THE HISTORY OF Four-footed Beasts, SERPENTS, and INSECTS.
HISTORY

of

The

sentences

of

Insects
THE HISTORY
OF
Four-footed Beasts
AND
SERPENTS:
Describing at Large
Their True and Lively Figure, their several Names, Conditions,
Kinds, Virtues (both Natural and Medicinal) Countries of their Breed,
their Love and Hatred to Mankind, and the wonderful work of
God in their Creation, Preservation, and Destruction.
Interwoven with curious variety of Historical Narrations out of Scriptures,
Fathers, Philosophers, Physicians, and Poets: Illustrated with divers Hieroglyphicks
and Emblems, &c. both pleasant and profitable for Students in all Faculties and Professions.

Collected out of the Writings of Conradus Gesner
and other Authors,
By Edward Topsell.

Whereunto is now Added,
The Theater of Insects; or, Lesser living Creatures:
As Bees, Flies, Caterpillars, Spiders, Worms, &c. A most
Elaborate Work: By T. Moffett, Dr. of Physick.

The whole Revised, Corrected, and Inlarged with the Addition of Two
useful Physical Tables, by J. Re M.D.

London:
Printed by E. Cotes, for G. Sawbridge at the Bible on Ludgate-hill, T. Williams at
the Bible in Little-Britain, and T. Johnson, at the Key in Paul's Church yard. MDC LVIII.
HISTORY
OF
Pope Innocent-RE-
SERPENTIS
TO THE
RIGHT HONOURABLE
THE
Lord Marquess of
DORCHESTER,
Earl of KINGSTONE,
Vicount NEWARK &c.

My very Noble LORD,

Our Lordship well knows that Honour attends upon Virtue, as the shadow doth upon the substance; there is such a magnetick force in Goodness, that it draws the hearts of men after it. The world observes that Your Honour is a great Lover of the works of Learned Writers, which is an infallible argument of an excellent mind residing in You. Wherefore I here humbly offer unto Your Noble Patronage the most Famous and Incomparable History of CONRADUS GESNER, a great Philosopher and Physitian, who by his vast expences, and indefatigable pains, Collected and Digested into two Volumes, what ever be found scattered here and there in almost infinite Authors, concerning Four Footed Beasts and Serpents, adding also what he could possibly attain to by his own experience, and correspondence held with other famous Scholars every where. After him Mr. Edward Topfel a Learned Divine, Reviv'd and Augmented the same History; as it is not altogether so difficult to add something to what is first begun, and to build upon such a foundation which was before so artificially laid. He hath deferred well of our English Nation in so doing; and the more, that he doth with so much modestly attribute the praise of the whole work to the Master-workman to whom it was chiefly due. The same Gesner, after Mr. Edward Wotton had begun, undertook to compose the History of Insects, which as it is a business of more curiosity and difficulty to write exactly of; so all things considered, they serve as much to set forth the Wisdom and Power of God as the greatest Creatures he hath made, and are as beneficial to Mankind, not only for dainty Food, but for the many Physical uses that arise from them. John Baptist fed upon Locusts and...
The Epistle Dedicatory.

wilde Honey, and we read that our Saviour eat a piece of a Honey comb. These little Insects are not so contemptible as the World generally thinks they are, for they can do as much by their multitudes, as the other can by their magnitude, when as one Hornet shall be able suddenly to kill a Horse, and Gnats, Ants and Wasps to bid resistance to Bears, Lions and Elephants, and to depopulate whole Countries. The Frogs, Locusts, and Lice, were none of the least Judgements in the Land of Egypt. Mr. Thomas Perrius, another Physitian, lighting his Candle by the former lights, succeeded them in this great undertaking. But all these vigilant and painful Men never could bring it to perfection, being every one of them prevented by death. And indeed, things of deep search, and high concernment, are very seldom begun and ended by the same persons. Hippocrates gives the reason for it, that Art is long, Life short, Experience difficult, occasion precipitate, Judge- ment uncertain. I may say further, which he also comprehends in the close of that Aphorism, that all must perform their several offices: which is not often done, but ingenious men frequently labour under the want of means, and find small encoura- ment to proceed in their great designs, especially in this latter age of the World. Gefner makes a sad complaint in behalf of himself, and Topel doth the like, and so do all the rest who spent their Estates, and wafted their Spirits for the common good. Which is sufficient proof to convince many rich men of blindness and ingratitude, and confirms that truth the Poet speaks;

Haud facile emerguunt, quorum virtutibus obiñat
Res anguīta domi

Good and well meaning men cannot proceed,
Virtue is cruñt by want, opprest by need.

After the death of the forementioned four Worthy of their times, Mr. Thomas Muffet a noted English Physitian undertook the same task, and compleated it; whose Encomium is excellently well penned by the late Honourable Doctor of Physick Sir Theodore Mayerne, in his Epistle to Doctor William Paddy of famous mem- ory, premised to this Book; wherein to his own immortal praise, he hath so Anato- mically dissected many of the chiefest Insects, even to admiration, that he hath let the World understand by it, that he was a deep Philosopher, and a most accurate search- er into the secrets of Nature, and worthy of those places of Honour he enjoyed in Great Princes Courts. This large History is not, nor could possibly be the pro- duction of one Age; both able Divines, and Physitians contributed what they had, and employed their Talents, and greatest Studies, for many years in their several genera- tions, to bring it forth; whereby it may appear how necessary this Work is for the souls and bodies of Men, to teach them to know the Wisdom and Omnipo- tence of God in the Creation of these Creatures, and Goodness to bestow upon Man, both for profit and delight; and though many of them be Dangerous and Venomous, yet they were not so when God first made them. For the Wisedman faith, That God made not death, neither takes he pleasure in the destruction of the living, for he created all things that they might have their being, and the Generations of the World were healthful, and there was no poison of destruction in them, no Kingdom of death upon the earth, but ungodly men
The Epistle Dedicatory.

men by their wicked works and words, called it to them. This Book will plentifully furnish us with Remedies against most of these inconveniences, which is no small occasion to put us in mind how much we stand obliged to the memories of the learned Authors of it; who spared no cost nor pains that they might prove beneficil to the then present, and to succeeding Ages. And the same reason is very strong in behalf of those who now have been at this vast charge to Reprint and to perfect the same, that it never should be lost by time or casualties, which consume all things; and to supply the whole Work with a double Physical Index, to ease the Readers labour, that he might not wander up and down, and lose himself in this great wilderness of Beasts and Insects, searching after that he stands in need of, but may in an instant be provided with all those known remedies these several Creatures can afford him. Should such a Fabrique as this decay and come to ruine, the damage were unspeakable and irreparable; the Maulocean Sepulchre, the Colossus of Rhodes, or the Pyramids of Egypt might sooner be renewed and built again. Wherefore Men are bound in conscience by the Laws of God, of Nature, and of Nations, to confider of the great Expanse and Pains now taken in it, and to promote the Work to the best advantage of the present undertakers for the publick good, who have now brought it to this perfection, that they may joy of it, what Ovid did of his Metamorphosis;

Jamque opus exegi, quod nec Jovis ira, nec ignis,
Nec poterit ferrum, nec edax abolere vetustas.

The Work is ended, which can envies fume,
Nor Sword, nor Fire, nor wafting time conlude.

Never was there so compleat a History of the Creatures as this is since the daies of Solomon, who writ the story of Beasts and Creeping things: and indeed it requires a Kingly Treasure and Understanding to accomplish it. And Petrus Gillius writes, that in former Ages, all the Histories of Creatures were compiled by Kings, or Dedicated to them; who are best able to bear the charge of it, and most fit be honoured with it. What would the World now give for that Book of Solomon, which by the negligence of ungrateful men and length of time is utterly lost? How highly then ought we to esteem of this History of Gefner and Mufet, which is inferior to none but that? For what Arifklele set forth upon this subject at the appointment of Alexander the Great, and for which he received from him 400 Talents as a Kingly reward, is all comprehended in this, with the addition of many hundreds more that have travelled in the same way. Orpheus, whom the Poets so much magnifie for drawing the Beasts after him, could do no more with all his melodious harmony, then these famous and ingenious Men have done. And because I cannot but think, what the Poets fancied concerning him, was but an Hieroglyphical representation(according to the dim light they had) of all the Creatures coming to Noah into the Ark, this History seems to me to be like another Ark of Noah, wherein the several kinds of beasts are once again met together, for their better preservation in the understanding of Man; for however there were multitudes of Birds in the Ark which are not here(it may be because Aldrovandus and others have

written
written largely to that purpose; yet here are abundance of Insects that never were in Noah's Ark, and whereas we never had, or we can find extant, any compleat History until this was made; which is like to another Paradise, where the Beasts, as they were brought to Adam, are again described by their Names, and named in most Languages; which serves to make some preparation for the great loss of that excellent knowledge of the Creature, which our first Parents brought upon their posterity when they fell from God. We read in the 10th of the Acts, that when a vessel was let down from heaven, wherein there were all manner of Four-footed Beasts and Creeping things, that St. Peter wondered at it: who then can choose but admire to see so many living Creatures that Nature hath divided and scattered in Woods, Mountains and Vales, over the face of the whole earth, to come all together to a general muster, and to act their several parts in order upon the same Theater? I confess there are many Men so barbarous, that they make no account of this kind of learning, but think all charge and pains fruitless that is employed this way; shewing themselves herein more unreasonable and brutish than the irrational Beasts. For next unto Man are these Creatures rankt in dignity, and they were ordained by God to live upon the same earth, and to be Fellow-commoners with Man; having all the Plants and Vegetables appointed them for their food as well as Man had; and have obtained one privilege beyond us, in that they were created before Man was; and ever since they are obnoxious to the same casualties, and have the same coming into the World, and going out that we have; for that which befalls the Sons of Men befalls Beasts, even one thing befalls them both, as the one dyeth, so dyeth the other; so that Man hath no preeminence above the Beasts. All go unto one place, all are of the dust, and all return to dust again: Ecclef. 3. 19, 20. And the Prophet David doubts not to compare Man being in honour, and having no understanding, unto the Beasts that perish. As for Minerals they are yet another degree below Beasts, all the Gold, Jewels, and Diamonds in the World, are not comparable to any one of the meanest Creatures that hath within it the breath of life. God hath bountifully bestowed them all on Man, whom he hath advanced above them all, for food, and raiment, and other necessary uses; also for his pleasure and recreation: and so long as we use them with Sobriety and Thankfulness, we shall finde an infinite benefit and advantage by them; but when we prove ungrateful unto God, they become to many Instruments of his vengeance against Sinners, to make up that fourfold Judgement, with the Sword, Famine, and Pestilence, the Prophet threatens the Jews with. I fear to be tedious, therefore I beseech Your Honour to accept this History in good part from him, who humbly prayeth for Your Lordships temporal and eternal happiness, and who is

Your Honours most affectionately

humble Servant

JOHN ROYVALD.
To the Reverend and Right Worshipful
RICHARD NEILE, D. of Divinity,
Dean of Westminster, Master of the Savoy,
and Clerk of the King his most Excellent Majesties Closet;
all felicity Temporal, Spiritual, and Eternal.

The Library of English Books, and Catalogue of Writers, (Right Worthy and Learned Dean, my most respected Patron) have grown to the height, not only of a just number, but almost innumerable: and no marvel, for God himself hath in all ages preferred Learning in the next place to Life; for as Life is the Ministerial Governor and Mover in this World, so is Learning the Ministerial Governor and Mover in Life: As an Interpreter in a strange Country is necessary for a Traveller that is ignorant of Languages (or else he should perish,) so is Knowledge and Learning to us poor Pilgrims in this our Peri­gri­na­tion, out of Paradise unto Paradise; whereby confus’d tongues are again reduced to their significit Dialects, not in the builders of Babel to further and finish an earthly Tower, but in the builders of Jerusalem, to bring them all to their own Country, which they seek, and to the desired rest of souls. Litera ob­jec­tiv­es artium, qua­rum be­ne­ficio ab­in­ter­im vi­ndica­ti­ur. As Life is different and divers, according to the Spirit wherein it is seated, and by which it is nourished as with a current; so also is Learning, according to the taft, use, and præstte of Rules, Canons, and Authors, from whom as from a Fountain it taketh both beginning and end­ca­fe: even as the Spirit of a Se­pen is much quicker then the Spirit of an Ox, and the Learning of Aristotle and Pliny more lively and light­ome then the knowledge of other obscure Philosophers, unworthy to be named, which either through Envie or Non-proficiencie durst never write: Si cum hac ex­cep­tione de­tutur sapientia, et ilium in­clusum­num tene­t­am, ac e­num­tie­num, re­sc­t­am. Nullius boni sine loco jucunda est pos­se­sti. And therefore I lay with Petrus Blesen: Sed­e­na­ri­um genere­ra­pos­si­e­io in plures di­per­sa, non per­di­tur, & dis­tribua­ta per­parses, mi­norati­onis di­ver­si­tum non fe­nti: sed­co di­ius­tum per­posu­ta ­pos­se­sti, quo pu­blic­uta­fa­cun­du­sus se di­f­fun­di­t.

The greatest men stored with all helps of Learning, Nature and Fortune, were the first Writers, who as they did excell other men in Possessions and Worldly dignity, so they manifested their Virtues and Worth in the edition of excellent parts of knowledge, either for the delight or profit of the World, according to the Poets profession:

Anti­pro­­de­ses vo­lu­nat, an­t dele­ctare Po­e­tae,
An­sim­cal & ju­cu­nda & id­o­na­a di­ce­ere vi­ta.
Omne­cul­it pun­ctum, qui­ mis­cit­ mi­le dulci,
Lec­ti­orem dele­ctando, par­ter­que monendo.

Yet now of late dates this custom hath been almost discontinued to the infinite prejudice of sacred inviolable Learning and Science, for Turpis se­pe­sma da­tur­ mi­noribus, (as Au­foni­um wrote in his time,) for indeed the reason is pregnant:

Hand
The Epistle Dedicatory.

Haud facile emergunt, quorum virtutibus obstas
Res angusta domi.

But yet the great Rector and Chancellor of all the Academies in the World Jesus Christ, in whom are hid all the treasures of wisdom and knowledge, the Matter of that College wherein he was but a Servant or Steward, that was learned in all the learning of the Egyptians, (I mean Moses) the first writer, the first Author, the first commander of knowledge, and the first ordainer of a lawful Common-wealth, and Ruler of Church and State, hath not left our age without some monuments of great Princes, Earls, Lords, Knights, for the ornament and honour of Learning, who for general and particular caules and benefits have added their Names to the society of Writers, and divulged their works in Print, which are likely to be remembered till the Worlds end. Such are our most Temperate, Juft, Wife, and Learned King and Soveraign. The Right Noble, and Honourable Earl of Surrey, long ago departed out of this earthly Horizon. The now living Earls of Dorset, Northampton, Salisbury; and many Knights, Sir Philip Sidney, Sir George Moore, Sir Richard Bartlet, Sir Francis Hastings, and others. But of Aaron, and such as sit at the Helme of the Church, or are worthily advanced for their knowledge in Learning and State, I mean both Bishops and Doctors, almost innumerable, of all whom I can say no more, if I were worthy to say anything, then apply unto them particularly that which was said of one of the greatest Scholars and Divines that ever England had:

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Then why should I presume, being every way the least and meanest of all other, now the third time to publish any part of my conceived studies for the age present and succeeding, and so to have my Name inrolled amongst the benefactors and Authors of Learning?

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Alas Sir, I have never abounded in any thing, except wantand labour, and I thank God that one of these hath been prepared to feed the other, therefore I will not stand upon any mans objections, who like Horses as it is in the Fable being led empty, well fed, and without burden, do scorn the laden Ass, adding mirth to his load, till his back was broke, and then was all laid upon the pampered disdainful Horse: even so thefe proud displeasing spirits are eased by the labors of us that bear the burdens, and if they content not themselves with ease, but will also sit in the seat of the scornful, let them remember, that when our backs be broke, they must take up the carriage. But pardon me (I beseech you) if by way of Preface I open my heart unto your Worship, who is better able than ten thousand of the Muses, and more charitably generous in receiving such gifts with the right hand (as these are) although they were given with the left; for seeing I have chosen you the Patron of this Work, I will briefly declare and open my mind unto you concerning the whole Volum, sparing any other praises of your demerits then those which by Martial are ascribed to Regulus, which I will without flattery or fear of the envious thus apply unto you:

Cam sit Sophia par fama & cura deorum, [SSS. Trinitatis]
Ingenio Pietas nec minor ipsa tua.
Ignorat meritis dilecto munere, quia tua librum
Et qui matur [Neile] Thura datur.

So then leaving these perorations, I will endeavor to prove unto you that this Work which I now publish and divulge unto the world, under the Patronage of your Name, is Divine, and necessary for all men to know; True, and therefore without flander or suspicions
scandall to be received; and that no man ought rather to publish this unto the World, than a Divine or Preacher. For the first, that the knowledge of Beasts, like as the knowledge of the other creatures and works of God, is Divine, I see no cause why any man should doubt thereof, seeing that at the first they were created and brought to man as we may read Gen. 1. 24, 25. and all by theLord himself, so that their Life and Creation is Divine in respect of their Maker; their naming Divine, in respect that Adam out of the plenty of his own divine wisdom, gave them their several appellations, as it were out of a fountain of Prophesie, foreshowing the nature of every kind in one elegant and significant denomination, which to the great loss of all his children was taken away, lost and confounded at Babel. When I affirm that the knowledge of Beasts is Divine, I do mean no other then the right and perfect description of their Names, Figures, and Names, and this is in the Creator himself most Divine, and therefore such as is the Fountain, such are the streams issuing from the same into the minds of men. Now it is most clear in Genesis how the Holy Ghost remembereth the creation of all living creatures, and the Foursfooted next before the creation of Man, as though they alone were appointed the Utens, going immediately before the race of Men. And therefore all the Divines observe both in the Hebrew, in the Greek and Latin, that they were created of three several sorts or kinds. The first Suntmum, as Oxen, Horse, Affes and fuch like, quia hominum jwomenta. The second, Reptile, quia hominem medicina. The third, Bestias, a vandalia, for that they were wilde and depopulators of other their associates, rising also against Man, after that by his fall he had loft his first image and integrity. Now were it not a knowledge Divine, why should the holy Scriptures relate it, and divide the kinds? Yea, why should all holy Men take examples from the natures of Beasts, Birds, &c. and apply them to heavenly things, except by the ordinance of God they were both allowed and commanded so to doe and therefore in admiration of them the Prophet David cryeth out, Magna magna sunt opera tua Domine omnis in sapientia faciit. The old Manichees among other blathemies accused the creation of hurtful, venomous, raving, and destroying Beasts, affirming them to be made by an evil God, and also they accused the creation of Mice and other unprofitable creatures, because their dulness was no kinder to the Lord, but like cruel and covetous Mifers, made no account of those Beasts, which brought not profit to their purse. You know (Right Learned Dean) how that grave Father answered that calumny, first affirming that the same thing which seemed idle to Men, was profitable to God; and the same that appeared ugly to them, was beautiful to him, Quo omnibus natura ad guberrationem unversa. He therefore wisely compareth a fool that knows not the use of the creatures in this world, to one ignorant that cometh into the workhouse of a cunning Man, viewing a number of strange tools, and having no cunning but in an Axe or a Rake, thinketh, that all those rare inventions of a wise workman are idle toys and whilst thus he thinketh, wandering to and fro, not looking to his feet, suddenly falleth into some furnace in the same Work-house, or chance to take up some sharp tool whereby he is wounded, then he also thinketh that the same are hurtful and dangerous. Quorum tamem quae novi artix, insipientiam ejus irriset, & verba incepta non omnes officicum saeurn confunctor exercet. But we that are ashamed to deny the use of instruments in the shops of rare Artificers, but rather admire their invention, yet are not afraid to condemn in Gods workhouse of his Creatures, which are rare inventions, although though folly we be wounded or harmed by them, and therefore he concludes that all Beasts are either useful, and against them we dare not speak, or perniciosa, whereby we are terrified that we should not love this perilous life; or else they are superfusius, which to affirm were most ridiculous: for as in a great house all things are not for use, but fome for ornament, so is it in this World, the inferior Palace of God. Thus far Austin.

Therefore I will conclude this first part, that not only the knowledge of the profitable creature is divine, and was first of all taught by God, but also of the hurtful: For a wife Man, faith Solomon, feeth the Plague (by the revelation of God) and bideth himself from it. And John Baptist, Quia vos decus ob ira creaturae fugere: These things have I principally laboured in this Treatise, to shew unto Men what Beasts are their friends, and what their enemies, which to truft, and which we avoid, in which to find nourishment, and which to shun as poison. Another thing that perifheth me in the necessary use of this History, that it was divine, was the preservation of all creatures living, which are ingendred by copulation (except Fishes) in the Ark of Noah, unto whom it pleased the Creator at that time to infulre an instinct, and bring them home to man as to a fold: surely it was for that a man

ight
might gain out of them much Divine knowledge, such as is imprinted in them by nature, as a type or sparsk of that great wisdom whereby they were created. In Mice and Serpents a foreknowledge of things to come, in the Ant and Pismire a providence against old age: in the Bear the love of young, in the Lion his stately pace, in the Cock and Sheep, change of weather; as S. Basil in his Hexameron, Etiam in Bruttis quidem futuri sensus est, ut nos praebet victa non additii simus, sed de futuro sacro omnem habemus.

For this cause there were of beasts in holy Scripture three holy uses, one for Sacrifice, another in Vision, and a third for Reproof and Instrucion.

In Sacrifices were the clean beasts, which Men were bound first to know, and then to offer, for it is unreasonableness that those things should be sacred at the Lord's altar, which are refused willingly at private men's Tables. Now although we have no use of Sacrificing of Beasts, Nam fies bruta pro peccatis immolabantur, ita jam virtus pro corporibus; yet we have use of clean Beasts for food and nourishment, and therefore for the inriching of the minds and tables of men, it is necessary to know not only the liberty that we have to eat, but also the quality and nutriment of the Beast we eat, not for any Religion, but for health and corporal necessity. This point is also opened in this story, and the other of Sacrifice, wherein I have not omitted to speak of the Divine use of every Beast, both among the Jews and among the prophane Gentiles.

Now for the second holy use of Beasts in Visions, the Prophet Daniel's Visions, and Ezekiel's, and S. John's in the Revelation do testify of them, whereby the most Divines have observed how great Princes and Kingdoms after they have shaken off the praction of Justice and Piety, turn Tyrants and ravening Beasts. For so Man being in honour understanding not, but become like the Beasts that perish, and so as Dionysius faith by Visions of Beasts, Insima educundarum pur media in suprema. Now there were, as S. Augustine faith, three kinds of visions, Sensibles, intellectuales, or imaginarii: the first were most pregnant, because to the understanding and conceiving, a Man never look his senses, and therefore God did suddenly create savage Beasts both of natural and extraordinary shapes, whereby he showed to his servants the Prophets, the ruin or uprising of beably States and Kingdoms. And not only thus, but also in heaven (as St. John faith) there are 4 Beasts full of eyes before the throne of God; both which must needs magnifie the knowledge of these Quadrupedes; for seeing God hath used them as Sacraments or Mysteries to contain his will, (not only in monstris treble-headed, or seven-horned shapes, but also) in pure, ordinary, natural limbs and members, how shall we be able to ghesse at the meaning in the secret, that do not understand the revealed? And what use can we make of the invisible part of that Sacrament, where we know not the meaning of the visible? Doth the Lord compare the Devil to a Lion; evill Judges to Bears; false Prophets to Wolves; secret and crafty periculosus to Foxes; open enemies in hostilitie to wilde Boars; Heretickes and false Preachers to Scorpions; good men to the Fowles of heaven, and Martyrs to Sheep, and yet we have no knowledge of the nature of Lions, Wolves, Bears, Foxes, wilde Boars, or Scorpions? Surely when Solomon faith to the sluggard, Go to the Pismire, he willeth him to learn the nature of the Pismire, and then according thereto reform his manners: And so all the World are bid to learn the natures of all Beasts, for there is always something to be learned in them, according to this saying of St. Basil, A deo nihil non providam in natura relinquit, neque quicumque pertinentis ad secum expers, & si ipsas animaliam partes consideraveris, invenies quodque superflunium quid conditor opposuit, neque mettisquum dextritis. Then it being clear that every Beast is a natural Vifion, which we ought to see and understand, for the more clear apprehension of the invisible Majesty of God, I will conclude that I have not omitted this part of the use of Beasts, but have collected, expressed, and declared, what the Writers of all ages have herein observed.

Now the third and laft holy use that is made of Beasts in Scripture, is for Reproof and Instrucion; so the Lord in Job 38. & 39. mentioneth the Lion, the Raven, the wilde Goats, the Hinds, the Hind-Calves, the wilde Afses, the Unicorn, the Ostrich, the Stork, the pursuant Horie, the Hawke, the Eagle, the Vulture, the Whale, and the Dragon, that is, the Fowles, Fishes, Serpents, and Four-footed Beasts: All which he reckoneth as known things to Job, and discouereth of strange things in their natures as any we have inferred for truth in our History, as may appear to any man whatsover, that will look studiously into them.
The Epistle Dedicator.

Shall I add hereunto how Moses, and all the Prophets, St. John Baptist, our most bles-
sed Saviour, St. Paul, and all the Writers since his time (both ancient and liter,) have
made proof of this part of Divinity; so that he was an unskilful Divine and not apt
to teach, which could not at his fingers speak of these things: for (faith our Saviour)
If I tell you earthly things and ye believe not, how shall ye believe when I tell you heavenly
things?

Solomon, as it is witnessed in holy Scripture, wrote of Plants, of Birds, of Fishes, and
Beasts, and even then when he stood in good favour with God, therefore it is an exerci-
se of the highest Wisdom to travel in, and the Noblest minds to study in: for in it as I will
thou (with your good patience, for I have no other Preface) there is both the know-
ledge of God and Man. If any man object, Multa multi de musca, de apicula, de vermiculo,
panca de Deo: I will answyer with the words of Theodorus Caca, Pernulta enim de Deo
est tracheta, qui detrina eterum conditorum exquisitissima, conditionem ipsum declarat,
neque musca, neque vermiculus omitendas est ubi de mira solebitis agitur. Whereunto St. Austin
agreeth when he faith, Majestatem divinam aequo in formico membris atque magnam jumento
tranante flumum. And for the knowledge of man, many and most excellent rules for
publick and private affaires, both for preferring a good conscience, and avoiding an evil
danger, are gathered from Beasts: It were too long to run over all, let me (I beseech
you) be bold to reckon a few which descend from Nature, one common parent, and there-
fore are neither strained, counterfeit, inconflant, or deceitful; but free, full of power to
persuade, true, having the seal of the Highest for their evidence, confident and never alt-
ted in any age; faithful, such as have been tried at fire and touch-stone.

Were not this a good peroration against murder, to see all Beasts fo to maintain their
natures, that they kill not their own kind? Who is so unnatural and unthankful to his Pa-
rents, but by reading how the young Storkes and Wood-peckers do in their parents old age
feed and nourish them, will not repent, amend his folly, and be more natural? What man
is so void of compassion, that hearing the baying of the Bone-breaker Bird to the young
Eagles, will not become more liberal? Where is there such a flagguard and drone, that con-
sideth the labours, pains, and travels of the Emmet, little Bee, Field-moufe, Squirrel,
and such other that will not learn for shame to be more industrious, and let his fingers
work? Why should any man living fall to do evil against his Conscience, or at the tem-
pation of the Devil, seeing a Lion will never yield? Mori fat,vinci nesciat, and seeing the
little Wren doth fight with an Eagle, contending for Sovereignty? Would it not make all
men to reverence a good King set over them by God, seeing the Bees flock out their King
if he lose himself, and by a moft fagacious smelling fene, never caele till he be found out,
and then bear him upon their bodies if he be not able to fly, but if he die they all forfake
him? And what King is not invited to clemency, and dehorted from tyranny, seeing the
King of Bees hath a fpring, but never utter the fame?

How great is the love & faithfulness of Dogs, the meeknes of Elephants, the modfly or
shamefaltiness of the adulterous Lions, the neatnes and polliure of the Cat and Peacock
the justice of the Bee, which gathereth from all flowers that which ferveth their turn, and
yet destroyeth not the flower; the care of the Nightingale to make her voice pleafant; the
chaffity of a Turtle, the canonical voice and watchfulness of a Cock, and to conclude the
utility of a Sheep? All these and ten thoufand more I could recite, to shew what the
knowledge of the nature of brutifh creatures doth work or teach the minds of men, but I
will conclude this part with the words of S. Jerom against Fovivinian. Ad Herodem di-
ciput proper multum, Ite & dicite volpi bir, Luk. 13, ad Scribas & Pharisaeos gentinum
viperrum, Mat. 23, ad libidinosos equi hinnentes in proximorum feminas, Jer.5, de voluptufo,
Nolite mittere margaritas velis te porcos. De impudicitibus, neque sanitatem date carnibus,
Mat. 7, de infidelibus, Ephefi cum besfias pugnavi in similitudine hominum, And thus far S. Jerom. Whereby we may boldly aver by way of induction, that where-
in the knowledge of God, the knowledge of Man, the precepts of Virtue, the means to
avoid evil are to be learned, that Science is Divine and ought of all men to be inquired
and sought after: and such have I manifested in this History following.

Now again the necessity of this History is to be preferred before the Chronicls and
Records of all ages made by Men, because the events and accidents of the time past, are
peradventure such things as shall never again come in use; but this sheweth that Chron-
icle which was made by God himself, every living Beast being a word, every Kind
being
The second thing in this discourse which I have promised to affirm, is the truth of the History of Creatures, for the mark of a good Writer is to follow truth and not deceivable Fables. And in this kind I have pass'd the straightest passage, because the relation of most things in this Book are taken out of Heathen writers, such as pr·adventure are many times superstitiously credulous, and have added of their own very many rash inventions, without reason, authority, or probability; as if they had been hired to fell such Fables: For, Non bene conditi vendunt perjurias tellae. I would not have the Reader of these Histories to imagine that I have inferred or related all that ever is said of these Beasts, but only so much as is said by many, For in the mouth of two or three witnesses standeth every word: and if at any time I have let down a single Testimony, it was because the matter was clear and needeth not further probation, or else I have laid it upon the Author with special words, not giving the Reader any warrant from me to believe it.

Besides, I have taken regard to imitate the best Writers, which was easy for me to do, because Gesner relateth every man's opinion (like a common place or Dictionary, as he protesteth;) and if at any time he seemed obscure, I turned to the Books which I had at hand to ghislle their meaning, putting in that which he had left out of many good Authors and leaving out many magical devices. Now although I have used no small diligence or care in collecting those things which were most essential to every Beast, most true without exception, and most evident by the Testimony of many good Authors; yet I have delivered in this Treatise many strange and rare things, not as Fictions, but Miracles of nature, for wifemen to behold and observe to their singular comfort, if they love the power, glory, and praise of their maker, not withholding their consent to the things express'd, because they intreat of living things made by God himself. Si ergo quarnus quis fecerit, Deus est; Si per quod, dixit, Fides, & falla fuit: Si quae sit, quia bonus est, Nec enim autor est excellentior Deo, nec ares efficacior Dei verbo, nec causa melior, quam ut bonus crearetur a Deo beno; and this Plato said was the only cause of the worlds creation, ut a Deo bono opera bonifereant.

Now I do in a fort challenge a consent unto the probability of those things to wise and learned men, although no belief. For Fides, is credere invidibilis; but consentum is a clearing or yielding to a relation until the manifestation of another truth; and when any man shall fully reprove any thing I have written for false and erroneous, I will not flink to release the Readers consent, but make satisfied on for ulteration. But for the rude and vulgar fort (who being utterly ignorant of the operation of Learning, do profoundly condemn all strange things which are not engraven in the palms of their own hands, or evident in their own herds and flocks;) I care not, for my ears have heard some of them speak against the History of Sampson, where he tied fire-brands to the tails of Foxes, and many of them against the miracles of Christ. I may remember you (or) of a Country tale of an old Maffe-Priest in the dais of Henry the eight, who reading in English after the translation of the Bible, the miracles of the five Loaves and two Fishes, and when he came to the verse that reckoneth the number of the ghefts or eaters of the banquet, he paused a little, and at last said, they were about five hundred: The Clerk, that was a little wiser, whispered into the Priest's ears that it was five thousand, but the Priest turned back and replied with indignation, Hold your peace sirrah, we shall never make them believe they were five hundred.

Such Priests, such People, such persons I shall draw upon my back, and although I do not challenge a power of not erring, yet because I speak of the power of God, that is unlimited, I will be bold to aver that for truth in the Book of Creatures (although first observed by Heathen men) which is not contrary to the book of Scriptures.

Lastly, that it is the proper office of a Preacher or Divine to set forth these works of God, I think no wifeman will make question, for so did Moses, and David, and Solomon, and
The Epistle Dedicatory.

and Christ, and S. Paul, and S. John, and S. Irene, S. Gregory, S. Basil, S. Austin, S. Jerome, S. Bernard in his expositions of Sermons upon the Canticles, and of latter days Isidorus, The Monks of Messac, Gemnanus, and to conclude, that ornament of our time Jeronimus Zanchius. For how shall we be able to speak the whole Counsel of God unto his people, if we read unto them but one of his books, when he hath another in the world, which we never fludly past the title or outside; although the great God have made them an Epistle Dedicatory to the whole race of Mankind?

This is my deavour and pains in this Book, that I might profit and delight the Reader, whereinto he may look on the Holyest daies, (not omitting prayer and the publick service of God) and passe away the Sabbaths in heavenly meditations upon earthly creatures. I have followed V. Gestaer as near as I could, I do profess him my Author in most of my Stories, yet I have gathered up that which he let fall, and added many Pictures and Stories as may appear by Conference of both together. In the names of the Beasts, and the Phy- sick I have not swarved from him at all. He was a Protestant Physician, (a rare thing to finde any Religion in a Phyfitian) although St. Luke a Physician were a writer of the Gospell. His prais es therefore shall remain, and all living Creatures shall witnesse for him at the last day. This my labor whatsoever it be, I conecrate to the benefit of all our English Nation under your Name and Patronage, a publick Professor, a learned and reverend Divine, a famous Preacher, observed in Court and Countrey; if you will vouchsafe to allow of my Labors, I stand not upon others, and if it have your commendation, it shall incourage me to proceed to the residue, wherein I fear no impediment but ability to carry out the charge, my case so standing that I have not any access of maintenance, but by voluntary benevolence for personal pains, receiving no more but a laborious wages, and but for you, that had also been taken from me: Therefore I conclude with the words of St. Gregory to Leontius, Et nos bona qua de vobis multipliciter pradicanur addiscentes, asidue pro gloria vestra incoluitate omnipotens velamus Dominum deprecari.

Your Chaplain in the Church of

St. Botolph Aldersgate,

Edward Topfel.
An Alphabetical Table of all the Creatures described in this First Volum.

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THE HISTORY OF
Four-Footed Beasts.

The Antelope.

The Antelope called in Latin Calopus, and of the Grecians Antelope, or Apelos: of this beast there is no mention made among the Ancient Writers, except Suidas, and the Epistle of Alexander to Aristotle, interpreted by Cornelius Neposius. They are bred in India and Syria, near the Country of River Euphrates, and delight much to drink of the cold water thereof: Their breed, body is like the body of a Roe, and they have horns growing forth of the crown of their head, which are very long and sharp; so that Alexander affirmed they pierced through the shields of his Soldiers, and fought with them very irately: at which time his company flew at him as he travelled to India, eight thousand five hundred and fifty; which great slaughter may be the occasion why they are so rare, and seldom seen to this day, because thereby the breeders and means of their continuance (which consisted in their multitude) were weakened and destroyed. Their horns are great, and made like a saw, and they with them can cut asunder the branches of other or small trees, whereby it cometh to pass that many times their necks are taken in the twigs of the falling boughs, whereby the Beast with repining cry, bewrayeth himself to the Hunters, and so is taken. The virtues of this Beast is unknown, and therefore Suidas faith, an Antelope is but good in part.
The History of Four-footed Beasts.

of the APE.

Ape, called in Latin Simia, and sometimes Simidus and Simiolus; of the Greek word Simas (viz.) signifying the flatness of the Nose: for so are an Ape; and called of the Hebrews Kop, and plurally Kopim; as it is by S. Jerome translated, 1 Kings. 10. 22. From whence it may be probably conjectured, came the Latin words Cepi and Cephi, for Apes that have tails. Sometimes they are called of the Hebrews Hoglab, and of the Chaldeans Kofin, the Ithaua Samada Majonio, and Bercnica, and a Munkey Gatto Mammone. The ancient Grecians Filipous and the Later Mimoun, and Ark-bizare, by reason of his imitation. The Moors Bugia, the Spaniards Mass, or Ximia, the French Singi, the Germans Aff, the Flemishe Simme or Schimmegeil, the Illryians Obija, and generally they are held for a lubill, ironical, ridiculous and unprofitable Beast, whose flesh is not good for meat, as a sheep, neither his back for burden, as an Ass; nor yet commodious to keep a house, like a Dog; but of the Grecians termed Gelatopes, made for laughter.

* Athenaeus. * Apeckat of the Philosopher, being at a banquet wherein divers Jesters were brought in to make them merry, yet never laughed, among the rest, but a man of great reputation and learning, answered, that mendo but saith merriments, whereas Apes are naturally made for that purpose; Moreover, Apes are much given to imitation and derision, and they are called Clockets, because of their wicked looks, deceit, impostures and flatteries: wherefore of the Poets it is observed, that there were two brethren most wicked fellows, that were turned into Apes, and from their fear or habitation came the the Phebeesian Islands, which Virgil calleth Inanti: for Ateane was an old Egypthian word for an Ape, and those Islands being the seats of the * Giants (who being by God overthrown for their wickedness) in derision of them, Apes were planted in their rooms. Apes have been taught to leap, sing, drive. Wagons, reigning and whipping the horses very artificially, and are very capable of all humane actions, having an excellent memory either to their love to his friends, or hateful revenge to them that have harmed him, but the saying is good, that the threatening of a flatterer, and the anger of an Ape, are both alike regarded. It delighteth much in the company of Dogs and young Children, yet it will strangle young Children if they be not well looked unto. A certain Ape seeing a Woman washing her Child in a bason of warm water, observed her diligently, and getting into the house when the Nurse was gone, took the Child out of the cradle, and letting water...
water on the fire, when it was hot, stripp'd the Child naked, and washed the Child therewith untill it killed it.

The Countreys where Apes are found, are Lybia and all that desert Woods betwixt Egypt, & Ehbipia and Lybia: and that part of Caucasia which reacheth to the Red Sea. In India they are moit abundant, both red, black, green, duff-colour, and white ones: which they use to bring into Cities (except red ones, who are so venereous that they will ravish their Women) and present to their Kings, which grow to tame, that they go up and down the Streets so boldly and civilly, as if they were Children, frequenting the Market places without any offense: whereof so many fliewed themselves to Alexander, having at first to be an Army of enemies, and commanded to join battle with them, until he was certified by Taxilus a King of that Countrey then in his Camp, they were but Apes.

In Caucasia there are trees of Pepper and Spices whereof Apes are the gatherers, living among those trees: for the inhabitans come, and under the trees make plain a plat of ground, and afterward cast thereupon boughs and branches of Pepper, and other fruits, as it were carelessly; which the Apes secretly oberving, in the night season they gather together in great abundance all the branches loade with Pepper, and lay them on heaps upon that plat of ground, and in the morning come the Ingers and gather the Pepper from those boughs in great measure, reaping no small advantage by the labor of Apes, who gather their fruits for them whiles they sleep: for which cause they love them and defend them from Lions, Dogs, and other wild Beasts. In the region of Bafman, subject to the great Cham of Tartaria, are many and divers forts of Apes, very like mankind, which when the Hunters take, they pull of their hairs all but the beard and the hole behind, and afterward dry them with hot spices, and poudering them, sell them to Merchants, who carry them about the world, persuading simple people that there are men in Islands of no greater stature. To conclude, there are Apes in Inghilistye which are manecked about the neck like Lions, as big as great Bel-weatheres. So are some called Cepot NEG Nugue, Chpuge, Hug Ape, Gers, Glabriuih, Metochiuf, Cynoebas, of a Dog and an Ape, Sarcys, and Spaniges, of which we will speake in order, for they are not all alike, but some resembel men one way, and some another: as for a Cymera, which Albertus maketh an Ape, it is but a higment of the Poets. The fame man maketh Fignereys a kind of Ape, and not men, but Niphus proveth that they are not men, because they have no perfect use of Reason, no mod certainty, nor honesty, nor justice of government, and although they speak, yet is their language imperfect; and above all they cannot be men, because they have no Religion, which (Pleto phaith truly) is proper to every man. Besides, their stature being not past three, four, or five spans long, their life not above eight years, and their imitation of man, do plainly prove them rather to be Apes then Men: and also the flatness of their Noses, their combats with Cranes and Partridges for their egges, and other circumstances I will not stand upon, but follow the description of Apes in general Apes do outwardly resemble men very much, and Vetalum seaweth, that their proportion differeth from men in more things then Salen observed, as in the muscles of the breath, and thato which move the arms, the elbow and the ham, likewise in the inward frame of the hand, in the muscles moving the toes of the feet, and the feet and shoulders, and in the instrument moving in the sole of the foot, also in the fundament and mefentery, the lap of the liver, and the hollow vein holding it up, which men have not; yet in their face, nostrils, ears, eye-lids, breaths, armes, thumbs, fingers and nails, they agree very much. Their hair is very hart and thick, and therefore hairy in the upper part like men, and in the other part like Beasts: they have teeth before and behind like men, having a round face, and eye-lids more above and beneath, which other Quadrupodes have not. Politianus faith, that the face of a Bull or Lion is more comely then the face of an Ape, which is like a man. They have two Dugs, their breaths and armes like men, but rougher, such as they use to bend, as a man doth his foot. So their hands, fingers and nails, are like a mans, but ruder and nimmer; and nature having placed their Dugs in their breath, gave them armes to lift their young ones up to suck them. Their feet are proper, and not like, having the middle one longest, for they are like great hands, and confift of fingers like hands, but they are alike in bignesse, except that which is fett to a man, is greatest to an Ape, whose sole is like the hand but that it is longer, and in the hinder part it is more flethy, somewhat resembeling a heel, but put backward it is like a fitt.

They use their feet both for going and handling; the neather parts of their armes, and their thighs are shorter then the proportion of their elbows and thins: they have no Navel, but there is a hard thing in that place: the upper part of their body is far greater then the neather, like other Quadrupodes, confisting of a proportion between five and three: by reason wereof they grow out of kind, having feet like hands and feet. They live more downward then upward like other four-footed Beasts, and they want Buttocks, (although Albertus faith they have large ones) they have no tail, like two legged creatures, or a very small signe thereof. The gentall or privy place of the female is like a Womans, but the Males is like a Dogs: their nourishment goeth more forward then backward, like the belt Horfes; and the Arabian Seropic, which are higher before then behind; and that Ape whose meat goeth forward by reason of the heat of heart and liver, is most like to a man, in standing upright: their eyes are hollow, and that thing in man is accounted for a signe of a malicious mind, as little eyes are a token of a base and abject spirit. Men that have low and flat Nostrils are Libidinous as Apes that attempt women, and having thick lips, the upper hanging over the neather, they are deemed fools, like the lips of Apes and Apes. Albertus faith, he saw the heart of a Male Ape, having two tops or sharpe ends, which I know not whether to term a wonder or a Monster.
Ape and a Cat have a small back, and so hath a weak hearted man, a broad and long back figuring a valiant and magnanimous mind. The Ape's nails are half round, and when they are in copulation, they bend their Elbowes before them, the finews of their hinder joynets being turned clean about, but with a man, it is clean otherwise. The veins of their armes are no otherwise disiected then a man, having a very small and ridiculous crooked thumb, by reason of the Muscles which come out of the hinder part of the leg, into the middle of the thin, and the fore muscles drawing the leg backward, they cannot exactly stand upright, and therefore they run and stand, like a man that counterfeits a lame manes halting.

As an Historie, a certain Ape after a shipwreck swimming to land, was seen by a Countryman, and thinking him to be a man in the water, gave him his hand to save him, yet in the mean time asked him what Countryman he was, who answered, he was an Athenian: well, said the man, dost thou know Percus? which was a port in Athens) very well said the Ape, and his wife, friends, and children, whereas at the man being moved, did what he could to drown him. They keep for the most part in Caves and hollow places of hills, in rocks and trees, feeding upon Apples and Nuts, but if they find any bitternets in the shell, they cast all away. They eat Lice, and pick them out of heads and garments. They will drink wine till they be drunk, but if they drink it oft, they grow not great, specially they lose their nails, as other Quadrupedes do. They are best contented to sit aloft, although tied with chains. They are taken by laying for them shoos and other things, for which they hunt him well to anoint their eyes with water in their presence, and so departing, leave a pot of lime or hone in stead of the water, which the Ape eating, cometh and anointeth her eyes therewith, and so being not able to see, doth the hunter take her. If they lay shoos, they are leaden ones, too heavy for them to wear, wherein are made such deviles of gins, that when once the Ape hath put them on, they cannot be gotten off without the help of man: So likewise for little bags made like breeches, wherein they are deceived and taken. They bring forth young ones for the most part by twins, whereof they love the one and hate the other; that which they love they bear in their armes, the other hangeth at the dams back, and for the most part the killet that which the love, by pressing it too hard; afterward the feether her whole delight upon the other.

The Egyptians: when they describe a Father leaving his inheritance to his Son that he loveth not, picture an Ape with her young one upon her back. The male and female abide with the young one, and if it want any thing, the male with all, and irreful aspect punisheth the female. When the Moon is in the wane, they are heavy and sorrowful, which in that kind have tails; but they leap and rejoice at the change: as other Beasts, fo do these, fear the defect of the Stars and Planets. They are full of diffimilation, and imitation of man, they readily follow the evil then the good they see. They are very fierce by nature, and yet tamed forget it, but still remain subject to madnefs. They love Conies very tenderly, for in England an old Ape (farre able to go) did defend tame Conies from the Weasel, as Sir Thomas More reported. They fear a shell fish and a Snail very greatly, as appeareth by this Historie.

In Rome, a certain Boy put a Snail in his hat and came to an Ape, who as he was accustomed, leaps upon his shoulder and took off his hat to kill Lice in his head, but eatisfying the Snail, it was a wonder to see with what haufe the Ape leaped from the Boys shoulder, and in trembling manner looked back to see if the Snail followed him. Also when a Snail was tied to the one end of another Ape's chain, so that he could not chufe but continually look upon it, one cannot imagine how the Ape was tormenteth therewith, finding no means to get from it, cast upon whatsoever was in his stomack, and fell into a grievous Fever till it was removed from the Snail, and refreshed with wine and water. Cardenere reported, that it was an ancient custom in former time when a Parricide was executed, he was (after he was whipped with bloody stripes) put into a sack, with a live Serpent, a Dog, an Ape and a Cock: by the Serpent was signified his extreme malice to mankind in killing his Father, by the Ape that in the likenes of man he was a Beast, by the Dog how like a Dog he spared none, no not his own Father, and by a Cock his hateful pride, and then were they all together hurled headlong into the Sea. That he might be deemed unworthy of all the Elements of life, and other blesnings of nature.

A Lion ruleth the Beasts of the Earth, and a Dolphin the Beasts of the Sea; when the Dolphin is in age and sicknes, the recovereth by eating a Sea-ape: and so the Lion by eating an Ape of the earth, and therefore the Egyptians paint a Lion eating an Ape, to signify a sick man curing himself. The heart of an Ape fad and dried, whereof the weight of a great drunk in a draught of stale Hony, fed in water, called Melaveron, strengthens the heart, emboldneth it, and drive away the pulse and puellaminitry thereof: sharpeneth ones understanding, and is sovereign against the falling evil.
The MUNKEY.

The MUNKEY, called in Greek Ceropithecus, and in Latin Ceropithecus, is a tailed Ape; not to distinguish from all other Apes, but from other vulgar and common Apes, for there be Apes with tails besides a Munkey, but not so often seen. It is thought of some that the Hebrew Zim, signifies a Munkey, other Ochim. I. a. 3. Babel shall be destroyed, and the fearful beast Zim shall lie there, and Ochim shall fill their houses. Which Ochim, is interpreted Munkeys, but not generally; wherefore there is an opinion that this kind of Ape is generated of a wild Cat very like an Ape, and an Ape having two black spots on the cheeks, a long tail, and black at the end thereof, it is called the Italians Gatto mainme, of the French Marmot of Marmons, that is, the Ape of a male, for Mona signifies an Ape, of the Germans Merkats, that is the Cat of the Sea, of the Illyrian Morke, and Vock; as for Mammones, it is a beast like

Their urnen.
Muncker.
Others.
Generrons.
Munkeys.
Mammonds.

Inclination of Munkeys.
Secrets of Munkeys nature.
Contention.
The fear of a Munkey.

They are very sportful, and given to imitate the actions of men like Apes, it being a question, whether Dogs, Elephants, or Munkeys, have the most understanding among Brutes, and as was said before, when the Moon waxeth, it is heavy and dull, but in the new Moon joccond and pleasant. Betwixt the Mammones and Apes is continual war, and the Mammones being the weaker, yet the wiser and craftier creature, is much more courageous in fight than an Ape. Thence Munkeys of all things most abhor a Crocodile, for at the sight of the skin afar off, it hath been seen how the creature hath run through fire and water, crying and trembling for the natural dread thereof.

They are bred in the hills of Confrence, in the woods of Bugia and Mauritanias. In Ethiopia, they have black heads, hair like Asses, and voices like to other. In India they report that the Munkeys will climb the most steep and high rocks, and fling stones at them that profecute to take them. When the King of Ioga in India for Religion goeth on Pilgrimage, he carryeth with him very many Munkeys. In like fort, Munkeys are brought from the new found Land, from Caleckut and Prufia; and not far from Adens a City of Arabia, is a most high hill abounding in these beasts, who are a great hinderance to the poor vintagers of the Country of Caleckut, for they will climb into the high Palm trees, and breaking the velliets set to receive the Wine, pour forth that liquor they find in them: they will eat hearbs and grain, and ears of grasse, going together in great flocks, whereof one ever watcheth at the uinabo bounds of their camp, that he may cry out when the husbandman cometh, and then all flying and leaping into the next trees ecape away: the females carry their young ones about with them on their shoulders, and with that burden leap from tree to tree.

There be of this kind of Munkeys two sorts, one greater, the other lesser, as is accounted in England, and Munkeys are in like sort so divided, that there be in all four kinds differing in bigness, whereof the least is little bigger then a Squirrel: and because of their marvellous and divers movings, movings, voices and gestures, the Englishmen call any man using such faculties Actors a Munkey.

The only difference betwixt these and other Apes aforesaid, is their tail; they differ from men in their nerves, in the joints of their loynes, and their processes, and they want the third muscle moving the fingers of their hands. Mammones are leffe then an Ape, brown on the back, and white on the belly, having a long and hairy tail, his neck almost so big as his body, for which cause they are tied by the hips that they flap not collar. They have a round head, a face like a man, but black and bald on the crown, his nose in a reasonable distance from his mouth like a mans, and not continued like an Ape, his stones greenish blew, like a Turkey fone. They are caught after the manner of

B 3

Apes,
Apes, and being tamed and taught, they conceive and work very admirable feats, and their skins pulled off them being dead are dressed for garments. The foolish Arabs dedicated Memnonium cer- to heaven, and small afflictions implored his aid. There is one other kind of Munkeys, whose tail is only hairy at the tip, called Cercolipk.

The C E P H S, or Martine Munkey.

The Martin called Cepus of the Greek word, Kepus, which Aristotle wrote Kebus, and some translate Caesar, some Cepbus or Cephes or more barbarously Cephus, the Latines sometimes Orest, for indeed this kind of Apes in his bent elate is like a garden let with divers flowers, and therefore the beast kind of them is discerned and known by the sweeterst favour, such being always the most ingerious imitators of men. It is very probable that this name Cepus is derived of the Hebrew Keph and Kephin signifying Apes in general, as is before said, but yet this kind is distinguished from other, by Strabo, Elianus and Pliny, although Aristotle doth make no difference betwixt this and another ordinary Munkey.

The games of great Pompy first of all brought these Marines to the sight of the Romans, and afterward Rome saw no more; they are the same which are brought out of Ethiopia and the farthest Arabia; their feet and knees being like a man, and their forefeet like hands, their inward parts like a man, so that some have doubted what kind of creature this should be, which is in part a man, and yet a Four-footed beast: it having a face like a Lion, and some part of the body like a Panther, being as big as a wilde Goat or Roe-buck, or as one of the Dogs of Etruria, and a long tail, the which such of them as have tafted flesh well eat from their own bodies. Concerning their colour, howsoever they are not all alike, for some are black with white spots, having a greater voice than others, some yellow, some Lion-taunt, some golden-yellow, and some cole-black: yet for the most part, the head and back parts to the tail, are of a fiery colour, with some golden hair averted among the residue, a white snow, and certain golden stripes like a collar going about the neck, the inferior parts of the neck down to the breast, and the forefeet are white, their two dugs as big as a mans hand can grip, are of a bluish colour, and their belly white, their hinder legs black, and the shape of their inout like a Cynocophale: which may be the difference betwixt Elianus and Strabo their Cepus, and Arestatos Cebus, for nature many times bringeth forth like beasts which are not of the same kind. In England there was a Martin that had his back and sides of a green colour, having here and there white hair, the belly, chin and beard (which was round) white, the face and thins black, and the nose white, being of the better kind, for in bignefs it exceeded not a Coney. Some of them in Ethiopia have a face like a Satyre, and other members in part resembling a Bear, and in part a Dog, so are the Prasien Apes. This Martin did the Babyloniens, inhabiting near Memph, for the flangenes, the colour, and shape thereof, worship for a God. They are of evil disposition like Apes, and therefore we will spare both their pictures and further description, finding very little of them in Histories worth commemoration.
Of the Calitrzech.

The Ape CALITRICH.

The Calitrzech, so called by reason of his beard, and may be termed in English a bearded Ape, will live no other where than in Ethiopia and India, which are easy to take, but very hard to be carried away alive into these countries. They differ in appearance from all other Apes, having a long beard and a large tail, hairy at the end, being in India all white, which the Indiens hunt with dogs, and being tamed, they are so apt to play, that a man would think they were created for no other purpose, whereupon the Greeks use the proverb, an Ape having a beard, for a ridiculous and foolish jesting man.

Of the Præsan Apes.

Megasthenes (faith Ælianus and Strabo) writeth of Apes in Præsa Region in India, which are no leffe then great Dogs, and five cubits high, having hair like a Man coming forth of their forehead and beard, being altogether white except their tails, which are two cubits and a half long, very like a Lions; and unto a simple man it might seem, that their tufts of hair were artificially trimmed, though it grow naturally. Their beard is much like a Satyres, and although their body be white, yet is their head and tip of their tail yellow, so that the Martines before mentioned, seem to be affianced to these. These Præsan Apes live in Mountains and Woods, and yet are they not wild, but so tame that often times in great multitudes they come down to the Gates and Suburbs of Lonja, where the King commandeth them daily foddren Rice for their food, which they eat, and being filled return again to their home, and such places of harbour in great moderation, doing no harme to any thing.
Peter Martyr telleth this story of one of these, that he being like to a great Monkey, but having a longer tail, by rowling over and over three or four times together taketh such strength, that he leapteth from bough to bough, and tree to tree, as if he flew. An archer of that Sea-voyage hurt one of them with an arrow, the wounded beast pretently leapteth to the ground, and setteth upon the archer, as fiercely as a mad Dog; he drew his sword and struck off one of his arms, and so at last with much ado took the maimed beast, who being brought to the Navy, and accustomed to the society of men, began by little and little to be tame.

While he was in the ship bound with chains, other of the company having been on land to forrage, brought out of the Marshes a Bore, which Bore was shewed to the Munkey; at the first sight either of other set up their bristles, the raging Monkey leapt upon the Bore, and wadeth his tail round about the Bore, and with the one arm which he had left, caught him, and held him so fast by the throat, that he stifled him.

There is another kind of Munkey, for stature, biggesse and shape like a Man, for by his knees, secret parts and face, you would judge him a wilde man, such as inhabit Nomidae and the Lapones. for he is altogether overgrown with hair; no creature, except a man can stand so long as he; he loveth women and children dearly, like other of his own kind, and is so venereous that he will attempt to rape women, whose Image is here described, as it was taken forth of the book of the description of the holy Land.

Of the Cynocephale or Baboun.

Cynocephales are a kind of Ape, whose heads are like Dogs, and their other parts like a mans; wherefore Geza translacteth them Canicpeace, (to wit) dog-heads. In the French, German, and Ilyrian tongues, they are called of some Babbon, and Buboon in Italian, is a small kind of Ape; but Aristotle saith, that a Cynocephale is bigger then an Ape. In English they are called Baboons.

There are many kinds of Baboons, whereas of some are much given to fishing, so that they will tarry, Professor John a whole day in the deep hunting for fish, and at length come forth with a great multitude. Again, ad Rom pont. there are some which abhor fishes, (as Orus saith) which kind the Egyptians Emblematically use to paint.
Of the Baboons.

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paint, when they will decipher a sacrifice. Some there are which are able to write, and naturally to differ letters; which kind the old Egyptian Priests bring into their Temples, and at their first entrance the Priest brought him a writing Table, a pencil and ink, that by seeing him write, he may make tryall whether he be of the right kind and the beast quickly fweareth his skill; whereof in ancient time, they were dedicated to Mercury, the fained god of learning.

The reason why the Egyptians do nourish them among their hallowed things is, that by them they may know the time of the conjunction between the Sun and Moon; because the nature of this beast is, to have a kind of feeling of that conjunction, for after that these two signs meet, the male Baboon neither will look up nor eat, but cast his eyes to the ground, as it were lamenting the ravishment of the Moon with dishonourable passion. In like manner the female, who moreover, at that time fent forth blood out of her womb of conception: whereupon the Egyptians signifie by a Baboon the Moon, the rising of the Moon, by his standing upright holding his hands up toward heaven, and wearing a crown on his head, because with such gestures doth that Beast congratulate her first appearance.

Another cause why they bring them into their Temples, is, because of the holiness of circumcision, for it is most true (though strange) that they are brought forth circumcised, at the least wise in some appearance, whereunto the Priests give great heed to accomplish and finish the work begun. The Egyptians also paint a Baboon fuitting to signifie the Equinodium, for in every Equinodium they back or bow twelve times in one day, and so many times make water: wherefore the Egyptians also upon their Hydrologies or Conduits did grave a Baboon, out of whole yard or privy part suffed forth water; and they also say that this beast be nourished among their holy things, dyeth not at once other beasts, but every day one part by the space of 72 days (the other parts remaining in perfection of nature) which the Priests take and put in the earth day by day, till all perish and be consumed.

The Wett region of Lybia and Ethiopia have great store of Cynoceplals, Baboons, and Aeopoils, beasts without a head, whole eyes and mouth are in their breasts. In like fort in Arabia, from Dira Southward in a Promontory, there are many Baboons, and in the Continent called Dachinabade Saragoza, and the Eastern Mountains of the Mediterranean region; and those which Apollodorus law between the rivers Ganzer, and Hyphasis, seem to be of this fort, in that he describeth them to be black hair, Dog-faced, and like little men; wherewithall Ethians feemeth to be deceived, in saying, that there are men Cynocephal, Dog-faced, whereas it is the error of vulgar people, to think that Baboons are men, differing only in the face of vantage.

Concerning their members or parts in several, they are black and hairy, rough skinned, red and bright eyes, a long Dogs face, and teeth stronger and longer then Dogs: the face of a Lion muf not be attributed to this beast, nor yet a Satyre, though it be more like. It hath a gum and fearful face, and the female hath naturally her womb cast out of her body, and so the breather it about all her life long: their voice is a shrill whizing, for they cannot speak, and yet they understand the Indian language; under their beard they have a chin growing like a Serpents, and bearding about the lips like a Dragon; their hands are armed with most strong nails, and sharp; they are very swift of foot, and hard to be taken, wherefore they will run to the waters when they are hunted, being not ignorant that among waters they are most hardly taken: they are very fierce and active in leaping, biting deep and eagerly where they lay hold, neither do they ever grow so tame, but that they remain furious. They love and nourish bread and Goats, and drink their milk; they know how to take the kernels out of Almonds, Walnuts and Nuts, as well as men, finding the meat within, though the shell be unprofitable: they will also drink wine and eat flesh, sod, rote, or deliciously dressed, and they will eat Vension, which they by reason of their swiftnes take easily, and having taken it tear in pieces and roll it in the Sun; they can swim safely over any waters, and therefore among the Egyptians they signifie swimming.

They are evil mannered, wherefore also they are pitiuous to signifie wrath, they are so unappeasable. The Latins use them adjectively to signifie any angry, rabbin, roward, or raving man. They will imitate all humane actions, loving wonderfully to wear garments, and of their own accord they clothe themselves in the skins of wide beasts they have killed, they are as lustfull and venereous as Goats, attempting to defile all forts of women, and yet they love little children, and their females will suffer them to suck their breasts if they be held to them, and some fay they will suck womens breasts like little children. There was such a beast brought to the French King, his head being like a Dogs, and his other parts like a man, having legs, hands and garments naked like a man, and a white neck; he did eat fof flesh so mannerly and modestly, taking his meat in his hands, and putting it to his mouth, that any man would think he had understood humane conditions; he feeld upright like a man, and fat down like a man. He discerned men and women asunder, and above all loved the company of women, and young maidens; his genital member was greater then most might match the quantity of his other parts: he being moved to wrath, would rage and let upon men, but being pacified, behaved himself as meekly and gently as a man, and was overcome with fair words: shewing himself well pleased with those that scolded with him. The Nomads people of Ethiopia, and the Nations of Memphis and Tyre live upon the milk of Cynocephals, keeping great herds of them, and killing all the males, except some few preferred for procreation.


The History of Four-footed Beasts.

A TARTARINE.

Thos. Beza.

Here was at Paris another beast called a Tartarine, and in some places a Magot (much like a Baboon, as appearing by his natural circumcision) being as great as a Gray-hound, and walketh for the most part upon two legs, being clothed with a Soldier’s coat, and a sword girded to his side, so that the most part thought him to be some Monster-little-man, for being commanded to his kennel, he would go and tarry there all night, and in the daytime walk abroad to be seen of every man, it was doubtful whether he were of the Monkey kind or the Baboon, his voice was like the squeaking of a Mouse, but his aspect and countenance was fierce, truculent and fearful, as his image is here deciphered.

The SATYRE.

A s the Cynocephal or Baboon Apes have given occasion to some to imagine (though falsely) there were such men, so the Satyres a most rare and seldom seen beast, hath occasioned other to think it was a Devil; and the Poets with their Apes, the Painters, Limners, and Carvers, to encircle that superflition, have therefore described him with horns on his head, and feet like Goats, whereas Satyres have neither of both. And it may be that Devils have at some time appeared to men in this likeness, as they have done in the likeness of the Onsentaurus and wild Ape, and other shapes; it being also probable, that Devils take not any denomination or shape from Satyres, but rather the Apes themselves from Devils whom they resemble, for there are many things common to the Satyre-Apes and Devilish-Satyres, as their humane shape, their abode in solitary places, their rough hair, and lust to women, wherewithal other Apes are naturally infected: but especially Satyres. Wherefore the Ancient Greeks conjecture their name to be derived as it were of Satther, signifying the yard or virile member: and it is certain that the Devils have exercised their prelibious lust, or rather their imagination of lust upon mankind, whereof cometh that distinction of Fauni, that some are Imuli defilers of Women, and some Sweltsis defiled by men. Peradventure the name of Satyre is more fitly derived from the Hebrew Sair, Isa. 34. whereof the plural is Seirim, Isa. 13. which is interpreted monsters of the Desert, or rough hairy Fawns; and when iim is put to the, it signifies Goats.

The Céoldeans for Seirim, render Schaden: that is, evill Devils: and the Arabians, Lystabin: that is, Satanas: the Persians, Devan: the Lyrians, Devadai and Dewas: the Germans, Tuskel: They which passed through the world and exercised daunting and other sports, for Dionysius, were called Satyres, and sometimes Tytii, because of their wanton songs: sometimes Sileni (although the difference is, that the smaller and younger beasts are called Satyri, the elder and greater Sileni:) Allo Bacbe and Nymphs, whereof Bacchus is pictured riding in a Chariot of Vinebranches, Silenus riding beside him on an Ape, and the Bacbe or Satyre shaking together their Italic Javelins and Paulmurers. By reason of their leaping they are called Sciris, and the antick or Satirical dancing Scimmis, and they also sometimes Scimmis: sometimes Aegypane: wherefore Piny reporteth, that among the Western Ethiopians, there are certain little hils of the Satyrique Aegypane, and that in the night time they use great fires, piping and dancing, with a wonderful noise of Timbrels and Cymbals: and so also in Atlas amongst the Moors, whereof there was no footing, remnant, or appearance to be found in the day time.
Of the Satyr, called Galeopithecus.

His figure of the Sogoin, I received of Peter Cordenberg, a very learned Apothecary at Antwerp, who is three times as big as my picture, and John Cay that famous English Doctor had advertised me, that it no way resembleth the Sogoin it self, which is not much greater then a Rat, a little Conny, or a young Hedghog: for he had seen several ones of that bigness, of a grizzled colour, a neat beard, and somewhat ash-coloured, a tail like a Rat, but hairy; the feet of a Squirrel, and the face almost like a Martine, or Satyre, a round ear, but very short and open, the hair black at the root, and white at the end, and in other conditions like a Monkey. They are much set by among women, and by the Bffians where they are bred and called Sogoin, it being very probable that they are conceived by a small Ape and Weasell, for in that Country, by reason of the heat thereof, there are many such unnatural conjunctions. It is a nimble, lively, and quick printed beast, but fearful; it will eat white-bread, Apples, Sweet-grapes, dried in the Sun, Figs or Pears. There was one of them at Antwerp, sold for fifty Crowns. In France they call a Sogoin a little beast not much bigger then a Squirrel, and not able to endure any cold. Some other affirm that a Sogoin is a bearded creature, but without a tail, of an ash-colour, not much bigger then a fift; but of this beast there is not any author writeth more then is already reheard.

Of the Bear-Ape Actopithecus.

Here is in America a very deformed beast which the inhabitants call Haut or Hauti, and the Frenchmen, Cwonn, as big as a great African Monkey. His belly hangeth very low, his head and face like unto a child, as may be seen by this lively picture, and being taken it will figh like a young child. His skin is of an ash-colour, and hairy like a Bear; he hath but three claws on a foot, as long as four fingers, and like the thorns of Privet, whereby he climeth up into the highest trees, and for the most part liveth of the leaves of a certain tree being of an exceeding height, which the Americans call Ambabut, and thereof this beast is called C 2'.
led Hte. Their tail is about three fingers long, having very little hair thereon; it hath been often tried, that though it suffer any famine, it will not eat the flesh of a living man; and one of them was given me by a Frenchman, which I kept alive six and twenty days, and at the last it was killed by Dogs, and in that time when I had set it abroad in the open aire, I observed, that although it often rained, yet was that beast never wet. When it is tame it is very loving to a man, and defirous to climb up to his shoulders, which tho' naked Americans cannot endure, by reaason of the sharpness of his claws.

Of the SIMIVULPA, or Apish-Fox.

The History of Four-footed Beasts.

Those which have travelled the Countrey of Payran, do affirme, that they have been a four-footed beast, called in Latin, Simivulpa, in Greek, Apeopithecus, and in German, Fuchaffe: in the forepart like a Fox, and in the hinder part like an Ape, except that it had man's feet, and ears like a Bat, and underneath the common belly, there was a skin like a bag or fersip, where in the keepe, lodgeth, and carryeth her young ones, until they are able to provide for themselves, without the help of their dam; neither do they come forth of that receptacle, except it be to suck milk, or sport themselves, so that the fame under-belly is her belt remady against the furious Hunters, and other ravening beasts, to preserve her young ones, for the is incredibly swift, running with that carriage as if she had no burthen. It hath a tail like a Monkey: there was one of them with three young Whelpes taken and brought into a flipp, but the Whelpes died quickly: the old one living longer was brought to Small, and afterward to Grandes, where the King of Spain saw it, which soon after by reaason of the change of aire and incertaintie of diet, did also pine away and die. The like thinges doth Cardan report of a beast called Chiara, in Hispania Nova, and Stadimak of a Sarray in America: but I conjecture that the former is this Fox Ape, called in Greek, Apeopithecus, and of the German Fuchaffe, the latter the Female Cyncephal, which carryeth her womb wherein lie her young ones without her belly. There is a filh called Glauclus, whereof the male swalloweith up all the young ones when they are indangered by other, and afterward yeeldeth them forth again safe and sound.

Of the ASSE.

The Ass, is called in Latin, Afinus, in Greek, Onis and Kilbo, because of his labour in bearing burdens, and of some Myganoos, because of his unpleasant voice: Of others Cochonour, or Canthus, from whence cometh Canthus, that is, a Scarbee or Flie, bred of the dung of Asses. The Hebrew call it Chamar, Deur. 5. and the Persians, Care, the latter Hebrews do indifferentely take Cajedor, Tartak, and Carr for an Ass; the Italians, L'asino, the Spaniards, Assa, the French, Unge, the Germans, Ofel, Mul, Malle refel, and the Rhytius, Ofel; the which Beast is intimated
Of the Ass.

Epithets of an Ass.

Howsoever this may be a fabulous commendation of this beast, yet holy Writ teacheth us, that an Ass faw an Angel, and opened his mouth in reproach of his master Balaam; and our most blessed Saviour rode on an Ass to Jerusalem to shew his humility; and Sampson out of the jaw-bone of an Ass, quenched his thirst. *Apollem* in his eleven books of his golden Ass, taketh that beast for an Emblem, to note the manners of mankind; how some by youthful pleasures become beasts, and afterward by timely repentant old-age, are reformed men again: Some are in their lives Wolves, some Foxes, some Swine, some Asses, and so other may be compared to other beasts: and as *Orion* faith, only by pleasure is a man a horse or Mule, when a beastly foul liveth in a humane shape. This world is unto them as an inchoated cup of *Circus*, wherein they drink up a portion of oblivion, error and ignorance; afterwards brutalizing in their whole life, till they taste the Roses of true science and grace enlightning their minds, which is their new recovery of humane wit, life, and understanding.

Asses are bred in Arcadia, wherefore proverbially, the best Asses are signified by the *Arcadian Ass*, and the greatest Asses by the *Arcarican Ass*. In *Timochen* in Persia, are very beautiful Asses, whereof one hath been sold for thirty pounds of silver. Likewise in *Rea*, in Italy, in *Illyria*, *Tirmania*, and *Epirus*, there are Asses but very small ones, although all other Cattel there are very large. In *India* among the *Feliminos*, they are no greater then Rams, and generally all their Cattel are of a very small growth. In *Sicyon*, *Pontius*, *Celts*, and the regions confining them, are no Asses bred, by reason of extremity of cold, for Asses are very impatient of cold. In *Mysea* there are also asses; but their flanks are crooked, and indented as if they were broken; whereupon a proverbial common speech arifeth (one having a broken flanke) for a *Myssian Ass*.

Asses are ingrended both by their own kind, and also by horses, for they chose fellations and put them to their Asses, who have large bodies, well-set legs, strong necks, broad and strong ribs, brawny and high creasts, thighs full of fineews, and of black or flea-bitten colour (for a Mouche-colour is not approved) wherefore he that will have a good flock of Asses, must look that the male and female be found, and of a good age, that they may breed long time, and out of a good Seminary, as of *Arcadia* or *Rea*; for as the best Lampreyes are in *Sicilia*, and the delicate fifth *Helps* in *Rhodes* and not
not elsewhere: so are belt Afges in those forenamed places. When they make choice of a Stallion, they look principally that he have a great head. An Ass is more defirous of copulation then an Horfe, and both male and female do couple at thirty moneths, although it prove not untill three, or three and a halfe Moneths. Men say that Anns the father in law of Ellaw, did firft invent the copulation of Horfes and Afges together; for as a Horfe doth cover the Ass, to an Ass will cover a Mare, and an Ass will sooner fill the huf of a Mare then a Horfe.

Ifa Horse cover a female Ass which hath been entred by a male Ass, he cannot alter the seed of the Ass: but if an Ass cover a Mare which a Horfe hath formerly entred, he will destroy the seed of the Horfe, so that the Mare shall suffer abortment, by reason that the seed genial of an Ass is more frigid then an Horfes. The Mares of kilis cannot at all conceive by Asses copulation, and there is more abortments fallent out by commision of Horfes with Asses, or Asses with Mares, then when every king mingled amongst themselves. It is but a superflition of some, which affime that an Ass cannot conceive for so many years, as the hath eaten grains of Barly corn defiled with womens purgation; but this is certain, that if an Ass conceive not at the first, loosing of her teeth, the remaineth barren. They are not coupled in generation in the Spring Equinoctium, like Mares and other beasts; but in the Summer Sulphur, by reason of their cold natures, that they may bring forth their young ones about the same time, for in the twelth moneth after their copulation, they render their Foles. If the males be kept from labour they are the worfe for generation, wherefore they are not to be suffered idle at that time; but it is not so with the female, she must ret, that the Fole may be the stronger: but prefently after she is covered, she must be coursed and driven to and fro, or else she will caft forth again the received feed.

The time that the goeth with young, is according to the male kind by which she is covered, for fo long as the male lay in the belly of his dam, fo long will the Ass carry her young before deliverance: but in the naturer of body, strength, and beauty, the young onke taketh more after the female then the male. The belte kind of Asses are the Foles of a wild Ass and a tame female Ass. They ufe when an Ass is foaled, to take it from tham, and put it to a Mare, that it may be the greater, which Foles is called Hapaphela, that is, a Horse-fucking; and Mares will not be covered by Asses, except by such a one as was a Horse-fucking. A feene of Asses will engender till the be thirty years old, which is her whole life long, but if she conceive ofte, she will quickly be barren: whereof their keepers must take such care, that they caufe them to be kept from often copulation.

They will not Bole in the fight of man, or in the light, but in darknes; they bring forth but once time, for it hath not been heard of in the life of man, that an Ass hath ever brought forth twins. As soon as they are conceived they have milk in their udders, but some hold not untill the tenth moneth. They love their young ones very tenderly, for they will run through fire to come at them, but if there be any water betwixt them, it coolteth their affections; for of all things they love not to wet their feet. They will drive their young ones from suckling at the fifth moneth, because of the pain in their udders, but their keepers wean them not till a whole year after their foaling. Their milk is so thick that it is used in stead of fodder: a Mares is more thin, and a Camels is thinnest of all. It is mortal to their young ones to taft the dames milk for two days after their foaling, for the food is so fat that it breedeth in their mouths the Colofraction or Reelings.

Touching their several parts, they have teetes on either chape like a Man and a Horfe, an Ass and a Mule have 36 teetes, and joyned neer together: the bloud of Asses and Bulls is the thickest of all other, as the bloud of man is the thinnest: His head is great and his ears long and broad: both male and female lofe their fore-teete in the thirtieth moneth of their age, and the second to the firtt, in the fift moneth; their third and fourth teeth are called Gnomons, that is, Regulars, because by them there is a trued rule to know their age; and those teeth also lofe in the fift moneth. The heart of an Ass is great, as all other fearful beasts have. The belly is uniform as in other beests that have a fold or whole hoof. It wanteth a gall, and hath two udders betwixt the thigges, the forepart of the back neer the shoulder is weakeft, and there appeareth the figure of a Croffe, and the hinder part neer the loins is stronger. The hoofs are whole and not parted: the Stygian water is so cold that nothing can hold it, except the hoofs of an Ass or Mule; although Elianus affirmeth, that it cannot be contained but in the horns of Stybian Asses. Their tails are longer by one joint then a horfes (though not so hairy). They are purged with monethly curious more then every Sheep or Goats, and the urine of the female is more thin then the males. If an Ass was hindered by any diete from making water, certain superflitious perlos for the ease of the bafl, muttered this charm:

    Gallus bibit & non mutit, Myoxus mutit & non bibit: that is,
    The Cock drinketh and maketh no water,
    The Dormouse maketh water and never drinketh.

Their men.

Philemon died with laughing when he saw an ass eat hogs.

Val. Max.
their feet; and that which is more strange, they cannot be brought to go over hollow bridges, through which the water appeareth in the chinks of the planks; and when in travall they are very thinly, they must be unladen and constrained to drink; yea, Herodotus reporteth, that there are certain Aflies among the African shepherds, which never drink. When they sleep they lie at length, and in their sleep conceive many forcible dreams, as appeareth by their often beating back their hinder legs, which if they strike not against the vain air but against some harder subtance, they are for ever utterly lamed.

When the Aflies of Tuscany have eaten Hemlock, or an herb much like unto it, they sleep so long and strangely, that oftentimes the Country men begin to flee them, and on the sudden their skins half take off and the other half on, they awake, braying in such horrible manner, that the poor men are most dreadfully affrighted therewith. Their voice is very rude and fearful, as the Poet saith;

Quiritat verres, tardus rudit, uncat astellas.

And therefore the Greeks to express the same, haved signified many new words, and call it Opeltos, Erafrutenis, as the Latins, Vacuna, that is, to utter forth a voice in a base and rude manner. The Poets feign that at that time when Jupiter came to war with the Gyants, Bacchus and Vulcan, the Artificers and Niens afflietted him and attended him, when the time came that the battell began, the Aflies for their fear brayed most horribly, whereas the Gyants not being acquainted with such strange and unknown voices and cries, took them to their heels and so were overcome.

In the facrice of the Goddesse Vacuna, an Aifie was feated with bread, and crowned with flowers, hung with rich Jewells and Peystreels, because (as they say) when Priapus would have ravished Venus, being asleep, she was suddently awaked by the braying of an Aifie, and so escaped that iniency. And the Lapumcomi in the digrace of Priapus did offer him an Aifie. But this is accounted certain, that among the Scythians by reason of cold, an Aifie is never heard or seen; and therefore when the Scythians set upon the Periuns, their Horsees will not abide the braying of Aflies,wondering both at the strangenes of an Aifie strange, and rudeless of his cry: wherefore there be certain birds, resembling in their chattering the braying of Aflies, and are therefore termed Oncotaur.

When an Aifie dyeth, out of his body are ingended certain Flies, called Scorabees. They are infected with the same diseases that Horsees be, and also cured by the same meanes (except in letting of blood) for by reason their veins be small and their bodies cold, in no case mutt any blood be taken from them.

Aflies are subject to madness when they have tasted to certain herbs growing near Parnass: as are Vegetinis, Bears, Horsees, Leopards and Wolves: they only among all other hairy beasts are not troubled with either tikes or lice, but principally they perish by a swelling about the crown of their paltere, or by a Certaine called Mules, which falling down upon their liver they die, but if it purge out of their nostrils they shall be safe: and Columela writeth, that if sheep be stabled where Mules or Aflies have been houled, they will incur the scab. There is great use made of the skins of Aflies, for the Germanes do make therewith a substance to paint and write upon, which is called Efelhaut. The Arabians have a cloth called Mesha, made of Aflies and Goates hair, whereof the inhabitants of their desert make them tents and sacks. This is reported that Enepheales was called Colunfeanes, because when the Ancientes were troubled with winds by hanging about their City innumerable Aflies skins, he safegarded them from the winds: whereupon some have thought (but falsely) that there was some secret in Aflies skins, against obstinatious Tempeles.

The bones of Aflies have been used for pipes, the Artificers made more reckoning of them then Flings, of the bones of Hattes, and therefore Esop in Phaethon wondereth that so groose and dull a creature, should have such shrill and musical bones; and the Bustriner called the Philosphers Naturaliter, because they played musick upon Aflies bones, for they cannot abide the sound of a trumpet, because it relembeath the voice of an Aifie, who is very hateful to them for Typhon sons.

Mecenates allowed the flesh of young Aflies to be eaten, preferring it before the flesh of wilde Aflies, and this cutlome also prevailed at Athenes, where they did eat the flesh of old Aflies which burneth the stomack, having in it no good juice or sweetness, and is very hard to be digested. In like sort about the coasts of Alexandria, men use to eat the flesh of Aflies, which beingget in their body much melanchoke and added humeur, causet them to fall into the Euphania or spotted leprofe.

Aflies are named three years old, and taught for those businesse which they must be applied unto; some for the mill, some for husbandry and the plough, some for burthens and carriage, some for the wars, and some for draught. Merchants use Aflies to carry their wine, oil, corn, and other things to the sea-side, wherefore the Country man maketh principal account of this beast for his carriage to and fro, being fit to carry both on his neck and on his back: with then they go to market with their wares, and upon them being home their household necessaries.
They grind in their mills and fetch home their corn, they plough their land, as in *Compania, Lybia*, and *Butia*, where the ground is soft, and in *Byzantium* that fruitful Country, which repayeth the husbandsman labor with increase of an hundred and fifty times more then the feed, and where in dry weather their ground is not arable with the whole strength of Bulls, yet after a little rain, one *Afs* in one end of a yok, and an old woman at the other end, do easily draw the plough, and open the earth to tow their feed: wherefore *Cato* said mildly, that Mules, Horses and *Afs*, keep no holy-days, except they be such *Afs* as keep within doors. In like sort they draw from place to place the carts of Bakers, or Carts laden with any other carriage, if it be not over great.

The people *Carman* (by reason they want Horses) use *Afses* in their wars, do also do the *Scymnarii*, who never use them in mils or any such base works, but upon them undertake all their martial perils.

There was a cullome amongst the *Scymnarii*, that when a Woman was taken in Adultery, she was led to the Market, and there set upon a bare *Afs*, afterwards she was set upon a bare *Afs* back, and so carried throughout the City, then brought back again to the former *Afs* for a publick spectacle to all the City, whereby she remained infamous all her life after, and was called *Onmatia*, that is, one that had ridden an *Afs*; and the *Afs* whereupon the flood, was accounted an unlucky, and an odious place for all posterity. In like sort among the *Parthians*, it was held a disgraceful thing to ride or be carried upon a bare *Afs* back. The dung of *Afses* is precious for a garden, especially for Cathages; and if an Apple tree be dying, it may be recovered by wafting in *Afs* dung by the space of six days; and some have used to put into Gardens the skull of a Mare or the *Afs* that hath been covered in copulation, with periwasion that the Gardens will be the more fruitful.

*Afse*s are of very foolish conditions and slender capacity, but yet very tame, not refusing any manner of burthen although it break his back: being loaded, it will not out of the way for any man or beast, and it only underlatheth the voice of that man, with whom it is laboured, knowing allo the way whereunto it is accustomed. *Ammoniatus* was in such love with an *Afs*, and holding him of so great a capacity, that he had one continually to hear his Lectures of Philosophie. *Galate* affirmeth, that an *Afs* underlatheth genus, species & individualum, because if you shew him a Camell that never saw one before, he is terrified and cannot endure his fight: but if he have been accustomed to such a fight, if you shew him never so many, he is not moved at them. In like sort, he knoweth men in general, being not afraid of them, but if he see or hear his keeper, he knoweth him for his keeper or master.

There was a cunning player in *Africs*, in a City called *Alcatur*, who taught an *Afs* divers strange tricks or feats; for in a publick spectacle, turning to his *Afs* (being on a scaffold to shew sport) said, *The great Sultan* purpofeth to build him an house, and shall need all the *Afses* of *Alcatur* to fetch and carry wood, stones, lime, and other necessaries for that buifinesse; presently the *Afs* fellath down turneth up his heels into the air, groaneth, and thutteth his eyes falt, as if he had been dead: while he lay thus, the Player desired the beholders to confider his efcape, for his *Afs* was dead; he was a poor man, and therefore moved them to give him money to buy another *Afs*. In the mean time having gotten as much money as he could, he told the people he was not dead, but knowing his matters poverty, counterfeiteth in that manner, whereby he might get money to buy him provender, and therefore he turned again to his *Afs* and bid him arife, but he flirred not at all. Then did he strike and beat him fow (as it seemed) to make him arife, but in all vain, the *Afs* lay fow.

Then said the player again, our *Sultan* hath commanded that to morrow there be a great triumph without the City, and that all the noble womens shall ride eithera upon the fairest *Afses*, and this night they must be fed with Oates, and have the beft water of *Niles* to drink. At the hearing whereof, up started the *Afs*, frothing and leaping for joy: then faid the Player, the Governor of this Town hath defired me to lend him this my *Afs* for his old deformed wife to ride upon; at which words the *Afs* hangeth down his ears, and underlathing like a reasonable creature, began to halt as if his leg had been out of joint; why, but faid the Player, had thou lifer carry a fair young Woman? The *Afs* wagged his head in token of content to that bargain, go then (faid the player) and among all thefe fair Women, chufe one that thou mayst carry; then the *Afs* looketh round about the Assembly, and at last went to a fober woman and touched her with his nose, whereat the residue wondered and laughed, fluttering up the sport, with crying out: An *Afs* Woman, An *Afs* Woman, and fo the Player went unto another Town.

Such things do ferve to teach us that *Afses* are not altogether indolent, besides in their own nature they know how to refrench themselves in their wearines, by wallowing on the ground, and being overcome with melancholy humor, they naturally look for the hearty *Caterach* or *Finger-feaste* to cure them. When the *Afses* of *Mauritania* are bound to a journey, they fet forward fo fast, that a man would think they rather flew then ran; but being overwearyed they are fo abated, that they fend forth tears, and then are they drawn at Horses tails to their journeys end.

The *Afs* is never at peace with the Crow, because it longeth for the *Afses* eyes, likewise the bird *Salem*, for when the *Afs* comes to the thornies, to rub himself where the faid bird buildeth her nest,
of the asse.

neit, the Ase spoileth it, wherefore the faind bird maketh continual asfalt upon him. In like fort the Caloct or Strelle, for it feepeth in the mangers, and creepeth up into the Afses nose to hinder him from eating.

The Wolfe is also an enemy to the Afe, for he lovethe his flefh, and with small forceth doth compeffe the deftruction of an Afe, for the blockisf Afe when he feeth a Wolfe, layeth his head on his fide, that he might not fee, thinking that because he feeth not the Wolfe, the Wolfe cannot fee him; but the Wolfe upon this advantage feteth upon the beaft on the blind fide, and eafily deftroyth the couragelfs Afe. Another argument of an Afe's stupiditie, is that he careth not for his own life, but will with quietnes fave, if meat be not laid before him. Wherefore it is apparent that when a dull Scholar not apt to learn, is bid to fell an Afe to fignifie his blockifhnes, is no vain fenfence; therefore they which refembe Afses in their head, round forehad, or great face, are faind to be blockifh; in their fleffifh face,feirtifh; in broad or great eyes, fimple; and like to be mad in thick lips, and the upper hanging over the neather, Foolifh; and in their voice, contumelious and difdainfull.

To conclude, the ancients have made many fignifications of Afses and their fhaipes, making a man with an Afe head to fignifie; Firft, one ignorant of manners, histories, and Countries. Secondly, immoderate riot of unborn perions in Scripture is deciphered in an Afe. Thirdly, impudence and flamelefnes, because an Afe will not for any fhaipes forfake his own wayes. Fourthly, the feift people, who like Afses could not understand the evident truth of Christ in the plain text of Scripture, wherefore our Saviour secretly upbraided their dullnes, when he rode upon an Afe. Fifthy, the Egyptifh by an Afe, noted a man without all divine knowledge; wherefore they tield to take an Afe and follow him with all defpit, beating him from place to place till he brake his own neck; for they believed that an Afe was poffefled of a Devil. Sixtly, Indocility, by an Afe bridled. Seventhly, the fnares of flatterers; for their Priets fet an Afe between flowers and ropes, neither of both partaining to an Afe's skill; teaching thereby how mighty men fall by treachrsh of flatterers. Eightly, a Woman difembling her Pregnancy. Ninthly, by a man weaving a cord, and an Afe behind him biting it afunder; they fignifie, a painful husband and a prodigal wife. Tenthly, a good Vufe-dreffler, for when an Afe did bite of the branch of a vine, it was obferved that the next year the Vine was more fruitful. Finally, hafe fervility, trilfing flaughterfnes, good fortune, Tyrants, and fools, are Hieroglyphically comprised under the difcourfe of Afses.

Touching fuch medicinal vertues as have been tried and found to be in the several parts of Afses, by learned and approved writers, now in the conclusion of this History they shall be briefly remembred, and fo this Narration be finifhed.

A draught or two of the fame water whereof an Afe or an Oxe hath drunk, will eafe the head- ache, the forehead of an Afe tied to the neck of one that hath the falling evil, cureth him; and the brain of an Afe steeped in sweet water and infuamed in leaves, whereof taken for certain days, half an ounce, eafeth the falling evil: the number of which days cannot be lefs then thirty, but this is very ridiculous, that if a man hurt by a Scorpion, dowhisper his bare in the ear of an Afe, prefently the hurt ceaeth. When one is vexed with a Quotidian Fever, with three drops of blood out of the vein of an Afe ear, put into eighteen ounces of water and drunk by the patient, eafe that pain.

The liver of an Afe burnt, driveth away venomed things, and the fame dried and beat to powder, helpeth the Cough and shortnes of breath, and roiled to be eaten, ifr be eaten falling it is againft the falling evil. Other fay, ifr be mixed with Opponox, and inflinced into the mouth forty days together, defendeth infants from the aforefaid ficknes. Also the heart of a male black Afe, eaten with bread at the evening, in the first or second day of the Moon, is good againft the falling evil. The liver dried with Parifely, and three Walnuts clenfed from the pil and put into hony, is marvellous good for one that is liver fick; the ashes of it mixt with oil, taketh away Wers; and the ashes of the liver and the flefh is good againft the chapping, cleits, or flifers in the body, which come by cold: but Dofowd, whom I rather follow, attributeth both these vertues to the ashes of the hoof. He that is fick of the mil, be holpet with the old mil of an Afe, If he eat thereof every day dryed and calling, he shall find eafe by it within three days. The fame firft dryed and then steeped in water, maketh the dogs full of milk, fo also doth the Spleen, and the Spleen with fewet of a Bear, and oil made as thick as hony, by anointing the eye-lids therewith, refethore the hairs which are wanting. The reins exenterated brooffed and put into new pure wine, do help the bladder, and fay the incontinency of the Urine. The fame dried, burned, and beaten into very small powder, whereof a nut shell full put into two cups of pure wine and drunk off, careth the Strangeury.

It is thought, t'while with the powder of the Afe genital, the hair may be made grow thicker: and the fame beaten with lead and oil, and anointing the head where gray hairs are shaven off, keept from more gray hairs. The bones of an Afe kept in falt and sprinkled in a portion of Afe's milk or Water, helpeth the falling evil. The Gall of an Afe or a Bull, either of them, feverally broke into Water, taketh away the spots in the face, if after the patients skin be pilled, he muft keep himfelf from fun and wind.

The blood of an Afe flayeth the flux of blood coming from the skin or films of the brain; and two or three drops of the fame drank with wine, careth the Quotidian Fever: the felf fame thing is reported of the blood let out of the vein in the ear. The blood of the Fole of an Afe with wine, careth

Marcellus.

Pliny.

Haly.

Marcellus.

Pliny.

Pliny.

Pliny.

Pliny.

Pliny.

Pliny.

Pliny.

Pliny.

Pliny.

Eusebius.
cureth the Kings evil. The froth or scum of Vide with the fat of an Affe or the fat of a Sow, cureth the wincings of Dogs: and if there be any freas in the body, the fat maketh them of the fame colour with the refulde of the body. And if one vexed with the Falling evil, be announced with the feet or fat of an Affe, it will ease them very much; likewise the marrow of Affes helpeth the Scabs from a man, and with the feet the places infected with Caraths, Leprofies, or Scars, receive their former colour; and the skin laid upon young Infants, maketh them without fear. And if the bill of a Hen wrapped in an Affes skin, be bound to ones forehead, it provoketh feep.

A Pallie man will fall down if he taste of the perfume made of the hairs of an Affe or Mule.

The Affes of the hares of Affes, fayweth bleeding; and the fame hath the more force if they be of a male, and be mixed with Vinegar and laid in wooll to the blude bleeding. The bones of an Affe broken and rod, are very foveryal against the venom of Sea-hair-fish. The powder of an Affes hoof drunk a moneth together, two spoonfuls at a time, helpeth the Falling evil very greatly; and the fame mixed with oil, helpeith the Kings evil; and being put upon Kibeor Chil-blaines, cureth them. The hoofs of Affes burned and beaten to powder, given to them that have the Falling evil in drink, helpeth them speedily: also a burned hoof is mingled with many medicines, to cure the swelling of the Navel in children; and the hoofs perfumed procure speedy deliverance in travel of young, that the dead thing may come forth, otherwise it is not used, for it will kill the living young ones.

The durt thereof with the milk of an Affe, by annointing cureth the Scars and Webs of the eyes, and as Marcellus faith, only the parings of an Affes hoof scraped and mingled with a womans milk; and they say, that if an Epilipick, in a ring made of Affes hoof wherein is no blacknes, it will preserve him from falling. The powder of an Affes hoof burned and beaten, laid in Vinegar and made in little bals, and one of them put into the mouth and there held, helpeith the loofenes and pain in the teeth. There is a collection of certain hard matter about an Affes legs, called Lichen, which if it be burned and beaten, and put into old oil, will caufe hairs to grow out of baldnes, and it is of such force, that if it be applied to a womans cheek, it will produce the fame effect, and mingled with Vinegar it raiseth up the Leibangke man.

And if a man take the Ring-wormes growing naturally on Affes legs, and shreadeth them into powder put them in Vinegar, it stayeth all pain in the head, which maketh one feepy. The ffeeth of Affes fodd in poottage helpeith them, that have the Pothisi or disease of the Lungs, and there are some which prescribe the taking of Affes ffeeth, or the blood of Affes mingled with Vinegar, to be taken forty days together against the falling evil. The milk of an Affe mingled with hony and drunk, looethereth the belly, and therefore Hippocrates gave it for a gentle purgation, being moother then any other kind of milk, and fitter to take down the belly. It will also ease the tooth-sach, if the teeth be washed in it, and faften them that are looether, being very good to waft the teeth withal. Galen gave Affes milk mixt with hony, to one in a Confrontation when he came newly from a bath, and therefore it is given in Fevers Heelick, and all confuming diseases, because the sublime of it is fitter for deteration then nutriments; when the beafts are in pain, by drinking Affes milk they be holp; and the fame mingled with hony, caufeth Womens purgation; by drinking Affes milk, an exulerate Homest is relieved; likewise all other pains in the homest, where a come of fnares or low- row, fivering, and defeption; and Horeludes gave Affes milk with Annised to one that had his lights hopped, and it is likewise recommanded against the Cough, extenuation, fittung of blood, Dropifie, and hardnes of the Spleen, but it is not good for a weak head troubled with giddines or noife, yet will it loofen the hardnes of the belly in a Fever.

It is also freely used against eating of Morture, White-leade, Sulphur, and Quickfliver; and when a mans meat doth not either nourifh nor digeft, let him drink Affes milk safely: and it is also good to gargarize in fore chaps or throates. Likewise in a Fever when there is no head-ache. The ancient in old time gave Affes milk to children before meat, and for want thereof Goats milk; for fore mouths it must be gargarized. It is very profitable against the Colick and Blondy-flux, if hony be put thereto; loosefnes or defire of ftool is taken away by drinking Affes milk: the whay or milk of an Affe did Hippocrates prescribe against the Confunption of the reins or back; and the fame with the root of a pomgranate against the loosefnes and other diseases of the belly to be drunk.

Alfo there are examples where the whay of Affes milk have helped the Gout, both in hand and foot; sweet water with Affes milk is wholesome againft poison of Hen-bane, and other poisons, but it must be use new, or else soon after warmed: This milk will make womens skins whiter, wherefore P. pap., the wife of Demitrus Nero carrie about with her in her progres fifty milch Affes, wherewith she did use to bath her self.

The Urine with the own dung, he leth bright flooing, feabs in a man, and the roughnes of the mils. It taketh away the feurfe of Oxen. It is given in drink, to cure them that have ache in their reins, and with Pyr or wort it is profitable against Suppurations and Apolloem in the flesh. If any be hurt by the Stirs, waft them in Affes flate, mingled with Sphina: the fame force hath it againft cornes and all hardnes or thicknes of skin. The dunge of Affes new with oil of Rofes, dilufed warme into the ears, helpeith deafnes; and putthes or fuddain boils of the head, are cured with the Juice of Affes dunge, and of Sea-onionts beat to powder, and the fat of beef, layed to the boils like a plaifer: both the dung of Affes and Horses either raw or burnt mingled with Vinegar, reftaineth bleeding both in Fluxes and Wounds, used like a plaifer, being new and mingled with Vinegar; and for
Of the Hinnus, Innus, &c.

for the bleeding at the nofe, snuffe in the athes of Aflès dung burnt to powder. The dung of Aflès cureth the Piles, and the fame dried and moistened in wine being drunk of Cartel which are flung with Scorpions, cureth them if it be at graffe; and it is found true by long experience, that the dung of an Aflè rubbed, in quantity two spoonfuls, and taken every day, delivereth one from the falling evil.

mitis prodeft ex ubere fuccus aﬄè,  
Sit tepido wine infundus ac meli piferque.

This is good againft the gall and running over thereof, if it be mingled with warm water, pepper, and hone. The Syrians call the dung of a young Fole which it first callifed up after the foling, Polcau; and give it againft the ficknefs of the milk.

In fopâ dreciHum folo magnupere prodeft.

The fame is good againft the Colick and the Bloody-flux. The juice of Aflès dung, Aflès milk, and sweet wine, anointed on the fick member, cureth the Gowe: and the fame layeth the fowreffe of women with child; the juice hereof cureth the closing up of the eyes in the right. The skin wherein the young Fole lyeth in the dams belly being fmelel not unto him that hath the Falling evil, it ealeth him. Anaiauli hath reported, that if the excrements of a Mares copulation be burned, there will appear monstrous figures of Horfes heads. If a Horfe have a web in his eye, mingle together the milk of an Aflè, the blood of a Dove, and the dew of Cabages, and anoint him therewith: and there be some which take of the dirt where an Aflè hath made water in the way, and therewith anoint the Scabs of Sheep for their recovery: but when one is fieckened with a Scorpion, the Aflès dung must be prefently applied, or else it profiteth nothing in that malady.

Of the Hinnus, Innus, and Ginnus, Mannus, mammulus, Beft & Burdeus, &c.

There is no word in the Greek that have any words to express thefe Beasts, and the Latins have derived thefe terms from them. Thofe are Beasts of a fmall fize, as dwarfs among men, and therefore feldom feen in these parts of the world. They which are called Hinnus, are conceived of a Horfe, and a Aflè, whofe bles that they take their denomination from the male, yet do they more reffemble the female. In ancient time, the males which were conceived of a Horfe and a Aflè, were called Hinnus, and likewise of an Aflè and a Mule; fo are the young ones of little Goats, Deer, Hares, and other like: although fome take Innus for the young Harts, and the Hinnus Hinnus for the breed of a Horfe, and an Aflè; fo that there appeareth two kinds, and both of them tranplanted out of other.

The Hinnus is leffe then the Muie, but more ruddy, having ears like a Horfe, and a mane and tail like an Aflè, lying in the womb before the fologing twelve moneths like a Horfe, and are brought up like little Horfes, whose age is difcerned by their teeth, and they are fometimes procreated of a Horfe and a Mule, and because of their aptnefs to bear, they are called Burdeus, or else of Burdeus by reafon of their folly and lownefs.

Mannus and mammulus are very little low horfes, being very gentle and easy to be handled, being called alfo among the Civilians, Beft. There is in France, not far from Grattenon, a kind of Mules which in the Country I speech are called Innus, being bred of an Aflè and a Bull, and in the Helvetian Alps beyond Cunna, about the Town Speluga, I have been fincerely informed, that there was a Horfe conceived of a Bull and a Mare, and therefore Seeliger faith, that fuch a fole is called Hinnus, whereof he reported he had feen many; and he himfelf had two of them, and at that inftant had only one female, becaufe whole ears there were two hone buncbes about the bignefs of half a Walnut, giving evident teftimony by the forehead, that her father or Syre was a Bull: and fome fay that this kind want their upper teeth: and their underchop doth in a deformed manner forth from it felf beyond the upper, as it is in many fishe, being called of the Catell and Avernus, Beft: And at this day there is in the Court of France a certain beaft which in the former part is like an Aflè, and in the hinder a Sheep. In Ferraria among other extraordinary beafts, they nourifh dwarff Aflès, of whom Maffini made a Difcription to this effect, that they are not fo high as a man, when he fitteth on the ground.

His tibi de mulit non est metuenda ruina:  
Altius in terris fene fecere folet.

For the Innus, and Ginnus, or Hinnus, they are conceived by a Male and a Mure, which are very small by reafon of some difeafe the dam that beareth them hath in her belly: the word Innis signifying a young or new born Nephew, and is attributed to this kind of beafts, because they never exceed the quantity of a young foie. Both the Male and the Burde remain barren and never conceive, theire neigh like a Horfe, and that brayeth like an Aflè. A Muffimon is a short Horfe, Aflè, or Mule.
The History of Four-footed Beasts.

Of the Wild Ass.

A Wild Ass, called of the Latin, Onager; of the Hebrews, Arad and Arda, and as Sebastian Munster affirmeth, Meodos and Arda; in the German tongue it may be termed Ein Waldesfell, and the young ones called Lalisouns.

These wild Asses are not Elkz, as some have reported of Elkz, nor that Oryx which the ancient writers do constantly affirm to live in a continual thirst, as for the most part wild Asses do. Of these Asses are great store in Persia, Lycaonia, and Africa, and it is said, that the Saracen King of Tama in Africa, sent unto Ferdinand King of Naples, a goodly great wild Ass, such an one as hath not been seen in this part of the world.

Apollonius affirmeth, that he saw wild Asses in great plenty beyond Cappadocia in Egypt; so there many in Cauca, an Island near Crete: as Persia, in Asia, in Madaura, and Abosia, Arabia desert, Mauritania, and Armenia. Cellini reporteth that there are such wild Asses in that region under the Equinoctial towards the East and South, of wonderful nature; their skins (beside the usual manner) being of divers colours, intermixed variably with white and black, and the Zones and Strakes descending from the top of the back unto the fides, and there divided by their winding and turning, make the foles appear of admirable variety.

These Asses love the higheft Mountains and rocks, as holy Scripture teacheth, Jer. 14. The Ass in the high place and drew in the wind like Dragons: which words gave occasion to some to imagine, that wild Asses would quench their thirst with the wind without water; whereas it is the manner of all wild beasts, in extremity of thirst, to gape wide and greedily draw in the cold refreshing air, and they will not drink but of pure fountain water. They live in flocks and great companies together, but in defolate places: the males going before the females, and commonly one male will lead and rule the whole flock of females, being exceeding swift, and fleetful, and therefore do they often change their places of abode; and yet it is observed, that the wild Asses of Asia never go over the mountain that divideth them from Cappadocia.

They engender among themselves, their females being much more lustful then the males, and therefore do the males observe and watch them with a jealous eye towards their own foles, especially after they have conceived; and the female as warily avoideth the fight of the male, especially at the time of her foling; for if the bring forth a female, the male receiveth it with all love, joy, and welcome: but if a male, then doth he with angry and envious countenance look upon it, taking it heavily that another male is bred, which in time may in the fathers place possesse his dam; wherefore in a raging madness he falleth upon the foles, seeking by all his power to bite off his bones; the poor female although weakened with poore delivery, yet helpeth her young one against the fathers rage, and like a Mother who seeing her Son slain in war, embraceth his bleeding corps, and cryeth out with doleful voice, tearing her cheeks and bleeding betwixt her breasts: so would you think this fife female Ass, to mourn for her foles, now ready to die by the Sires cruelty laying, O my husband why is thy ass so insolent? Why are thy eyes now become so bloody, which even now were as white as light? Doth thou look upon the face of that monster Medusa? which turneth men into foles? or doft thou look upon some new hatch'd horrible Dragon, or the wheet of some Lion lately littered? Why wilt thou gild this your young one which nature bath given unto us both by preception? O wretched foles that I am, which have conceived an unclean fole by the fathers wickedness! O my poor and unhappy! which for a jealous fear art deprived of thy natural parts, not by the claws of Lions (that I would endure) but by the unnatural and more then basilethy of thy own father.

These wild Asses have good and strong hooves, their swiftnes is compared to the wind, and in the time that they are hunted, they can call backward with their heels Bones with such violence; as they pierce the breyes of them that prosecute them if they be not very wary. They are of a large, broad, tall and beautiful body; long ears, and a silver colour, (that is as I heffe) a bright cloud-colour, for it is but vain to imagine, that an Ass can be all white, for then were all the ancients deceived, which with one voice affirm, that he hath a black lift on the back, at either side whereof are two white lines.

Their food is only grasse and herbs of the earth, whereby they grow very fat, their heart being the fittest part of their body, and they will not abide any flesh-eating beast, especially the Lion whom he feareth very much, for all these strong beasts devour and eat them. These Asses are very fit for civil uses, as for plowing and fowing, for being tamed they never grow wild again, as other beasts will, and they easily grow tame. It is observed, that the same being tamed, is most tame which before time was most wild. They love figs and meat above all things, wherefore the Armenians use to take a certain black fift bred in their waters which is poison, and covering it with the meat the wild Asses come and lick thereof, and so are destroyed. The bell of them are generated of a Mare and a wild Ass tamed, for they are the twintfil of intense, by hardhkeit hoof, a lean body, but of a generous and untiresable stomac. The Indian wild Asses have one horn in their forehead, and their
their body all white, but their head is red: So is there another beast in India very like a wild Ass, which the Inhabitants eat (as we have read) about the Strait of Maelstrom: When these Asses are hunted with Dogs, they cast forth their fire or dung, with the favour whereof the Dogs are stayed while it is hot; and by that means the beast escapeth danger: but the Asses of Monstrianus are very short wined, and subject to weariness and champing, for which cause they are more easily taken, and the bell of all are not so swift as a Barbary horse; besides their nature is, when they see a man to stand stone still, crying, braying, and kicking, till you come at them, and when one is ready to take them, they take their heels and run away. The Inhabitants of Arabia Deserta, by many guns and other deceptive devices take them, and on horseback follow them till they tire, or can strike them with their darts. Their fleth being hot, doth stink and taste like an other Asses, but boiled and kept two days hath a pleasant taste; yet doth it not breed good blood, because it is viscus and hard to be concocted, although there be many which eat that, as also the flesh of Panthers and other such beasts.

Pliny teacheth that there is more virtue in the wild Asses milk and bones against venom and poison, than in the tame. Likewise, in the heel of an Ass, a principal remedy against Apoplexy, and buncbes, and scabes in the heth, if it be applied to the inner part of the thigh. The gall draweth out botes, and must be anointed upon impollutable scars. It is used also in Empiheurs against Saint Anthony fire, the leprous, and dwelling in the legs and guts. The fat with oil of haery Mary by anointing the reins of the back, helpheth and eateh that pain which was engendred by wind. The spleen dryed to powder and drunk in wine or drink, is good against the thicknes of the spleen. The fleth is good against the pain in the ridge and hip-bones: and Genan affirmeth, that the urine breaketh and disolves the stone in the bladder. The ass's of the hoof helpheth the falling evil, and mingled with oil, cureth the kings evil, and the looseness of the hair. The marrow eateh the Gout, and the dung mixed with the yolk of an egge and applied to the forehead, liethy bleeding: also the fame cureth the hair if it be mingled with an Oxes gall and dryed: put into wine and drunk, cures the stings of a Scorpion: and Zor an Hebrew affirmeth very constantly, that if a man look into an Asses eye, it preferveth the sight, and hindereth the water that defcendent into the eye.

Of the Scythian Asses.

The Asses of Scythia have horns wherein it is reported that the Stygian water of Arcadia may Helianus be contained, although it will eat through all other vessells be they never so hard. Sosthen brought of them to Alexander the great, who admiring the rareness, would not put them to any private use, but sent them to Delphi, to be offered to Pythias; but that these can be properly called Asses, no man can defend, although Herodotus alfo affirmeth, that among the Africans called Aetas, there be Asses with horns.

Of the Indian Asses.

It is questionble whether the Monoceros, commonly called a Unicorn, the Rhinoceros, the Oryx, and the Indian Ass be all one beast or divers: for the Unicorn and Rhinoceros have the same things attributed to them in stories, and differ in very few reports: but for the Asses of India, both Aetianus, Pliny and Helianus, joyntly agree, that they differ from all other whole-footed beasts, because they have one horn in the forehead, and so alfo have the Rhinoceros, Monoceros, and Oryx, but the Indians call a Unicorn, Carthusian; and the horn so highly prized at this day, is thought to be of the Rhinoceros: but Helianus and Pliny acknowledge no other Valerius then the Indian Ass, who in bignesse equalleth a Horse among the Indian, being all white on the body, but purple headed or red (as some say) black eyes, but Valerianus faith bl ew, having one horn in the forehead a cubit and a half long, whose upper part is red or bay, the middle black, and the neather part white, wherein the Kings and mighty men of India use to drink, adorning it for that purpose with fundry bracelets, precious flones, and works of gold, for holding for truth that all those which drink in those horns, shall be freed from annoyance of inuerable diseases, as Convulsions, the Falling evill, and deadly poysons.

These wild Asses exceed all other, both in stature of body, and also swiftnes of foot, for at the firll, they set forth very gently, and afterward sped their journey with better pace, so that it is very hard for any to follow them, but impossible to overgo them. The males take great pains in keeping their young ones, whom they continually watch and hide in the most remote and desert places they can finde. When they are hunted, they keep their weak young ones behind them, and fight for them very furiously, neither fear they to encounter horfemen. They are so strong, that no beast may stand before them, for they will receive the charge of Horfes with such violence, that in their encounter they bite out their fides and tear their guts out of their belly: for which cause they are dreadful to Horfes, who are most unwilling to joyn with them, for they never meet but they both perish. They fight with their heels, but their teeth are most dangerous, for what they apprehend in D them
them; they bring it clean away: and because of this rage, those which are of any years, can never be tamed. The great King of India doth once every year appoint all manner of fights both men and beasts, wherein are wilde Bulls, tame Rams, these wild Asses with one horn, Hyænas and Elephants. To conclude, it is but a fable of Volaterranus, that faith, these Asses want a gall, for they have the bladder of the gall, a portion whereof drunk, cureth the falling evil.

Of the **Alborach** and **Axis**.

There are two other beasts to be added to the end of this rank, namely the Alborach among the Turks, being a fair white beast like an Affe, whereupon the Turkish Priests blaspheous idolaters, persuade the silly Pilgrims of Mecha, that Mahomet was carried up to heaven. The Axis, of which Plato speakseth, is a wilde beast, having a skin like the Hinnulus aforesaid, but spred over with whiter spots, which is bred in India. **Bellanus** affirmeth, that they saw two of them in the Castle of Cairo, a male and a female, and either sex wanted horns, having long tails down to their mid-legs like Deer, and differ very little from Deer, faving in their large white spots and yellow colour, yealding a much more clear and founding voice than a Deer, and the female thereof is smaller than the male. This beast is by idolatrous people, dedicated to their drunken god Bacchus.

Of the **Badger**, otherwise called a Brocke, a Gray, or a Bausen.

The Badger could never find a Greek name, although some through ignorance have foiled it into a Greek Dictionary Melo, whereas in truth that is his Latin word Meles or Meles, and so called, because above all other things, he loveth hony, and some later writers call him Texo, Tass, Taxo, and Albertus Magnus, Duxus. But whereas in the Scripture some translate Tejus, Tejas, or Tachseh, and plurally Tebafem, Badgers, yet is not the matter so clear, for there is no such beauty in a Badgers skin, as to cover the Arke, or to make Princes choose thereof: therefore some Hebrews say, that it signifies an Oxe of an exceeding hard skin. Onaheus translateth it Salgus, that is, a beast skin of divers colours; Symmachus and Aquila a jacinet colour, which cannot be; but the Arabians, Darasch, and the Persians, Albasch; yet it may be rather said, that those skins spoken of Exod. 25. Numb. 4. Ezek. 26. be of the Lynx, or some such other beast: for Tachseh cometh near to that, signifying a kind of Wolf not hurtful to men, being rough and hairy in Winter, but smooth in Summer.

The Italians call a Badger Tasso, the Rhetians, Tosh: the French, Tasse, Tasson, Taixin, Taffon, Tass, and sometime Grasfart, for her colour: sometime Blasen, and at Paris, Bedese. The Spaniards, Taffo, Texon; the Germans, Tach, or Dux; the Illyrians, Graswex.

Badgers are plentiful in Naples, Sicily, Lucane, and in the Alpine and Helvetican coasts; so are they also in England. In Lucane there is a certain wilde beast, resembling both a Bear and a Hog, not in quantity, but in form and proportion of body; therefore this may fitly be called in Greek, Superitor, for a Grey, in short legs, ears and feet, is like a Bear, but in fatness like a Swine. Therefore it is observed, that there be two kinds of this beast, one resembling a Dog in his feet, which is called Cume; the other a Hog in his cloven hoof, and is called Swinefis: also these differ in the fashion of their shoue, one resembling the shoue of a Dog, the other of a Swine: and in their meat,
Of the Badger.

meat; the one eating flesh and carrion like a Dog, the other roots and fruits like a Hog, as both kinds have been found in Germany and other parts of France and Sicily. This beast diggeth him a den or cave in the earth, and there livest; never coming forth but for meat and cæson, which it maketh out of his den: when they dig their den, after they have entred a good depth for avoiding the earth out, one of them sitteth on the bank, and the other layseth all the earth on his belly, and so taking his hinder feet in his mouth, draweth the belly-laden Badger out of the cave, which disburtheth her cariage, and goeth in for more till all be finished and emptied. The wily Fox never matcheth a Den for himself, but finding a Badgers cave, in her absence, layseth his excrements at the hole of the Den, the which when the Gray returneth, if the smell (as the tavour is strong,) the forebeareth to enter as noforme, and to leaveth her elaborate house to the Fox. These Badgers are very sleppy, especially in the day time, and flir not abroad but in the night, for which cause they are called Lucifers; that is, Fiends of the light. They eat bony, and wormes, and horns, and flesh like things, because they are not very swift of foot to take other creatures. They love Orchards, Vines, and places of frutes also, and in the autumn they grow therewith very fat.

They are in quantity as big as a Fox, but of a shorter and thicker body; their skin is hard, but rough and rugged, their hair harsh and stubborn, of an intermingled grizzled colour, sometime white, sometime black; his back covered with black, and his belly with white, his head from the top thereof to the ridge of his shoulder, is adorned with theakes of white and black, being black in the middle, and white at each side. He hath very sharp teeth, and is therefore accounted a deep-biting beast. His back is broad, his legs (as some say) longer on the right side then on the left, and therefore he runneth best when he geteth to the side of a hill, or a cart-road-way. His tail is short but hairy, and of divers colours, having a long face or snowlike, as the Zibetibus; his forelegs being a full span long, and the hinder legs shorter, short ears and little eyes, a great bladder of gall, a body very fat between the skin and the flesh, and about the heart; and it is held that this fat increaseth with the Moon, and decreaseth with the fame, being none at all at the change: his forelegs have very sharp nales, bare and apt to dig withall, being five both before and behind, but the hinder very short ones and covered with hair. His favour is strong, and is much troubled with lice about his secrets; the length of his body from the nose which hangeth out like a Hogs nose, to the tail or rump, is some thirty inches and a little more, the hair of his back three fingers long; his neck is short and like a Dogs; both male and female have under their hole another outwardly, but not inwardly in the male. If the be hunted out of her Den with Hounds, the bithem they gravely if they lay hold on them, wherefore they avoid her carefully, and the Hunters put great broad collars made of a Grays skin about their Dogs neck, to keep them the safer from the Badgers teeth: her manner is to fight on her back, using thereby both her teeth and her nales, and by blowing up her skin above measure after an unknown manner, she defendeth her self against the keys of men, and the teeth of Dogs: wherefore she is hardly taken, but by devils and gins for that purpose inventd; with their skins they make quivers for arrows, and some the heard in Italy use thereof to make facks, wherein they wrap themselves from the injury of rain.

In Italy and Germany they eat Grays flesh, and boil with it pears, which maketh the flesh tast like the flesh of a Porcupine. The flesh is best in September if it be fat, and of the two kinds, the Swinsh Badger is better flesh then the other. There are sundry vertues confected out of this beast: for one is affirmed, that if the fat of a Badger mingled with crude bony, and anointed upon a bare place of a horse, where the former hairs are pulled out, it will make new white hairs grow in that place: and it is certain (although the Grecians make no reckoning of Badgers grace, yet,) it is a very forerain thing to soften, and therefore Serenus prescribeth it to anoint them that have Feyes or Inflamations of the body.

Nec sernendas adeps dederit, quem belsia melis.

And not to be despifed for other cures: as for example, the eashing of the pain of the reins if it be given in a glyfter, and likewise the fat of a Dog and a Badger mingled together, do loosen contracted fines.

The ashes of a Badger is found to help the bleeding of the stomack and the fame sod and drunk, preventeth danger by the biting of a mad Dog: and Brunfelsius affirmeth, that if the blood of a Badger be intillled into the horns of Cattel with fat, it keepeth them from the murrain, and the fame dryed and beat to powder doth wonderfully help the Leprosie. The brain sod with oil eatch all aches; the liver taken out of water, helpeth swellings in the mouth; and some affirm, that if one were soles made of Badgers skins in their sooes, it giveth great eafe unto the Gowt. The biting of this beast is venemous, because it feedeth upon all venemous meats which creep upon the earth, although Arnoldus be of a contrary judgement: and of this beall I can report no other thing, worth the noting, save that the Noble family of the Taxons in Ferraria, took their name from this creature.
A Bear is called in the Hebrew, Dub; and plural Dubim; of the Arabians, Dukle; of the Chaldeans, Dubah, Aleb and Debah; of the Greeks, Arutos; of some Delphus, because of the roughness of his hair; of other Beeros, and Monius, signifying a solitary Bear. The Latins call him Ursus, which some conjecture to be tanguam orus, signifying that it is but begun to be framed in the dams bellye, and perfected after the littering thereof. The Italians call it Ursus; fo also the Spaniards; the French, Ours; the Germans, Bears; and Bears; the Boemians, Nedsved; the Polishers, Vultures; and the attributes of this beast are many among Authors, both Greek and Latin; as Lemnian Bears, armed, filthy, deformed, cruel, dreadful, fierce, greedy, Calydonian, Erymanthian, bloody, heavy, night ranging, Lybic, menacing, Numidian, Ursus; head-long, ravening, rigid and terrible Bear; all which serve to set forth the nature hereof, as shall be afterward in particular disoured.
Of the Bear.


First, therefore concerning several kinds of Bears, it is observed, that there is in general two; a greater, and a less; and these leffer are more apt to clime trees then the other, neither do they ever grow to so great a stature as the other. Besides there are Bears which are called Amphiibus, because they live both on the Land and in the Sea, hunting and catching fish like an Otter or Beaver, and these are white coloured. In the Ocean Islands towards the North, there are Bears of a great stature, fierce and cruel, who with their fore-feet do break up the thickest congealed Ice on the Sea, or other great Waters, and draw out of those holes great abundance of fishes: and so in other frozen Seas are many such like, having black claws, living for the most part upon the Seas, except tempestuous weather drive them to the Land.

In the Eastern parts of Indis, there is a Bear in proportion of body very like a Bear, yet induced with no other quality of that kind, (being neither so wild, nor ravenous, so strong) and it is called Fo-tmicarian Bear; for that it is pretended, whereas that Courtesey is abundantly annoyed with the Emeriche Ants, that bear doth so prey and feed upon them, that by the strength and vertuous humor of his tongue, the filly poor Inhabitants are exceedingly relieved from their grievous and dangerous numbers.

Bears are bred in many Countreys, as in the Helvetian Alpine region, where they are so strong and full of courage, that they can tear in pieces both Oxen and Horses, for which cause the Inhabitants study by all means to take them away. Likewise there are Bears in Persia, which do raven beyond all measure, and all others; so also the Bears of Numidia, which are of a more elegant form and composition than these reducet; and whereas Pliny affirmeth, that there are no Bears in Africa, he mistook that Countrey for Crete, and so fay many, that in that island be no Wolves, Vipers, or other such venemous creatures; whereas the Poets give a vain reason, because Jupiter was born there: but we know alfo, that there be no Bears in England.

In the Countrey of Arabia, from the Promontory Diræ to the South, are Bears which live upon eating of flesh, being of a yellowish colour, which do far excel all other Bears, both in activity or swiftefe, and in quantity of body. Among the Koscelani and Littinians, are Bears, which being tamed are presents for Princes. A fi[6]lo in his wonders reporteth, that there are white Bears in Miyra, which being esierly hunted, do send forth such a breath, that putrifeth immediately the flesh of the Dogs, and whatsoever other beast cometh within the favour thereof, it maketh the flesh of them not fit to be eaten: but if either men or dogs approach or come nigh them, they vomit forth such abundance of phlegm, that either the hunters are thereby choked or blinded.

The rays also breed white Bears, and the King of Ethipia, in his Hebrew Epistle which he wrote to the Bishop of Rome, affirmeth, that there are Bears in his Countrey: In Buufonia are Bears, both of a Snow white, yellow, and dusky colour, and it hath been seen that the Noble women Charities drawn by six Horses, have been covered with the skins of white Bears; from the pattern to the head, and as all other creatures do bring forth some white, and some black, so also do Bears, who in general do breed and bring forth their young in all cold Countreys, some of a dusky and some of a brown black colour.

A Bear is of a moft venenous and luflful disposition, for night and day the females with most ardent inflamed defires, do provoke the males to copulation: and for this cause at that time they are most fierce and angry.

Philippus Celsus, Confinste, did moft confidently tell me, that in the Mountains of Savoy, a Bear carried a young maid into his den by violence, where in venenous manner he had the carnal life of her body, and he kept her in his den, he daily went forth and brought her home the bell Apples and other fruits he could get, presenting them unto her for her meat in very amorous sort; but always when he went to forrage, he rouled a huge great stone upon the mouth of his den, that the Virgin should not escape away: at length her parents with long search, found their little Daughter in the Bear's den, who delivered her from that Savage and beaftful captivity.

The time of their copulation is in the beginning of Winter, although some time in Summer, (but such young ones seldom live) yet most commonly in February or January. The manner of their copulation is like to a man, the male moving himself upon the belly of the female, which lyeth on the earth flat upon the back, and either embrace each other with their fore-feet: they remain very long time in that act, insomuch as if they were very fat at their first entrance, they disjoin not themselves again till they be made lean.

Immediately after they have conceived, they betake themselves to their dens, where they (without meat) grow very fat (especially the males) only by sucking their fore-feet. When they enter into their den, they convey themselves in backwards, so that they may put out their foot-steps from the sight of the hunters. The males give great honor to the females great with young, during the time of their fereifie, so that, although they lie together in one cave, yet do they part it by a division or small ditch in the midst, neither of them touching the other. The nature of all of them is, to avoid cold, and therefore in the Winter time do they hide themselves, chufing rather to suffer famine then cold; lying for the most part three or four months together and never see the light, whereby...
The History of Four-footed Beasts.

When they first enter into their den, they betake themselves to quiet and rest, sleeping without any awaking, for the first fourteen days, so that it is thought an easie stroke cannot awake them. But how long the females go with you’re is not certain, some affirm three months, others but thirty days, which is more probable, for wild beasts do not couple themselves being with young (except a Hare and a Lins) and the Bears being (as is already said) very lufiful, to the intent that they may no longer want the company of their males, do violently call their Whelps, and so presentiy after delivery, do after the manner of Conies betake themselves to their luft, and nourishing their young ones both together: and this is certain, that they never come out of their caves, till their young ones be thirty days old at the least; and Flin precisely affirmeth, that they litter the thirty day after their conception; and for this cause, a Bear bringeth forth the least whelp of all other great beasts, for their whelps at their first littering are no bigger then rats, nor longer then one finger. And whereas it hath been believed and receivd, that the whelps of Bears at their first littering are without all form and fashion, and nothing but a little congealed blood like a lump of flesh, which afterwards the old one frameth with her tongue to her own likenes, as Flin, 

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Time of bearing 

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The briefest 

of a 

Bear-whelp.

Beats not so 

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Hare.


destructive 

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Of the quantity 

and price of 

Bears.

The parts or 

members.

A superflitious 

life of 

Bears.

whereby their guts grow so empty, that they are almost closed up and stick together.

The History of Four-footed Beasts.

The History of Four-footed Beasts.

Awaying of cold.

Time of bearing the young Bears.

The briefest of a Bear-whelp.

Beats not so unperfect as some have reported.

Number of young ones.

Remedy in Nature.

A fabulous elephant, yet vulgarly believed.

The meat of Bears.

Hare.

Destructive devouring ants, evil.

Of the quantity and price of Bears.

The parts or members.

A superflitious life of Bears lived or fat.

Some affirm, that Bears do wax or grow as long as they live, that there have been seen some of them five cubits long; yea I my self saw a Bears skin of that length, and broader then an Oxes skin.

The head of a Bear is his weakest part (as the hand of a Lyon is the strongest) for by a small blow on his head he hath often been stricken dead, the bones of the head being very thin and tender: yea more tender then the beak of a Parrot. The mouth of a Bear is like a Hogs mouth, but longer; being armed with teeth on both sides, like a fow, and flanding deep in his mouth, they have very thick lips, for which cause, he cannot easily or halfly with his teeth break aunder the hunters nets, except with his fore-feet.

His neck is short, like a Tygers and a Lyons, apt to bend downwards to his meat; his belly is very large, being uniform, and next to it the intrals as in a Wolf: it hath also four spears to her Paps. The genital of a Bear after his death waxeth as hard as horn, his knees and elbows are like to an Apes, for which cause they are not swift or nimble: his feet are like hands, and in them and his lions is his greatest strength, by reason whereof, he sometimes feteth himself upright upon his hinder legs: the pattern of his leg being fleshy like a Cammels, which maketh them unfit for travel: they have sharp claws, but a very small tail as all other long haired creatures have.

They are exceeding full of fat or lard-grease, which some use superflitiously beaten with Oyl, wherewith they anoynt their Grasp-fickles when they go to vintage, persuading themselves that if no body know thereof, their tender Vine-branches shall never be confumed by Caterpillars.
Of the Bear.

Other attribute this to the virtue of Bears blood, and Tiphresius affirmeth, that it Bears greale be kept, at such time as the Bears he secret, it will either fill it up, or cause it to run over. The fleth of Bears is unfit for meat, yet some use to eat it, after it hath been twice sod; other eat it baked in paffies; but the truth is, it is better for medicine then for food. Tiphresius likewise affirmeth, that at the time when Bears he secret, their dead fleth encreaseth which is kept in houfes, but Bears fore-feet are held for a very delicate and well falted food, full of sweetnefs; and much used by the German Princes.

The skins of the Bears are used in the far Northern regions for garments in the Winter time, which they make so artificially, covering themselves with them from the crown of the head to the feet, that (as Monier affirmeth) some men deceived with that appearance, deeme the people of Lapponia to be hairy all over. The fouldiers of the Moos wear garments made of Lyons, Pardals, and Bears skins, and fleep upon them; and it is reported of Herodatus Megarensis the Mufitian, who in the day time wore a Lyons skin, and in the night lay in a Bears skin.

The constitution of the body of a Bear is beyond measure phlegmaticke, because he falleth in the Winter time fo long without meat: His voyce is fierce and fearful in his rage, but in the night time mounrful, being given much to ravening. If a Bear do eat of Mandragoras, he presently dyeth, except he meet with Emmets, by licking of whom he recovereth: fo likewise if he be sick of a Swирует.

A Bear is much subject to blindness of the eyes, and for that caufe they desire the Hives of Bees, not only for the Hony, but by the stinging of the Bees, their eyes are cured. It hath not been seen that a female Bear was taken great with young, which cometh to pafs, by reafon that they go to their Den so soon as they are conceived, and come not out thence till they have littered: And because of the fierceenes of this beast, they are seldom taken alive, except they be very young: fo that some are killed in the Mountains by poifon, the Country being too steep and rocky that Hunters cannot follow them; some taken in ditches of the Earth, and other gins. Oppianus relateth, that near Tigrius and Armenius, the Inhabitants ufe this stratagem to take Bears. The people go often to the Woods to find the Den of the Bear, following a Leam-hound, whose nature is fo soon as he windeth the Bear, to bark, whereby his leader discovereth the prey, and do draweth off the Hound with the Leam; then come the people in great multitude, and compassing him about with long nets, placing certain men men at each end: then they a long rope to one fide of the net as high from the ground as the small of a mans belly: whereunto are fatted divers plumes and feathers of Vultures, Swans, and other repleident coloured birds, which with the wind make a noise or hisling, turning over and gliding; on the other fide of the net they build four little bowsls, wherein they lay four men covered all over with green leaves, then all being prepared, they found their Trumpets, and wind their Horns; at the noise whereof of the Bear ariseth, and in his fearful rage runneth to and fro as if he faw fire: the young men armed make unto him, the Bear looking round about, taketh the plainest way toward the rope hung full of feathers, which being firred, and hated by them that hold it, maketh the Bear much afraid with the rating and hisling thereof, and so flying from that fide half mad, runneth into the nets, where the Keepers entrap him so cunningly, that he feldom elcape.

When a Bear is set upon by an armed man, he standeth upright and taketh the man betwixt his fore-feet; but he being covered all over with iron plates can receive no harm, and then may easily with a sharp knife or dagger pierce through the heart of the beast.

If a the Bear having young ones be hunted, the drove ther her whelps before her until they be weared, and then if he be not prevented, the clumbeth upon a tree, carrying one of her young in her mouth, and the other behind. A Bear will not willingly fight with a man, but being hurt by a man, he gnatheth his teeth, and licketh his fore-feet: and it is reported by an Ambaffador of Poland, that when the Sarmatians find a Bear, they inclose the whole Wood by a multitude of people, standing not above a cubit one from another, then cut they down the outmost trees, so that they raise a wall of wood to hem in the Bears; this being effecteth, they raffe the Bear, having certain forks in their hands made for that purpofe, and when the Bear approacheth, they (with thole forks) fall upon him, one keeping his head, another one leg, another his body, and fo with force muzzle him and tie his legs, leading him away. The Rhettians ufe this policy to take Wolves and Bears: they raffe up great poifes, and crofe them with a long beam laded with heavy weights, unto the which beam they fasten a cord with meat therein, whereunto the beast coming, and biting at the meat, pulleth down the beam upon her own pate.

The Inhabitants of Helvetia hunt them with maftiff Dogs, because they should not kill their Carrell at large in the field in the day time; They likewise shoot them with guns, giving a good fum of money to them that can bring them a flain Bear. The Sarmatians ufe to take Bears by this flegft; under thofe trees wherein Bees breed, they plant a great many of sharp pointed flakes, putting one hard into the hole wherein the Bees go in and out, whereunto the Bear climbing, and coming to pull it forth, to the end that he may come to the Hony, and being angry that the flake licketh fo fuit in the hole, with violence plucketh it forth with both her fore-feet, whereby the loofeth her hold and fallceth down upon the picked flakes, whereuon the dieth, if they that watch for her come not to take her off. There was reported by Demetrius Ambassador at Rome, from the King of Melos, that a neighbour of his going to fpeak Hony, fell into a hollow tree up to the brelf in Hony, where he lay two days, being not heard by any man to complain; at length came
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came a great Bear to this Hony; and putting his head into the tree, the poor man took hold thereof, whereas the Bear suddenly affrighted, drew the man out of that deadly danger, and ran away for fear of a worse creature.

But if there be no tree wherein Bees do breed near to the place where the Bear abideth, then they use to annoy some hollow place of a tree with Hony, whereunto Bees will enter and make Hony-combes, and when the Bear findeth them the he is killed as aforesaid. In Norway they use to saw the tree almost alder, so that when the beast climbeth it, the falletth down upon piked flakes laid underneath to kill her: And some make a hollow place in a tree, wherein they put a great pot of water, having anointed it with Hony, at the bottom whereof are fastened certain hooks bending downward, leaving an easie passage for the Bear to thrust in her head to get the Hony, but impossible to pull it forth again alone; because the hooks take hold on her skin: this pot they bind fast to a tree, whereby the Bear is taken alive, and blindfolded, and though her strength break the cord or chain wherewith the pot is fastened, yet can the not escape or hurt any body in the taking, by reason her head is fastened in the pot.

To conclude, other make ditches or pits under Apple-trees, laying upon their mouth rotten ficks, which they cover over with earth, and throw upon it herbs, and when the Bear cometh to the Apple-tree, the falletth into the pit and is taken.

The herb Wolf-chen or Libardine is poison to Foxes, Wolves, Dogs, and Bears, and to all beasts that are littered blinde, as the Alpine Bihetians affirm. There is one kind of this called Cyclamem, which the Valdenfians call _Twa_, and with the yucey thereof they poiyon their darts, whereof I have credibly received this story: That a certain Valdenfian, having a wild Bear, having a dart poyoned herewith, did cast it at the Bear being far from him, and lightly wounded her, it being no sooner done, but the Bear ran to and fro in a wonderful perplexity through the woods, unto a very sharp chife of a rock, where the man saw her draw her last breath, as soon as the poiyon had entered to her heart, as he afterward found by opening of her body. The like is reported of Henbane, another herb: But there is a certain black fift in Armenia, full of poiyon, with the powder whereof they poiyon Figs, and cast them in those places where wilde beasts are most plentiful, which they eat, and so are killed.

Concerning the indufly or natural disposition of a Bear, it is certain that they are very hardly tamed, and not to be trusted though they seem never fo tame; for which cause there is a story of _Diana in Lysias_, that there was a certain Bear made fo tame, that it went up and down among men and would feed with them, taking meat at their hands, giving no occasion to fear or mistrust her cruelty: on a day, a young maid playing with the Bear lafbrivously did so provoke it, that he tore her in pieces; the Virgins brethren seeing the murder, with their darts flew the Bear, whereupon followed a great perpetuall wrath upon all that region: and when they consulted with the Oracle, the paynim God gave anfwer, that the plague could not ceafe, until they dedicated some Virgins unto _Diana_, or the Bears fake that was illain; which some interpreting that they should sacrifice them: _Embarus_ upon condition the Priesthood might remain in his family, flw his only daughter to end the pellife, and for this cause the Virgins were after dedicated to _Diana_ before their marriage, when they were betwixt ten and fifteen year old, which was performed in the month of _January_, otherwise they could not be married: Yet Bears are tamed for labours, and especially for sports among the _Rexolani_ and _Lybian_, being taught to draw water with wheels out of the deepest wells; likewise stones upon felds to the building of walls.

A Prince of _Lippania_ nourished a Bear very tenderly, feeding her from his table with his own hand, for he had used her to be familiar in his Court, and to come into his own chamber when he listed, so that she would go abroad into the fields and woods, returning home again of her own accord, and would with her hand or foot rub the Kings chamber door to have it opened, when she was hungry; it being locked: it happened that certain young Noble-men confpired the death of this Prince, and came to his chamber door, rubbing it after the custom of the Bear, the King not doubting any evil, and supposing it had been his Bear, opened the door, and they presently flew him.

There is a fable of a certain wilde Bear, of huge stature, which terrif'd all them that looked up on her, the which _Pythagoras_ sent for, and kept to himself, very similarly using to stroke and milk her at the length when he was weary of her, he whistled in her ear, and bound her with an oath, that being departed the Bear never more harm any living thing, which faith the fable, she obferved to her dying day. These Bears care not for any thing that is dead, and therefore if a man can hold his breath; as if he were dead, they will not harm him; which gave occasion to _Eopis_, to fable of two companions and fworne friends, who travelling together met with a Bear, whereas they being amaz'd, one of them ran away and got up into a tree; the other fell down and counterfeited himself dead, unto whom the Bear came and fmelt at his nostrils and ears for breath, but perceiving none, departed without hurting him: soon after the other friend came down from the tree, and merrily asked his companion what the Bear said in his ear, Marry (quoth he) the war'd me that I should never tru't such a fugitive friend as thou art, which didd forfake me in my greatest necelcity: thus far _Eopis_.

They will bury one another being dead, as _Teucer_ affirmeth, and it is received in many Nations, that children have been nurfed by Bears: _Paris_ throwed out of the City, was nourished by a Bear. There is in _France_ a Noble house of the _Orfani_, whose first founder is reported to have been certain years
Of the Bear.

They will not willingly fight with a man, although men may do it without hurt, for if they annoy or sprinkle the mouths of Lyons or Bears with Vitriol or Copperas, it will fo bind their claws together, that they shall not be able to bite, which caufed Martiull to write thus:

Alexander had a certain Indian Dog, given unto him, to whom was put a Bore and a Bear to fight withall, but he did them not, but when a Lyon came, he rose up and fought with him. Bears, they will fight with Buls, Dogs, and Horfes: when they fight with Buls, they take them by their horns, and to with the weight of their body, they weary and prefs the beast, until they may easily flay him: and this fight is for the most part on his back. A Ki\-ne\-cros let on by a Bear in a publick spectacle at Rome, did easily call him off from the hold he bad on his horn. She doth not adventure on a wide Bore, except the Bore be asleep, or not seeing her. There is also a mortal hatred between a Horfe and a Bear, for they know one another at the first sight: and prepare to combat, which they rather act by policy then by strength: The Bear falling flat on his back,

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back the Hore leaping on the Bear, which pulleth at his guts with her fore-feet-nails, and is by the heels of the Hore unkinded to death, if he strike the Bear upon his head. Also Bears bear a Sea-calf, and will not fight with them if they can be avoided, for they know they shall be overcomen.

Great is the fiercenes of a Bear, as appeareth by holy Scripture, Hose. 13. I will meet them as a Bear raked of her whelps (saith the Lord) and will tear in pieces their inward heart: And Chief telleth Al-La-

Jenes, Silvatis HS. Of The What of Beaf, Fiber notation (j-etk heels back like powder, pounded them) they vered! Of the of Beaf, Bears, Wolves, Lyons, and Leopards, muzled and disarmed, so that when they did awake, they shoulde finde such chamber-fellows, as they could not behold (if darknes did not blind them) without singular terror; whereby many of them fell into swounds, ficknes, exaffte and madnes.

Vitellus King of Lituanian, kept certain Bears of purpole, to whom he cast all persons which spoke against his tyranny, putting them firl of all into Bears skins; whose crueltie was so great, that if he had commanded any of them to hang themselves, they would rather obey him then endure the terror of his indignation: In like fort did Alexander Therman deal with his subjects, as is reported by Tector, Valentiannus the Emperor nourished two Bears devourers of men, one of them called golden Bice, the other Inonezencia; which he lodged near his own Chamber: at length after many Laughters of men, he let Inonezencia go loose in the Woods for her good defects, in bringing so many people to their funerals.

There are many natural operations in Bears. Pity reporteth, that if a woman be in fore travaile of child-birth, let a fcone or arrow which hath killed a Man, a Bear or a Boar, be thrown over the house wherein the woman is, and the shall be eased of her pain. There is a small worm called Vol-

rex, which eateth the Vine-branches when they are young, but if the Vine-ficcles be anointed with Bears blood, that worm will never hurt them. If the blood or grease of a Bear be let under a bed, it will draw unto it all the fleas, and fo kill them by cleaving thereunto. But the virtues medicain are very many: and the firl of all, the blood cureth all manner of Bunche and Apotomuses in the fteeth, and bringeth hair upon the eye-lids if the bare place be anointed therewith.

The fat of a Lyon is most hot and dry, and next to a Lyon, a Leopard; next to a Leopard, a Bears; and next to a Bears, a Bul. The latter Physitians use to cure cupulved and disfrahed parts, spots, and tumors in the body. It also helpeth the pain in the loines, if the fick part be anointed therewith, and all Ulcers in the legs or thins, when a Plaifer is made thereof with Bole-armorick. Also the Ulcers of the feet mingled with Allom. It is sovereign against the falling of the hair, compounded with wilde rofes. The Spaniards burn the brain of Bears when they die in any publique sports, holding them venemous, because being drunk, they drive a man to be mad as a Bear; and the like is reported of the heart of a Lyon, and the brain of a Cat. The right eye of a Bear dryed to powder, and hung about childrens necks in a little bag, drive away the terror of dreams, and both the eyes whole, bound to a mans left arm, eafeth a quartain Ague.

The Liver of a Sow, a Lamb, and a Bear put together, and trod to powder under one shooes eafe-

eth and defendeth Cripples from inflammation: the gall being preffed and warmed in water, deliveth the body from cold, when all other medicine faileth. Some give it mixt with water, to them that are bitten with a mad Dog, holding it for a singular remedy, if the party can fast three days before. It is also given against the Paffie, the Kings Evill, the Falling-ficknes, an old Cough, the Inflammation of the Eyes, the running of the Ears, the difficulty of Urine, and delivery in Childe-birth, the Hemorrhois, the weaknes of the Back. The ftones in a Perfume are good against the Falling evil, and the Paffie; and that women may go their full time, they make Amulets of Bears nails, and caufe them to wear them all the time they are with childe.

Of the BEAVER Male and Female.

A Beaver is called in Grecian, Caffar; in Latin, Fiber; in Italian, Biarre, or Bivero, and Icafloros; in Spanien, Caffar; in French, Bierre, and sometime Caffar; in Illyrian, Bobr; in German, Biber: all which words at the first sight seem to be derived from the Latin: There is no certain word for it in Hebrew; in Arabia it is called Almodinofher; it is also called in Latin, Canis Fonicus, but Ca-

nis Fluvialis, is another Beaf, as we shall manifest in the fucceeding discourse of an Otter: and the reason why in Latin it is called Eberis, because (as Varro faith) it covereth the fides, banks, or extremities of the river, as the extremities or laps of the ear and liver are called Fibres, and the skirts of garments Pimborie: but the reason why the Gracians call it Caffar, is not as the Latins have supposed, because it bitheth off his owne ftones, quasi capudo foemum, as shall be manifest here after, but of Caffaros, because the ftones thereof it is hunted and killed, or rather of Caffar, signifying a bel-

ly for that the body is long and almost all belly; or rather because of the colour & ill favour thereof.

This Beaver is no other then that which Aritfotle calleth Latinas, and it differeth from an Otter only in
Of the Beaver.

They are most plentiful in Pontus, for which cause it is called Canis Ponticus; they are also bred in the Rivers of Spain, and in the River Marne in France; Padus, in Italy; Saône, in the Rivers Isara and Rhône, and in the Island called Camargo, and in Helvetia, near Arada, Orlé and Limoges: Likewise throughout all Germany, Poland, Scaronia, Russia and Prussia: and there are Beavers in the woods of Mocho and Lithuania, of excellent perfection and stature above others, having longer white hairs which glitter above other. These beasts live both in the water and on the land, for in the day time they keep the water, and in the night they keep the land, and yet without water they cannot live, for they do participate much of the nature of fishes, as may be well considered by their hinder legs and tail.

Their quantity is not much bigger than a Country Dog, their head short, their ears very small and round, their teeth very long, the under teeth standing out beyond their lips three fingers breadth, and the upper about half a finger, being very broad, crooked, strong and sharp, standing, or growing double very deep in their mouth, bending compass like the edge of an Axe, and their

colour yellowish red, wherewith they defend themselves against beasts, take fishes as it were upon hooks, and will gnaw in funder trees as big as a man's thigh: they have also grinding teeth very sharp, wherein are certain wrinkles or folds, so that they seem to be made for grinding some hard substance, for with them they eat the rindes or bark of trees; wherefore the biting of this beast is very deep, being able to crush render the hardest bones, and commonly he never lothes his hold, until he feeleth his teeth gnash one against another. Pliny and Silvius affirm, that the person so bitten cannot be cured, except he hear the crashing of the teeth, which I take to be an opinion without truth.
The History of Four-footed Beasts.

They have certain hairs about their mouth, which seem in their quantity or bigness to be rather hard they are so hard, but their bones are most hard of all and without marrow: Their forefeet are like a Dogs, and their hinder like a Gooses, made as it were of purpose to go on the land, and swim in the water, but the tail of this beast is most strange of all, in that it cometh nearest to the nature of fishes, being without hair, and covered over with a skin like the scales of fish, it being like a foal, and for the most part fix fingers broad and half a foot long, which some have affirmed the beast never pulleth out of the water; whereas it is manifest, that when it is very cold, or the water frozen he pulleth it up to his body, although Agricola affirm, that his hinder legs and tail, freeze with the water; and no leffe untrue is the assertion, that they compel the Otter in time of cold and frost, to wait upon their tail, and to trouble the water so that it may not freeze round about them; but yet the Beaver holdeth the Otter in subjection, and either overcometh it in fight, or killeth it with his teeth.

This tail he useth for a stern when he swimmeth after fish to catch them. There hath been taken of them whose tails have weighed four pound weight, and they are accounted a very delicate dish, for being drest they eat like Barbles: they are used by the Letter ringers and Savages for most allowed to be eaten on fish-dayes, although the body that beareth them be feath and unclean for food. The manner of their dressing is, first roasting, and afterward steething in an open pot, that so the evil vapor may go away, and some in pottage made with Saffron; other with Ginger, and many with Brine; it is certain that the tail and forefeet taft very sweet, from whence came the Proverbe, That sweet is that fis, which is not fis at all.

These beasts use to build them Caves or Dens near the Waters, so as the Water may come into them, or else they may quickly leap into the water, and their wit or natural invention in building of their Caves is most wonderful: for you must understand in the night time they go to land, and there with their teeth gnaw down boughes and trees which they likewise bite very short fitting their purpoze, and so being busied about this work, they will often look up to the tree when they perceive it almost aunder, thereby to discern when it is ready to fall, left it might light upon their own pates: the tree being down and prepared, they take one of the oldest of their company, whose teeth could not be used for the cutting, (or as others say, they constrain some strange Beaver whom they meet withal) to fall flat on his back (as before you have heard the Badgers do) and upon his belly place all their timber, which they so ingeniously work and fasten into the compasse of his legs that it may not fall, and so the residue by the tail, draw him to the water side, where these buildings are to be framed: and this the rather seemeth to be true, because there have been some such taken, that had no hair on their backs, but were pulled; which being espied by the hunters, in pity of their slaverie or bondage, they have let them go away free.

These beasts are so constant in their purpoze, that they will never change the tree that they have once chosen to build withall, how long time so ever they spend in biting down the same: it is likewise to be observed, that they never go to the same, during the time of their labour, but in one and the same path, and so in the same return to the water again. When they have thus brought their wood together, then dig they a hole or ditch in the bank side, where they underfet the earth to bear it up from falling, with the aforesaid timber; and so they proceed, making two or three rooms like several chambers, one above another, to the intent that if the water rise they may go further, and if it fall they may defend unto it. As the husbandmen of Egypt do observe the building of the Crocodile, so do the inhabitants of the Countrey where they breed, observe the Beavers, that when they build high, they may expect an inundation, and flow on the Mountains; and when they build low, they look for a calm or drought, and plow the valles. There is nothing so worthy in this beast as his stones, for they are much sought after and desired by all Merchants, so that they will give for them any great price.

There is both in male and female, certain bunches under their belly as great as a Gooses, egg, which some have unskilfully taken for their cods, & between these is the secret or privie part of both sexes; which tumours or bunches are nothing else, but a little fisthe bag within a little thin skin, in the middle whereof is a hole or passage, out of the which the beast sucketh a certain liquor, and afterward
ward therewith anointeth every part of her body that the can reach with her tongue. Now it is very plain that the be bunches are not their cods, for these reasons; because that there is no passage either of the feed from them, or from them into the yard; besides, their bones are found within their body; neither ought this to seem strange, seeing that Hares have the like bunches, and also the Malebus or Mask-cat: the female hath but one passage for all her excrements, and to conceive or bring forth young ones.

It hath been an opinion of some, that when a Beaver is hunted and is in danger to be taken, the bitch of her own bones, knowing that for them only her life is sought, which caueth Alcimus to make this Emblem,

Et pedibus segnitus, tumida & pendensibus albus,
Hac tamen infidias effulgat arte fiber :
Mordicus ipse fluidecia virilis uellit ;
Atque objecta se se manus ab ilia peti.
Et ut in exemplo dicist non parcat e rebus,
Et vitam ut rectam hosibus ara dare.

Teaching by the example of a Beaver, to give our purse to the thieves, rather then our lives, and by our wealth to redeem our danger, for by this means the Beaver often escape. There have been many of them found that wanted bones, which gave some strength to this error, but this was exploded in ancient time for a fable; and in this and all other honest discourses of any part of Philo- sophy, the only mark whereat every good student and profesfor ought to aim, must be verity and not tales; wherein many of the ancient have greatly offended (as is manifefted by Morcellus Virgil- ius) especially Plato: and this poyson hath also crept into and corrupted the whole body of Religion. The Erytian in the opinion of the aforefaid Censure, when they will signific a man that hurteth himself, they picture a Beaver biting off his own bones. But this is most safe, as by Scribon, Plu- nius, Donecius, and Albertus, is manifefted. First, because their bones are very small, and so placed in their body as are a Boars, and therefore impossible for them to touch or come by them. Secondly, they cleave to fall unto their back, that they cannot be taken away but the beast must of necessity lose his life: and therefore ridiculous is their relation, who likewise affirm, that when it is hunted (having formerly bitten off his bones) that he standeth upright and sheweth the hunters that he hath none for them, and therefore his death cannot profit them, by means whereof they are averted and seek for another.

These Beavers eat fish, fruits, and the bitter rindes of trees, which are unto them most delicate. Their food; especially Aldern, Poplar, and Willow; whereupon it is proverbially said, of one that serveth another for gain: Sic me fas quotidian ut fist falicem, you love me as the Beaver doth the Willow, which eateth the back and deltroeth the tree.

They are taken for their skins, tails, and cods, and that many ways; and first of all when their Calves are found, there is made a great hole or breach therein, whereinto is put a little Dog, which the beast espying, flyeth to the end of her den, and there defendeth her self by her teeth, till all her structure or building be rafed, and the laid open to her enemies, who with such instruments as they have pretent, beat her to death: some affirm that the rouzeth up her body, and by the strong favour of her bones the driveth away the Dogs, which may be probable, if the bones could be seen. These Dogs are the same which hunt wild fowl and Otters.

It is reported that in Prussia they take them in bow-nets, baited with the rinde of trees, whereinto they enter for the food, but being entrapped cannot go forward again. They cannot dive long time under water but must put up their heads for breath, which being eliped by them that befet them, they kill them with gun-shot, or pierce them with Otters spear, so that one would think seeing such a one in the water, that it was some hairy kind of fish; and his nature is, if he hear any noise to put his head above water, whereby he is discovered and loseth his life. His skin is precious in Polonia, either for garment, or for Goves, but not so precious as an Otters, yet it is used for the edging of all fur garments, making the belt thw and enduring longest; they are belt that are blackest, and of the bellies which are like felt wool, they make caps and stockings against rain and foul weather.

The medicinal vertues of this beast are in the skin, the urine, the gall and the cods: and first, a garment made of the skins, is good for a Paralytik person; and the skins burned with dry Onions and liquid pitch, layeth the bleeding of the nose, and being put into the soles of shoes easeth the Gout. The urine preferred in the bladder, is an antidote against poiyon: and the gall is profita- ble for many things, but especially being turned into a glye it helpeth the falling evil. The gener- nals of a Beaver are called by the Pliny Cafferum, and therefore we will in this discourse use that word for expressing the nature, qualities, remedies, and miraculous operation thereof, where-fore they must be very wary and skillfully taken forth, for there is in a little skin compassing them about a certain sweet humor (called Humor Molletus) and with that they must be cut out, the utter skin being cut aunder to make the more easie entrance, and the Apothecaries use to take all the fat about them, which they put into the oil of the Cafferum, and fell it unto fisher-men to make bait for fifties. The females have fones or Caf- foreum, as well as the males; but very small ones. Now you must take great heed to the choise of your Beaver, and then to the bones which

The cods or stones of the beath,

Kamoselum

The Beaver doth not bite off her own bones.

Herbis. An emblem,
mult grow from one root conjoined, otherwise they are not precious, and the beast must neither be a young one nor one very old, but in the mean betwixt both, being in vigor and perfection of strength.

The Beavers of Spain yeeld not such virtuous Cafforeum as they of Ponsius, and therefore if it be possible, take a Pantique Beaver, next one of Gallatius, and laitly of Africk. Some do corrupt them putting into their skin Gum and Ammoniac with blood, other take the reins of the beast, and so make the Cafforeum very big, which in it self is but small. This beast hath two bladders, which I remember not are in any other living creature, and you must beware that none of these be joyned to the Cafforeum. You may know if it be mingled with Ammoniac by the tale, for although the colour be like, yet is the favour different. Platearius sweeth, that some adulterate Cassaforem, by taking off his skin, or some cod newly taken forth of another beast, filling it with blood, fines and the powder of Cafforeum, that, fo it may not want his strong smell or favour: other fill it with earth and blood: other with blood, roten, gum, fines and pepper, to make it raft sharp: but this is a falsification discoverable, and of this sort is the Cassaforeum which is sold in Venetie, as Brafasola affirmeth: and the most of them sold at this day are bigger then the true Cassaforem, for the full weight of the right flones is not above twelve ounces and a half, one of them being bigger then the other, being fix fingers breadth long, and four in breadth. Now the sub stance contained in the bag is yellowish, solid like wax, and sticking like gleet, not sharp and cracking betwixt the teeth (as the counterfeit is). These flones are of a strong and finking favour, such as is not in any other, but rotten and sharp, as Grammatius affirmeth; yet I have smelled it in its dried, which was not unpleasant, and things once seasoned with the favour thereof, will ever taft of it, although they have not touched it, but lie covered with it in the same box or pot: and therefore the Cassaforem of Persia is counterfeit, which hath no such smell, for if a man smell to the right Cassaforem, it will draw blood out of his nose.

After it is taken forth from the beast, it must be hung up in some place to be dried in the shadow, and when it is dry, it is soft and white: it will continue it strength fix years, and some say feven: the Persians affirm, that their Cassaforem will hold its virtue ten years, which is as faft as the matter they speak of is counterfeit. Archigenes wrote a whole booke of the virtue of this Cassaforem, whereunto they may resort, that require an exact and full declaration of all his medicinal operations: it shall only be our purpose, to touch some general heads, and not to enter into a particular discovery thereof.

Being so dried as is declared, it must be warily ufed, for it fafteth out herein as in other medicinal subiects, that ignorance turneth a curing herb or sub stance, into a venemous and destructive quality; therefore we will lift of all fer down the dangers to be avoided, and afterward some particular cares that come by the right ufe of it. Therefore it must be understood that there is poftoy in it, not naturally, but by accident: as may be in any other good and wholesome matter: and that especially in the smell or favour thereof: whereunto if a woman with child do smell, it will kill the childe unborn and cause abortion: for a womans womb is like a creature, nourished with good favours, and destroyed with evil: therefore burning of feathers, shoo-soles, woolen clothes, pitch, Gulanum, gum, onions, and garlick is noftom to them. It may be corrupted not only as is before declared; but alfo, if it be shut up close without vent into pure aire, when it is hanged up to be dried, or if the bag be kept moist, so that it cannot dry; and it is true (as Avien faith) that if it be ufed being fo corrupted, it killeth within a dayes space, driving one into madness, making the sick perfon continually to hold forth his tongue, and infecting him with a Fever by inflaming the body,loosing thecontinuity of the parts, through sharp vapors arising from the stomac: and for a proof that it will inflame, if you take a little of it mingled with oil, and rub upon any part of the body, or upon your nail, you shall feel it.

But there is also a remedy for it being corrupted; namely, Affes milk mingled with some sharp syrop of Citron, or if need require, drink a dram of Phlius Antidote at the moft, or take buter and sweet water, which will cause vomit, and vomit therewith fo long, as you feel the favour of the flower, and afterward take syrop of Limmons or Citrons: and some affirm upon experience, that two penny weight of Curador-feed, scorched in the fire, is a presernt remedy for this evil. And it is most strange, that seeing it is in greatest strength, when the favour is hottest, which is very displeasing to a mars nature in outward appearance, yet doth it never harm a man taken inwardly, (being pure and rightly compounded) if the perfon be without a Fever, for in that case only it doth hurt inwardly, otherwise apply it to a moist body lacking refrigeration, or to a cold body wanting evaporation, or to a cold and moist body, you shall perceive an evident commodity thereby, if there be no Fever: and yet it hath profirld many where the Fever hath not been over hot, as in Extaties and Lethargies, miniftred with white Pepper, and Melicrate, and with Rofe cakes laid to the neck or head. The fame virtues it hath being outwardly applied and mingled with oil, if the bodies be in any heat, and purely without oil, if the body be cold, for in heating it holdeth the third degree, and in drying the second. The manner how it is to be administered is in drink, for the moist part, the sweet liquor being taken from it, and the little skins appearing therein cleaned away, and so it hath among many other these operations following. Drunk with Vinegar, it is good against all venom of Serpents, and against the Chameleon, but with this difference, against the Scorpion with wine, against Spiders with sweet water, against the Lizards with Myrrh, against Dipius and Cerastes, with Opium, or wine made of Rews, and against other Serpents with wine tumply.

The dangers in the use of Cassaforem, Serpens.
Of the Bison.

Take of every one two drams, for a cold take it a scruple and a half in four cups of wine, used with Ladanum, it cureth the Euphilaes and Ulcers, provoking freezing by smellng to it; procureth sleep, they being anointed with it; Maiden-weed and Conferve of Rofes, and being drunk in water, helpe of Phrenife, and with the Rofes and Maiden-weed asfoafed, eafeth head-ach; being laid to the head like a plaifter, it cureth all cold and windy affections therein; or if one draw in the imoak of it perfumed, though the pain be from the mothers womb, and given in three cups of sweet Vinegar falling, it helpe the Falling sicknefs, but if the perfon have often ills, the fame given in a Glyfier, giveth great eafe: Then muft the quantity be two drams of Cafiorum, one fextary of honey and oil, and the like quantity of water, but in the fit it helpe with Vinegar by smellung to it. It helpe the Palfic, taken in Rew or wine, fold in Rew, fo alfo all heart trembling, ach in the stomack, and quaking of the fitews. It being infused into them that lie in Lethargies with Vinegar and Conferve of Rofes doth prefently awake them, for it strengthnethe the brain, and moveth Iternation. It helpe obfition coming by reafon of ficknefs, the party being firft purged with Pfera Ruff, Cafiorum, with oil bound to the hinder part of the head, and afterward a dram drunk with Mincrate, alfo taken with oil, cureth al Convulsion proceeding of cold humors, if the Convul- 

Venetii

A secret; 

A miraculous

Monifter.

Of the name.

Bifon called of some Latins, though corruptly, Urifum, and Vifum: of the Greces, Bifon: of the Lithuanians, Suber; of the Polonians, Zubr, from whence some Latins derived Zubr, for a Bifon. Of the Germans, Vizent, and Vifent, and Wifent: a beaft very strange as may appeare by his figure prefixed, which by many Authors is taken for 

A

two parts, as is Scythia, Moscovia, Hercynia, Thracia, and Prufia. But those tall wide Oxen which are fai to be in Lapponia, and the Dukedom of Angeromania, are more truly fai to be Urif, as in their ftory thall be afterward declared. Their name is taken from Thracia, which was
was once called Bifhonis, and the people thereof Bifhons, from Bifho the Son of Cicero and Tereiffa-
re; and thereof came Bifhoni Gruza, cranes of Thracia, and Bifhoni Laci, for the lake or sea of
Dices, near Adina, where never living thing, or other of lefle weight was call in but it prefently
funk and was drowned.

This Bifon is called Taurus Pecianum, the Pecian Bull, whereof I finde two kinds, one of greater and
another of lefle fize, called the Scotian, or Caldonian Bifon, whereof you allhall fee the picture and qua-
litics at the foot of this History.

The greater is as big as any Bull or Ox, being maned about the neck and back like a Lion, and
hath hair hanging down under his chin or neather lip like a large beard: and a rising or little ridge
down along his face, beginning at the height of his head, and continuing to his nofe very hairy;
his horns great and very fharp, yet turning up towards his back, and at the points hooked like the
wilde Goats of the Alpes, but much greater: they are black of colour, and with them through the
admirable strength of his neck can he taffe into the air, a horse and horfeman both together. They
are as big as the Dextars which are the greatest Stallions of Italy. Their face looketh downward,
and they have a strange strength in their tongue, for by licking they grate like a file in any indifferent
hard fubstance, but especially they can therewith draw unto them any man or beaff of inferior con-
dition, whom by licking they wound to death.

Their hair is red, yellow, or black, their eyes very great and terrible; they smell like a Mofheu or
Musk-cat, and their mane reacheth over their shoulders, making it irrele when he brayeth; their
face or forehead very broad, especially betwixt their horns, for Sigismund King of Polonia, having
kild one of them in hunting, ftood betwixt his horns, with two other men not much leffer in quan-
ty than himfelf, who was a goodly well proportioned and perfonal Prince.

There are two bunches on his back, the former near his shoulders, which is the higher, and the
other near the rump, which is somewhat lower. I have feen the horns of a Goldsmith to tip with filver and gilt, that it might be fit to drink in: it did bend like the talon of an Eagle or Gryphion, or fome ravenous bird. The flefth in Summer time is molt
fat, but it raffeeth so much of wide Garlick, or Ramfens, that it is not pelfant to eat, being full of
small veins and ftrings, and is accounted a noble and strong kind of flefth: the bloud is the molt
pureth in the world, excelling in colour any purple, and yet for all that it is fo hot, that being let
forth when the Beaff dyeth, within two hours fpace it putrefeft, and the flefth it felf in the coldest
Winter will not keep fweet many hours, by reafon of the immoderate heat thereof, if the
Hunter do not after the fall of the beaff, separate from it the inrafts: and which is molt strange of
all, being pierced alive with any hunting spear, dart, or sword, the weapon by the heat of the body
is made fo weak and folute, that it cometh forth as flexible as lead: and to conclude, it is a molt
noble and fierce spirited beaff, never afraid, or yeielding till breath failed, neither can he be taken
with any nets or gins, till they be thoroughly wearyed: wherefore they which hunt him, muft
be
be very strong, nimble and skilful men, or else that sport will be their own undoing and overthrow.

Therefore when they go to hunt this Bison, they choose a place replenished with large trees, neither so great that they cannot easily wind about them, nor so little that they shall not be able to cover their bodies from the horn or tongue of the beast: behind which the hunters place themselves out of sight: and then the Dogs rouse up the beast, driving him to that place where the hunters stand; whom the beast first espieseth, to him he maketh force, who must warily keep the tree for his shield, and with his spear wound him where he can, who will not fall without many mortal strokes, but wax more and more eager, not only with horn but with tongue, for if he can but apprehend any part of the hunters garment with his tongue, he loveth no hold but draweth him unto him, and with his horn and feet killeth him: but if the fight be long, and so the hunter wearied and out of breath, then doth he call a red cap unto the beast, who maketh at it with head and feet, never leaving till it be all in pieces; and if another come to help him as hunters must, if they will return alive, then shall he easily draw the beast to combat, and forake the first man, if he cry Lu-lu-lu.

فزاناس theweth how these Bisons are taken alive, in this sort. The hunters (faith he) chuse ouf some steep and slippery down hill, whereupon they lay skins of beasts newly taken off, and if they want flesh, then anoint them old skins with oil, and to leave them spread upon those steeping or bending passages: then raise they the beasts, and with Dogs and other means on horfeback drive them along to the paces where they laid their hides, and as soon as they come upon the skins they flip and fall down, rolling headlong till they come into the valleys, from whence they contrain them back again some other way, three or four times a day, making them fall down the hills as aforesaid, and so wearying them with continual hunting, and fasting. At the last they come unto them, when they are no more able to rise for faintness, and give them Fine-apples taken out of the shels, (for with that meat are they delighted) and so while they eagerly feed and lie weary on the ground, they intoil them in bands and manacles, and lead them away alive. The medicines coming from this beast may be conjectured to be more forcible, than of common and ordinary Oxen, but because they were not known to the Greeks and Arabsians, and we finde nothing recorded thereof; we will conclude the story of this great Bison, with good opinion of the virtues, though we are not able to learn or discover them to others.

Of the white SCOTIAN BISON.

In the Woods of Scotland, called Gallander or Caldar, and in ancient time Calydonia, which reacheth from Mineth and Brunel, unto Atholus and Loghaboria, there are bred white Oxen, maned about the neck like a Lyon, but in other parts like ordinary and common Oxen. This wood was once full of them, but now they are all flain, except in that part which is called Cummirland. This beast is so hateful
The nature of the beast, that it will not feed of that grasse or those herbs, whereof he favour-eth a man hath touched, no not for many days together; and if by art or policy they happen to be taken alive, they will die with very fullen grief. If they meet a man, presently they make force at him, fearing neither Dogs, Spears, nor other weapons. Their flesh is very pleasant, though full of finesse, and very acceptable to the greatest Nobles, for which cause they are grown to a small number; their qualities being like to the former beast, excepting their colour and beard, I will term them a white Calydonian, or Scolian BISON.

BONASUS, the figure of the Head and Horns.

Of the name. This beast is called in Greek Μονόπες, and in Latin Monopius, or Monops, and once in Aristotle, Balisthus, the Bohemians, Loll, now the Germans & English call the long hair about the neck of any beast, a Mane or Mane, from whence cometh this word Monopius, which signifies a maned Ox. This Bison is the greatest beast, Bull or Ox, though it be shorter in length, yet are the sides larger and broader then all other. Pausanias. They are bred in Pannonia in the mountain Mepus, not in Lydia and Phrygia, as Salinus and Alberti have delivered; being deceived, because the Pannonians were joined with the Medians which they derive from Medes a people of Asia, whereas the Pannonians and Medes in Pliny (as is observed by Hermolus in his Caesitations of Pliny) are a people of Thracia in Europe; so called of Feron the Son of Endymion and brother of Epeus, who was seated near the river Axius in Macedonia: for it was agreed
Of the Bosusus.

Of the two brethren striving for the kingdom, that which was overrun by the other should yield the kingdom inquietnes to his brother.

The head of this beast is like the head of an Ox or Bull; his horns bending round to the sides of the cheek, by reason whereof he hath no defence by them, neither can a man be hurt that is cast upon them. His neck is very thick with a large mane, from his eyes down to his shoulders in length like an Horse; but the hair thereof is much longer, and lyeth more smoothly, the uppermost hairs being hairier, and the undermost softer like wool. Their colour betwixt red and ash colour, but black and yellow appearreth not in them. They have no upper teeth, in this point resembling an Ox and other horned beasts; their horns being in compacts about nine inches and somewhat more, are very smooth and black like varnish. Their voice is like the voice of an Ox, their legs all hairy, and their feet cloven, their tail too short for the other members of the body like a Bugies, their back stretched out at length, as long as a feat for seven men; their flesh is very sweet, for which cause he is much sought for in hunting; he will with his feet dig up the ground like an Ox or Bull in this rage; when he is once struck, he flyeth away, fighting with his heels backward; and whereas nature hath denied him the benefit of horns, which other beasts have, so that he is only adorned and not armed by those weapons, like a Souldier that cannot draw forth his Sword; the hath given him the secret operation of his dung, which in his chafe he causeth forth of his body to plentifully upon the Dogs or other that pursueth him, by the space of four paces backward, that he flyeth their course, and the heat of his dung is so admirable, that it scorches or burneth the hair or skin of any beasts or men that hunt him: neither hath this time such vertuous operation at any other time, but only when the beast is being, being hunted and pursuéd for life, at other times it lying quiet, there is no such virtue therein: neither ought this to seem incredible, seeing many other beasts in their chase, have the like or at the least do then eject their excrements more plentifully and noisomly then at other times: as the Cattell-stiff, for when in chafe the intrails are heated, and the passag somewhat restrained, so that the holding in of breath breedeth more wind in the guts, it may very naturally chance, the excrement being with the inclosed wind and heat sent forth by violent eruption, that it may fie far backward, and also burn as aforesaid. These beasts Calve in the Mountains, and before that time cometh the chufeth a place, which the walleth in with the abundance of her own dung, so high as it may cover her young one, wherefore is there no beast that is naturally so full of excrement as a Bosusus. Their ears are very broad as the Poet faith, Patule commia sub cornubis aureis, broad ears, under crooked winding blunt horns; the skin is so large, that it hath covered a good part of a house, the inward colour whereof is like the earth whereon the beast did use to feed. That excellent Physitian of England, John Cai, did send me the head of this beast, with this description, in an Epistle, laying.

I send unto thee the head of a great wilde beast, the bare mouth and the bones supporters of the horns being very weighty, and therefore bearing up some like heavy burden, the horns are recurved and bending backward, so that they do not spire directly downward but rather forward, though in a crooked manner, which because it could not appear forward, as they do when the beast is alive, therefore they are described turning on the one side: the space betwixt the horns or breadth of the forehead, is three Roman palms and a half; the length of the horns, three palms one finger and a half; and their compacts where they are joyned to the head, is one foot one palm and a half. In the Castle of Warwick where are preserved the Armor and Spear of one Earl Guy of Warwick a most valiant strong man, I have seen the head of a beef not unlike to this, faying that if the horns whereon the horns grow should be joyned together, then would the horns be longer, and of another crooked fashion. And in the same place there is also the backbone of the same beast, the compasse thereof is at the least three Roman feet two palms and a half, whereunto I may also add that shoulder-blade which hangeth on the North gate of the City of Coventry, being in the lowest part three foot broad and two fingers, and four foot long and two palms: and the compasse of the arm hole wherein the shoulder is joyned, is three foot and one palm, and the whole compasse of them both in breadth and length, is eleven foot one palm and a half.

In the Chappel of the said great Guy, distant from Warwick about one thousand paces (or a mile) there hangeth a rib of this beast (as I suppose) the compasse whereof in the smallest place is three palms, and in length it is fourteen feet; a half; the rib is dry and rotted in the superficies thereof. The vulgar people affirm, that it is the peice of a Bear, which was slain by Earl Guy; other say, by tradition of their elders, that it is a piece of a wilde Cow remaining near Coventry, and did much harm to many people; which latter opinion I embrace, taking it for a Bosusus, who in most things is like a Cow, and therefore some affirm it is an Indian Cow (but ignorantly) because any thing that is not common is usually attributed to some strange Country breed (with an addition to that it mort of all remembeth.) Thus for D. Cay.

Whereunto I assent, holding his conjectures to be very probable, until by the diligent industry of some other, or my own eye-light we may deliver to the world some more assured and perfect knowledge in these kinde of beasts. Exhorting in the mean season all learned men, to discover more exactly their present or future knowledge herein, to the high benefit of all them that are diligent students in this part of Gods creation.
The History of Four-footed Beasts.

Of the **BUFFE**.

A **BUFFE** is called in Greek, *Tarandos*; and in Latin, *Tarandus*; which some have corrupted barbary, tearing in *Parandros* and *Pyraus*; and I conjecture that it is the same beast, which the Polonians call *Tur* or *Tuaro*; howsoever other confound this *Tarandus* with another beast, called *Rangifer*; and some with a kind of *Ursus*, which have many properties in common with a Buffe, yet my reason, why the Polonian *Tur* can be no other then a Buffe, is, because the head and mouth differeth from those beasts; and also because this is taken in *Sarmatia*, where the common people call it *Daran*, or *Daraus*; although the later Writers call it *Daran* and *Daraus*, and translate it a *Boynus*, which can by no means agree with this beast; and the name of *Daran* is easily derived from *Tarandus*, or *Tarandes*.

Also that the Polonian *Tur* should not be a Buffe, all that can be objected, is, that the horns there-of are cragged or branched, which thing *Pliny* attributeth to a Buffe: whereunto I answer, that the Ancients did confound a Buffe with an Elk, and a *Rangifer*; for in the description of an Elk they vary, divers times mistaking one for another, by reason that they wrote altogether by report, none of them being seen in their Countries, and therefore may easily be deceived in a Buffe, as well as in an Elk. The chief Authors of this opinion have been Sir *Thomas Eliot*, and *Georgius Agricola*, with whom I will not contend, nor with any other man that can give better reason: for *Pliny* maketh a Buffe to be a beast proportioned between an Hara and an Oxe, of which sort is not a *Rangifer*, as shall be manifest; and if it be, yet can it never appear that a *Rangifer* doth change colour like a Buffe, as also we will make more evident: So then distinguishing a Buffe from a *Rangifer*, and presuming that the Polonian *Tuaro*, or *Tur*, is a Buffe; we will proceed to his description.

The head of this beast is like the head of a Hara, and his horns branched or cragged; his body for the most part like a wild Oxes, his hair deep and harsh like a Bears, his hide is so hard and thick, that of it the *Sepihus* make breast-plates, which no dart can pierce through. His colour, for the most part, like an Asses, but when he is hunted or feared, he changeth his hew into whatsoever thing he feeth; as among trees he is like them; among green boughs he seemeth green; among rocks of stone, he it transmuted into their colour also; as it is generally by most Writers affirmed: as *Pliny* and *Sibburn* among the Ancient; *Stephanus* and *Eusebius* among the later Writers.

This indeed is the thing that seemeth most incredible, but there are two reasons which draw me to subcribe hereunto: first, because we see that the face of men and beasts through fear, joy, anger, and other passions, do quickly change; from ruddy to white, from black to pale, and from pale to ruddy again. Now as this beast hath the head of a Hara, so also hath it the fear of a Hara, but in a higher degree; and therefore by secret operation it may easily alter the colour of their hair, as a pallion in a reasonable man, may alter the colour of his face.

The same things are reported by *Pliny* of a beast in India called *Lycaon*, as shall be afterward declared; and besides these two, there is no other among creatures covered with hair, that changeth colour.
Of the Bugil.

A Bugil is called in Latin, Lebaulae, and Buffer in French, Buffete; in Spanish, Buga; in German, Buffen; and in the Lybian tongue, Bulafr. The Hebrews have no proper word for it, but comprehended it under 74, which signifieth any kind of wide Oxen; nor can either can it be expressed by Merub, which signifieth fatted Oxen; or Bekarmi, which signifieth Oxen properly; or Zachmor, which the Persians call Zatoozi, or Buzoozi, and is usually translated a Wilde-Off. For which beast the Hebrews have many names; neither have the Grecians any proper word for a vulgar Bugil, for Buffer and Buffer, are amongst them taken for a kind of Rock buck. So that this Buga was first of all some modern or barbarous term in Africa, taken up by the Italians, and attributed to this beast, and many other for whom they knew no proper names. For in the time of Pliny, they used to call strange beasts like Oxen or Bulls, Uris; as now a days (led with the same error, or rather ignorance) they call such, Buffete, or Buffete. The true etymology of the vulgar Bugil, was sent unto me by Carusius Silvadus, a famous Physitian in Northerm, and it is pictured by a tame and familiar Bugil, such as liveth among men for labour, as it seemeth to me. For there is difference amongst these beasts, (as Aristote hath affirmed) both in colour, mouth, horn, and strength.

This vulgar Bugil, is of a kind of wide Oxen, greater and taller then the ordinary Oxen, their body being thicker and stronger, and their limbs better compact together; their skin very hard, their other parts very lean, their hair short, small, and black, but little or none at all upon the tail, which is also short and small. The head hangeth downward to the earth, and is but little, being compared with the residue of his body; and his aspect or face bereiketh a tameable and simple disposition. His fore-head is broad and curved with hair, his horns more flat then round, very long, bending together at the top, as a Goats do backward; insomuch as in Crete, they make bows of them; and they are not for defence of the beast, but for distinction of kind and ornament. His neck is thick and long, and his rump or nether part of his back is lower then the residue, depending to the tail. His legs are very strong, broad and strong, but thinner, then the quantity of his body would seem to permit. They are very fierce being tamed, but that is corrected by putting an Iron ring through his Nother, whereunto is also put a cord, by which he is led and ruled, as a Horse by a bridle (for which cause in Germany they call a simple man over-rulled by the advice of another to his own hurt, a Bugle, led with a ring in his nose.)

His feet are cloven, and with the formost he will dig the earth, and with the hindmost fight like a Horse, forgetting on his blos with great force, and redoublling them again if his object resisteth him. His vowe like the voice of an Ox; when he is chafed he runneth forth right, folden winding or turning, and when he is angered, he runneth into the water, wherein he covereth himself all over, except his mouth, to cool the heat of his blood; for this beast can neither endure outward cold nor inward heat; for which cause, they breed not but in hot Countries, and being at liberty are seldom from the waters. They are very tame, so that children may ride on their backs; but on a 

dan they will run into the waters, and so many times indanger the childrens lives.

Bellerophon. The name of their horses.

Erasnum. The nature of their breeding places.

Their love to their young ones is very great; they always give milk from their copulation to their Calving; neither will they suffer a Calf of another kind (whom they discern by their smell) to suck their milk, but beat it away if it be put unto them: wherefore their keepers do in such cases, anoint the Calf with Bugils excrement, and then the will admit her suckling.

They are very strong, and will draw more at once than two Horses; wherefore they are famed for service, and will draw Wagons and Plows, and carry burdens also, but they are not very fit for Carriages: yet when they do draw, they carry also great burdens or loads, tye'd to their backs with ropes and wantslytes. At the first setting forward they bend their legs very much, but afterward they go upright, and being over-laden they will fall to the earth, from which they cannot be raised by any stripes until their load or carriage be leftened. There is no great account made of their hides, although they be very thick: Selinus reporteth, that the old Brites made Boats of Ofer ears, covering them round with Bugils skins, and sayled in them: and the Inhabitants of the Kingdom of Cartagin, made them bucklers and shields of Bugils skins, which they use in Wars; the flesh is not good for meat, which caused Beptis Fiera to make this Poem:

Bubalus bino abeat, nova intert prandia nostra:  
Non edat hunc quiquam: sub Juga semper eat.

For they ingender melancholy, and have no good taste, being raw they are not unpleasant to be hold, but lod or rolled they thaw into a deformed substance. The milk of this beast maketh very hard Cheefe, which tasteth like earth.

The medicines made of this beast are not many: with the horns or hoofs they make rings to wear against the Cramp, and it hath been believed (but without reason) that if a man or woman wear rings made of the horns or hoofs of a Bugil in the time of carnal copulation, that they will naturally fly off from their fingers; whereas this secret was wont to be attributed to rings of Chrystydes or Smedeirde bones. To conclude, some teach husbandmen to burn the horns or dung of their Bugils on the windy side of their corn and plants, to keep them from Cankers and blainting: and thus much of the vulgar Bugil, called Bubalus Recensentorum: whose beginning in this part of the world is unknown, although in Italy, and other parts of Europe they are now bred and festered.

Of the African Bugil.

Bullionis reporteth, that he saw in Car a small beast, which was in all things like a little Ox, of a beautiful body, full of flesh, well and neatly limned, which he could take for no other then the African Ox, or Bugil of the old Gracians, which was brought out of the Kingdom of Aamia unto the City Carth; it was old, and not so big as a Hart, but greater then a Ram; he never in all his life took more pleasure to behold a beast, then in the viewing the excellent beauty of every part of this creature. His hair was yellow with, glittering as if had been combed and trimmed by the art of a Barber, under his belly it was somewhat more red and tawny then upon his back. His feet in all things like a vulgar Bugil, his legs short and strong, the neck short and thick, whereon the two dew-laps of his crest did scarce appear. His head like an Oxes, and his horns growing out of the crown of his head, black, long, and bending like an half Moon: wherof he hath no use to defend himself, or any another, by reason their points turn inward. His ears like a Cows, and shoulder blades standing up a little above the ridge very strongly. His tail to the knees like a Carnivorae, from whence hangeth some few black hairs, twice so great as the hairs in a Horses tail. His voice was like an Oxes, but not so strong and loud: to conclude therefore, for his description; if a man conceive in his mind a little yellow near Ox, with smooth hair, strong members, and high horns above his head, like a half Moon; his mind cannot erre from the
true and perfect shape of this beast. There was such a one to be seen of late at *fower,* under the name of an *Indian Oxe,* saving his head was greater and longer, his horns not high nor bending together, but standing up right, and a little wrettling into fpires above their root; and the hinder part of the back much lower then the shoulders, but it may be the obferver of this beast failed and took not the true defcription of it.

This creature of *African Bugil,* must be underftood to be a wilde beast, and not of a tame kind, although *bellonius* exprifeth not fo much. *Leo* in his defcription of *Aftrick,* relateth a difcourfe of a certain beast called *Laus,* or *Daus,* who is left then an Oxe, but of more elegant feature in his legs, white horns, and black nails, which is to fift, that no beast can out-run it, except a *Barbary Horse:* it is taken most eafily in the Summer time; with the skin whereof they make targets and shields, which cannot be pierced by any weapon, except Gunfhot; for which caufe they fell them very dear; which is conjectured to be the *Bugil* that *bellonius* defcribeth, although it be not juft of the fame colour, which may vary in this beast as well as in any other, and I have a certain *manuscript* without the Authors name, that affirmineth there be *Bugils in Lybia,* in likenefs reftembling a Hart and an Oxe, but much leffer, and that thefe beafts are never taken alfeep, which caufe them an opinion that they never feep; and that there is another *Bugil* beyond the *Alpes,* near the River *Rhone,* which is very ftrong and of a white colour.

There is a horn in the Town-house of *Argentum* four *Roman cubits* long, which is conjectured to be the horn of some *Urs:* (or rather as I think of some *Bugil*) it hath hung there at the leaft two or three generations, and by fraping it I found it to be a horn, although I forgot to measure the compass thereof, yet because antiquity thought it worthy to be reffered in fo honourable a place for a monument of fome strange beast, I have alfo thought good to mention it in this difcourfe: as when *Philip King of Macedon,* did with a dart kill a wilde Bull at the foot of the Mountain *Orebius,* and confecrated the horns thereof in the Temple of *Hercules,* which were fifteen yards or paces long, for poffeignty to behold.

**Of the Bull.**

A Bull is the husband of a Cow, and ring-leader of the herd, (for which caufe *Hornt* compar-
The History of Four-footed Beasts.

The Hebrews call him Tor, or Taur; which the Chaldees call Abirs, for a strong Ox; so the Arabians, Taur: the Greeks, Taurus; the Latins, Taurus; the Italians, Tauri; the French, Taureau; the Germans, ein Stier; ein Vucherstier, ein Vucher, ein Mammelfier, ein Hagen, and ein Bollen; the Egyptians, Vul, and Juncce: by all which several appellations, it is evident, that the name Taurus in Latine is not derived from Taurus, the stretching out the tayl; nor from Gaurus, signifying proud; but from the Hebrew, Tor, which signifies great: upon which occasion, the Grecians called all large, great, and violent things, by the name of Taurus, and that word Taurus among the Latines, hath given denomination to Men, Stars, Mountains, Rivers, Trees, Ships, and many other things, which called Iacobus Camerarius to make thereof this eminatly riddle.

Maecius cramregia: sed ligna mumba sequendar.
Et Cicicon men jam: sed mans jam nomine sola.
Et in arteo: sed in ipsis ambito terris.

That is in divers fenes, Taurus was a Kings Tandar, the root of a tree, a Mountain in Gigia, a Bull, a Mountain in name, a Star or sign in heaven, and a River upon the earth: so also we read of Statallus Taurus, and Pamponius Vitalus, two Romans. It was the custom in those days, to give the names of beasts to children, especially among the Troglydites, and that Adulator which ravished Europa, was Taurus the King of Crete; or as some say, a King that came in a Ship, whose Ensign and name was the Bull; and other affirm, that it was Lupus in the likenes of a Bull, because he had so defloured Ceres when he begat Proserpina, and afterward defloured Proserpina his daughter, in the likenes of a Dragon. It is reported that when Achelous did fight with Hercules for Deianira the Daughter of Oeneus King of Calydon, finding himself as to be too weak to match Hercules, turned himself suddenly into a Serpent, and afterward into a Bull; Hercules seeing him in that proportion, speedily pulled from him one of his horns, and gave it to Cepis the companion of Fortune, whereof cometh that phrase of, Cronisops. Afterward, Achelous gave unto Hercules one of the Horns of Amalthea, and so received his own again, and being overcome by Hercules, hid himself in the River of I leus, which after his own name bending forth into one horn or crook, was called Achelous. By these things the Poets had singular intentions to decipher matters of great moment under hidden and dark Narrations.

But there are four reasons given, why Rivers are called Taurorani: that is, Bul-heads. First, because they empty themselves into the Sea, they roar or bellow like Bulls, with the noise of their falling water. Secondly, because they burrow the earth like a draught of Oxen with a plow, and much deeper. Thirdly, because the sweetest and deepest places unto which these cattle refer, are near the rivers. Fourthly, because by their crooking and winding, they imitate the fashion of a horn, and also are impetuous, violent, and unrefrangible.

The strength of the head and neck of a Bull is very great, and his fore-head feemeth to be made for fight: having horns short, but strong and piked, upon which he can tos into the air very great and weigthy beasts, which he receiveth again as they fall down, doubling their elevation with renewed strength and rage, until they be batter by confounded. Their strength in all the parts of their body is great, and they use to strike backward with their heads; yet is reported by Callimachus that Acestis, a Bear, that being in the field among the cattle, took one of the most fierce and strongest Bulls in the herd by the hinder-leg, and there in defpite of the Bull striving to the contrary, held him with one hand, until another Bull came by him, whom he likewise took in his other hand, and so perforce held them both: which thing being seen by Milo Cretanistes, he lifted up his hands to heaven, crying out by way of Interrogation to Jupiter, and saying: O Jupiter, haft thou sent another Hercules among us? Whereupon came the common proverb of a strong armed man: This is another Hercules. The like story is reported by Suidas of Paldamus, who first of all flew a Lyon, and after held a Bull by the leg so fast, that the beast striving to get out of his hands, left the hoof of his foot behind him.

The Epithets of this beast are many among Writers, as when they call them Brazen-footed, wide, cheerful, sharp, plower, warrier, horn-bearer, blockish, great, glittering, fierce, valiant, and louring, which feemeth to be natural to this beast; infomuch as the Grammarians derive Taurus, grimmels or lowring, from Taurus, a Bull, whose aspect carrieth wrath and hatred in it: wherefore it is Proverbially laid in Wisphalia, of a lowing and louring conSetence, Eir jet als ein der dem fliebuchwer Entferfleitt: That is, he looketh like a Bull escaped from one stroke of the Butcher. Their horns are leffer but stronger then Oxen or Kie, for all beasts that are not gelded, have smaller horns and thicker skules then other, but the Bulls of Syphianas is said elsewhere, have no horns. Their heart is full of nerves or sinews, their blood is full of small veins, for which caufe he ingendereth with most speed, and it hardneth quickly. In the gall of a Bull there is a stone called Clers, and in some places the gall is called Mammas. They are plentiful in most Countries, as is said in the discourse of Oxen, but the belt fort are in Epirus, next in Tracia, and then in Italy, Syria, England, Maccotie, Phrygia, and Belgia: for the Bulls of Gallia are impaire by labour, and the Bulls of Ebiue are the Robinetics, as the Bulls of the woods are Elephants.

They defire the Cow at eight months old, but they are not able to fill her till they be two years old, and they may remain tolerable for breeders until they be 12. and not paft. Every Bull is sufficient for ten Kie, and the Bulls must not feed with the Kie, for two months before their leaping time.
time, and then let them come together without restraint, and give them Paele, or Barley, if their pasture be not good. The beast time to suffer them with their females, is the midst of the Spring, and if the Bull be heavy, take the tayl of an Hart and burn it to powder, then moisten it in Wine, and rub therewith the genitals of a Bull, and he will rise above measure into lust: whereof, if it be more then tolerable, it must be allayed with Oyl. The violence of a Bull in the act of copulation is so great, that if he miss the females genital entrance, he woundeth or much harmeth her in any other place; sending forth his feed without any motion except touching, and a Cow being filled by him, he will never after leap her, during the time she is with Calf: wherefore the Egyptians decipere by a Bull in health, without the itch of lust, a temperate continent man, and Epictetus saying of Sudden and Allike; that is Bear and Forbear, was emblematized described by a Bull, having his knee bound and tryed to a Cow in the hand of the Neat-herd, with this subperation. Hard fortune is to be endured with patience, and happiness is oftentimes to be feared; for Epictetus said, Bear and forbear: we must suffer many things, and wide-build our fingers from forbidden fruits for is the Bull which forsweth rule among leaved, being bound in his right knee, at least from his female great with young.

When they burn in lust, their wrath is most outrageous against their companions in the same pature, with whom they agreed in former times, and then the conquerer coupleth with the Cow: but when he is weakened with generation, the beast that was overcome, setteeth upon him affreth, and oftentimes overcometh: which kinde of love-fight is elegantly describ'd by Oppianus, as followeth.

One that is the chiefest raleth over all the other herd, who tremble at the fight and presence of this their eagar King, and especially the Kye, knowing the infulting jealousie of that raging husband. When the herds of other places meet together, beholding one another with disdainful countenances, and with their loughing terrible voices, provoke each other, puffing out their flaming pride of defiance, and dimming the glittering light with their often dull-beating-feet into the air, who pretently take up the challenge, and separate themselves from the company, joyning together at the sound of their own trumps-roughing voice, in fearful and sharp conflicts, not sparing, not yeelding, not retiring till one or both of them fall wounded to the earth: sometimes turning round, sometimes holding heads together, as if they were Coach-fellows: and as two mighty thips well manned, with sufficient armes and strength, by force of winds and floods violently rushing one against another, do break and split asunder, with the horrible cry of the Souldiers, and rattling of the armour: so do these Bulls, with voice, legs, horns, and strength, like cunning and valiant Martialists, make the sounds of their blows to ring betwixt heaven and earth, untill one of them be vanquished and overthrown.

The poor over-comed Beast, with shame retireth from the herd, and will no more appear, untill he be enabled to make his party good against his triumphant adversary: then he feedeth solitarie in the Woods and Mountains, for it is proverbially said, to signify a single and unmarried life, abit Turus in silvam: that is, the Bull is gone to the Wood to live solitarie without his female, often exercing himself like a furious Champion against the day of a new combate, and when he findeth his strength increas'd, and his courage armed for the day of battel, then roareth he in the Woods and Mountains, to provoke his adversary to anuer: and perceiving his own voice to be more fierce and violent then his enemies, forth he proceedeth like some refreshed Giant, confident in his strength, defending the lits of a second combate, where he easly overcometh the Victor, weakened with copulation, and not exercied or fitted to such a triall through fulnes and venery: so the first that was vanquished becometh Conqueror.

The very same is in other words describ'd by Virgil: Bulls are enemies to all beasts that live upon prey, as Bears, Lyons, and Wolves: when they fight with Wolves, they winde their tails togeth'r, and do drive them away with their horns; when the Bear fighteth with an Oxe, the falleth on her back, watching opportunity to take his horns with her fore-foot; if she catch, with the catch of her body the weareth the beast, who is so earneft in combate with these beasts, that they will fight their tongues hanging out of their mouths. The Crow is enemy to Bulls and Alles, for in her flight she will strike at their eyes; and it is easier for the Bull to be revenged of a Lyon, then on such a bird: Red colour fireth up a Bull to fight, neither can the Neat-herds govern them with such facility as they do the females, for when they wander and go a-fay, nothing can recall them but the voice of their females for copulation, which they understand and hear, being a mile or two distant.

The voice of a Bull is sharper and thriller then is the lowing of a Cow; they are most corrosive that have short and thick necks, and in their greatest wilderness, if their right knee can be bound, they will not fir; or if they be tyed to a wide fig-tree, which is so fearfull to the nature of an Oxe or Bull, that it hath been feen, how a very few ficks of that wood have fed a great quantity of Bulls flesh in shorter time, than a far greater number of other wood for on fire could perform: which caused the Egyptians in ancient time, to picture a Bull tyed to a wide fig-tree, to signify a man that changed his manners through calamity.

Out of the hides of Bulls, especially their ears, necks, and genitalis, is most excellent gleye confecuted, but for the most part it is corrupted, by seething with it old lether of chooes or boots: but that of Rhodés is without all fraud, fit for Physitians and Painters, and evermore the whiter the better, for that which is black is good for nothing; wherefore that which is made out of Bulls hides, is so white, that it fendeeth forth a brightes,whole veruous conjuncion in conjugulation is so powerful, that it is easier to break a whole piece of wood then any part so gleewed together therewith: and for this invention, we are (faith Plijyt) indebted to Dédalos the first author thereof. They used it in instruments of musicke, and such other tender and precious actions.
Chapter 50

The History of Four-footed Beasts.

Of the Bull.

The bull or an Ox put upon Copper or Braiis, maketh it glister like Gold; for which cause it is used by Priests, to colour their counterfeit Crowns. The fleith of a Bull is good for meat, but yet not so good as an Ox or Cow; yet did the Egyptians abtian from eating Cows flesh, and not from the flesh of Bulls.

These beasts are used in some places to plow, in some to fight; and it is reported by Athanas, that Methisses King of Phœbus, before his guard of men, had also a guard of a Bull, a Horie, and a Hure, which he tamed with his own hands; so that when his followers were alseep, if any stranger came near, they failed not to awake him, by one of their several vocies. It is reported also, that if the nostrils of a Bull be anointed with Oyl of Roses, he will presently lose his eye-fight; and that in the Lake Aphiinæus there no living creature abide, and yet many Bulls and Camels sweem therein safely. It is but fabulous that there were Bulls in Celesib, which did breath out fire, except by that fiction the Poets understood the beaftly rage of the rich inhabitants. Touching the sacrificing of Bulls; it was also the custom of the old Egyptians to sacrifice a Bull unto Egyptus; and their manner was, first of all to try him whether it were fit for sacrifice, by laying meal before them, whereof if they refused to take, they were adjudged not apt for the Temple.

The Druides call a general sacrifice Vifien, whereby they afford all grievances may be cured. First they prepared a banquet with sacrifice under some tree, then brought they two white Bulls fattened together by the horns, and then they gave a drink to any barren creature, woman, or brute beast, holding religiously, that by that drink they should be made fruitful, and free from all poyson: Unto to great a height did the folly of blinde people arise, to put religion in every unreasonable invention, under pretence of any good intention devised by idolatrous Priests. As often as they flew and offered a Bull, and poured Frankincence and Wine upon the hoatt, they said: The Bull is increated with Frankincence and Wine: but the Ionians did bel comfort themselves in their sacrifices, where the Bull before his death did lough at the Altar: and the Meffiania did bands his Bull which was to be sacrificd to the ghost of Arinomene, unto certain Pillars in his Sepulchre: if therefore the Bull did shake the pillar while he leaped to and fro to get liberty, they took it for a good sign or Omen, but if it flood immovable, they held it a mourant and lamentable thing.

It is likewise reported by Varinus, that when Agamemnon ignorantly killed one of the Harts of Diana in Aulis, she was so wroth, that she flew the winds from blowing upon his Navy, so as they could not stir out of harbour: hereupon they went to the Oracle, where answer was given, that the goddess was to be pacified with some one of Agamemnon blood, therefore Xiphes was sent away to fetch Iphigenia, the daughter of Agamemnon from her mother Clitemenstra, under pretence to be married to Actites: but when he was ready to be sacrificd, the goddess took pity on her, and accepted a Bull in her stead, which ought not to be thought incredible, seeing that in holy Scripture a Ram was substituted in the place of a Boar.

They were wont also to sacrifice a Bull to Neptune, and to all the Rivers, because of that affinity which they held a Bull hath with all waters: and to Apollo, according to this Virgilian verse, Tuturn Neptunus, Taurum tribu pulcher Apollo. But unto Jupiter it was unaccustomed to be offered, perhaps because he had often thwed himself in that likenes, to ravish and defour women. There be certain Proverbs of a Bull, which are not altogether impertinent in this place. First, it is commonly said, that he may bear a Bull that hath borne a Calf; whereby is meant, that he may be more subject to fithnesses in age, which is so yout. Quastella was a woman of most wise reputation for uscleannes, because the faid, that when the was little, the lay with little ones like her self, and when the grew bigger, she applied her self to the pleasure of elder men, growing in fithinesse as the she increated in years. Likewise they were wont to say of an abfur or impossible thing; that if a Bull could reach his head over Tagus, he might drink of the river Erups, and the beginning of this proverb, was taka of an Apologie of Cerudos, when his Hoatt upon a time did ask him what punishment the Lacedemonians had appointed for adulterers, he anwered: there was no adulterers in Lacedemon, and therefore the punishment and quellen were frivolous. His Hoatt replied: But if there should be an adulterer there, what punishment would they appoint for him? Marty (said Cerudos) he should pay for such a Bull as would reach over Tagus to drink of the water Erups: whereof the hoatt laughed, demanding where such a Bull could be found? then said Cerudos, and where can you finde an adulterer in Lacedemon? so putting of one abfurdisy with another. And thus much of the natures and properties of a Bull in general. In the next place before this beast be turned into the Woods, we will describe his medicinal vertues, and so let him loose.

The powder of a Bulls horn drunk in water layeth a flux of blood, and the looñnes of the belly. Scintus and Eufcopus say, that if a Bulls horn be burned in a place where Serpents abide, it driveth away the male. The blood of Bulls mingled with Barley flower, driveth away hardnes in the fleith, and being dried cureth Apothemes in every part of the body. It taketh away spotes in the face, and killeth Serpents: It is commended warm against the Gout, especially in Horces. It is not good for drink, because it is easily congealed, except the little veins be taken out. It is accounted among the chiefest poupons, and therefore it is thought by Plutarch, that Hannibal poisoned himself by drinking Bulls blood, being thereunto persuaded by his servant: for so dyed Themistocles, and Pharnacesus king of Egypt, taken by Carisbius, was restrained to drink the blood of a Bull; whereupon immediately he gave up the ghost. For remedy hereof, it is good to beware of vomitting, because the blood congealed in the Romach into lumpes, stoppeth the throat; wherefore all those things which dissolve milk in the Romach, are also medicinal against the blood of Bulls. In these cases let the
party be first of all purged by Gl, tler or otherwise, and then anoint the stomack and belly with Early meal and sweet Water, laying it unto them like a plaster; likewise Lupines, Oxymel, and Nitre, are sovereign in this, as all Physitians know. The dry leaves of Neppe and Calamach is profitable against this Malady; so also are afftes made of the lees of Wine burned.

The fat of a Bull is profitable to many things. First therefore, it must be plucked out warm from the reins of a Bull and washed in a River or Brook of running Water, pulling out the skins and tum- cles, then melt it in a new earthen pot, having call among it a little salt, then let it in fair cold Water, and when it beginneth to congeal, rub it up and down in the hands, wringing out the water, and letting it foak in again, until it appear well washe: then boyli it in a pot with a little sweet Wine, and being sodden, let it stand all night: it in the morning it favour strong, then pour in more Wine, feethe it again, until that favour cease, and so all the poyson be removed: and beware of Salt in it, especially if it be to be used in diances, whereunto Salt is an enemy, but being thus used, it looketh very white: after the same manner may be used the fat of Lions, Leopards, Panthers, Camels, Boars, and Horses.

The fat call about the guts melted in a frying pan, and anointed upon the genitals and breast, helpeth the Defenterie. The marrow of a Bull beaten and drunk, cureth the pain in the small of the belly: and Kafi, that if it be melted at a fire, and mingled with one fourth part of Myrthe and Oyl of Bays, and the hands and feet be therewith antonied and rubbed, morning and evening; it helpeth the contractions of the Nerves and Sinews.

The fat of a Dormoufe, of a Hen, and the marrow of a Bull, melted together, and poured warm in to the ears, eafeeth their pain very much: and if the liver of a Bull be broyleed on a hot fire, and put into one mouth that hath the Tooth-ach, the pain will go away so soon as ever the teeth touch it. The gall of a Bull is sharper than an Oxes, and it is mingled with Hony for a Wound-plater, and in all outward remedies against poyson. It hath also a quality to gnaw the deadness or corruption out of Wounds, and with the joyce of Leeks and the Milk of women, it is applied against the Swine-poxt, and Filitas; but the gall alone rubbed upon the biting of an Ap, cureth that Malady. Likewise the Ulcers in the head, both of men, women, and children. And if the wool of an Hare be burned to ashes, and mingled with oyl of Myrtes, Bulls gall, and beaten Alone, and so warmed and anoynted upon the head, it layeth the falling away of the hair of head.

With the gall of a Bull, and the white of an Egge, they make an Eye-salve, and so anoynt therewith dissoled in water four days together: but it is thought to be better with Hony and Balsam: and infilled with sweet new Wine into the Ears, it helpeth away the pains of them especially running-mattery Ears, with Womans or Goats milk. It being taken with Hony into the mouth, helpeth the chists and feares therein: and taken with the Water of new Calonintida, and given to a woman in travel, cautheth an eafe childe-birth. Gallen was wont to give of a Bulls gall the quantitie of an Almond, with two spoonefulls of Wine, called (Vium Lymbatium) to a woman that hath her childe dead within her body, which would presently caufeth the dead Embryon to come forth. The genital of a red Bull, dried to powder, and drunk of a woman, to the quantity of a golden Noble, it maketh her to loath all manner of copulation: but in men (as the latter Physitians affirm) it cautheth that defire of lust to increase. The dung of a Bull laid to warm, helpeth all hardnes, and burnt to powder, helpeth the member that is burnt. The urine of male of Bulls with a little Nitre taketh away Scabs and Leprrose.

Of another Beast called BUSELAPHUS.

Here was (faith D. Cey) a cloven-footed beast brought out of the Deferts of Mauritania into England, of the bignes of a Hinde, in form and countenance betwixt a Hinde and a Cow, and therefore for the reSEMBlance it beareth of both, I will call it Buselapbus, or Bossicmenus, or Myxelaba, phus, or a Cow-Hart: having a long and thin head and ear, a lean and slender leg and thin, fo that it may seem to be made for chase and celerity. His tail not much longer then a foot, but the form thereof very of a Cows, and the length like a Harts: as if nature seemed to doubt whether it shoulde encloue to a Cow or a Hart: his upper parts were yellowish and smooth, his neither parts black and rough; the hair of his body betwixt yellow and red, falling close to the skin, but in his foore-head sounding up like a Star; and forso about the horns which were black, and at the top smooth, but downward rough with wrinkles meeting on the contrary part, and on the nearer side spreading from one another, twice or thrice their quantity. These horns are in length one foot and a hand-breath, but three hands-breath thick at the root, and their distance at the root was not above one fingers breadth, fo ariseth to their middle, and a little beyond where they differ or grow asunder three hands-breath and a half; then yeeld they together again a little, and so with another crook depart asunder the second time, yet fo, as the tops of the horns do not stand asunder above two hands-breath, three fingers and a half. From the crown of the head to the noitris, there goeth a black strake which is one foot, two palms and one finger long, in breadth above the eyes where it is broadelet, it is seven fingers, in thickness one foot and three palms, it hath eight teeth, and wanteth the uppermoft like a Cow, and yet cheweth the Cud, it hath two udders under the belly like a Heifer that never had a Calf, it is a gentle and pleasant beast, apt to play and sport, being not only swift to run, but light and active to leap: It will eat any thing, either bread, broth, salted or powdered beef, grapes or herbs, and the ufe hereof being alive is for hunting, and being dead the flesh is sweet and pleasant for meet.
We are now to describe those beasts which are less foreign and strange, and more commonly known to all Nations, than any other four-footed beast: for howsoever Beagis, Buffs, Lyons, Bears, Tigers, Beavers, Porcupines and such others, are not always found in every Nation, yet for the most
Of the Oxe.

most part are Oxen, Kine, Bulls and Horfes, by the Providence of Almighty God, diftributed in all the habitable places of the world: and to feak the truth, Oxen and Horfes were the first riches, and fuch things wherein our Elders got the firft property, long before houses and lands: with them they rewarded men of highest deferit, as Melampus, who opened an Oracle to REDE that fought out the loft Oxen of IBIUS. And Eris King of Sicily, fo much loved Oxen, that Her Ces iuered from Gryphon, that when he was to contend with Hercules about thefe, he rather yeelded to de- part from his Kingdom then from his Cattel: and LOHIUS PALLUX affirmeth, that there was an ancient coin of mony, which was ftamped with the figure of an Oxe, and therefore the Cryer in every publick speeche made proclamation, that he which deferved well, fhould be rewarded with an Oxe, (meaning a piece of mony having that imprefion upon it:) which was a piece of Gold compared in value to an English Rofe-noble: and in my opinion the firft name of mony among the Latins is derided from Cattel, for I cannot invent any more probable etymologie of PETUNIA, then from PETUS, signifying all manner of Cattel: howeyer it is related by fome Writers, that on the one fide of their coin was the Kings face, and on the other an Oxe picture; and that SEUTUS was the firft that everfigured money with Sheep or Oxen. Mirus the great painter of ELEUTHERUS, and difciple of AGETUS, made an Heifer or Cow of Bras, which all Poets of GREECE have celebrated in fundry Epigrams, because a Calf came unto it to fuck it, being deceived with the proportion, and APUSUS als added this following unto the faid Cattel and Cow, saying:

Vtra quaer pulstas fragipia matris oberta,
O vita f qua pro pote patet.

Whereunto the brazen Cow is caufed to make this anfwere following:

Volla. O bue namis
Bon. Abeerum

Why whereby he defired their vain labours, which endeavoure to fatisfie themselves upon mons devifes, which are cold and comfortlesfs without the bliffing of Almighty God. To begin therefore with these beafts, it muft be firft of all remembred, that the name BOS, or an Oxen as we fay in English, is the moft vuglar and ordinary name for Bugils, Bulls, Cows, Buffes, and all great cloven-footed houfe beafts: although in proper speech, it signifies a heaft gelded or libbed of his bones: and BOS signi fiehts a hug great Serpent whereof there were one found in IADU, that had falwallowed a childe without breaking one of his bones, of which being olso in Oxen the deftruction of years or age; which giveth them feveral names, for in their young age they are called Calves, in their second age Steeres, in their third Oxen, and the Latines add the fourth, which they call VITUS, old Oxen. There are alfo distingufhed in sex, the Male Calis is VITUS, the Female VITULUS; likewife ICWENUS, a Steer, and IWENUS, an Heifer, BOS, or an Ox, and VACCA, a Cow; Taurus, a Bull; Jura, a barren Cow; and HYND, a bearing and fruitful Cow: of whom the Romans obferved certain feftival days called HERODETUS, wherein they sacrificed thofe Cattel. The Latines have alfo VACCA and BUCULA for a little Cow:

Vaccam non nunguam secreta cubilis suspitit, Virg.
And again,

Ant Bucula Calum.

And BUCULA or BULVULVUL for a little Oxen. SABOR in the Hebrew signifies a Bull or Oxen, BAKR, Herds, or a Cow. TUR in the Chaldees hath the fame signification with SEBI, and among the later Writers you may finde TARA a male-fwine, and TORATA a feminine, for a Bull and a Cow, accustomed to be handled for labour. The Greekes call them BOS, or Bous, the Archibounds, BAKR: and it is to be noted, that the holy Scriptures diftingufh between TEOM, signifying flocks of Sheep and Goats, and BAKR or Herds of Cattel and Neat: and MERA is taken for Bugils, or the beft Oxen, or rather for fatt Oxen, for the verb MAR is signifieth to feed fat. EGELA is interpreted Jer. 46. for a Young Cow; and the PARIS, GELALUT: It is very probable that the Latine VACCA, is derived from the Hebrew, BAKR, as the Saracen word, BOSQAR: in Hebrew, PARA is a Cow, and PAR, a Steer, and BEN BAKR, the lion of an Ox, or Cali: and whereas the Hebrews take PARIM, for Oxen in general, the Chaldens translacte it TUR; the Arabes, BAKRA; the Persians, NADAG, or MIHAGUCHA; the Italines, call it BOS; the French, BUEF; the Spaniards, BUEZ; the Germans, OIER, and KINZE; the Illyrians, WUL: The Italianes call a Cow VACA at this day; the Greckes, BUBALUS, and DAMAUL, or DAMALUT; (for a Cow which never was of a Cow, covered with a Bull, or tamed with a yoke) and ADELADA. The French, VACA, the Spaniards, VACA; the Germans, KU or RUBE; and the Citizenes of ALEPH, NEM, from which the English word Cow feemeth to be derived: the Latine word is, a young Heifer, which hath caed to be a Cali.

There are Oxen in moft part of the world, which differ in quantity, nature, and manner, one from another, and therefore do require a feveral Treacite. And firft, their Oxen of Italy are most famous, for as much as fome learned men have affirneth, that the name ALTUS was firft of all derived of the Greek word INALTUS, signifying Oxen; because of the abundance bred and nourifhede in thofe parts, and the great account the ancient Romans made hereof, appeareth by notable example of punishment, who banifled a certain Country man for killing an Ox in his rage, and denying, that he eat thereof, as if he had killed a man: likewife in ITALY their Oxen are not all
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The Cyprians, which dwell about Rhusi, have Oxen as white as snow, and of exceeding high and great stature, (greater then the Oxen of Grecia) yet so meek and gentle, that they are easily ruled and governed by men. The Armenian Oxen are of divers colours, intermingled one within another, having a whole round hoof like a horse, but one horn growing out of the middle of their forehead.

The domestic or tame Oxen of Asia are so small, that one would take them for Calves of two years old; the Armenians (last Stabs) which dwell between Gruza and our Coast or Country, have Oxen and Horses which have longer lips and hoofs than other, and by the Grecians are termed Microcleticians.

The Armenian Oxen have two horns, but winding and crooking to and fro like Ivice which cleaveth to Oiks, which are of such exceeding hardness that they will blunt any sword that is stroke upon them, without receiving any impression or cut thereby. Some are of opinion, that the only excellent breed of Cattel is in Bactia, near the city Tanagra (called once Pamendes) by reason of their famous Cattel, the which Oxen are called Coprophago, by reason that they will eat the dung of man; so also do the Oxen of Cypria, to eafe the pains of their small guts. The Carianians in a part of Asia are not pleasant to behold, having thaggie hairs, and bunches on either shoulders, reaching or dwelling to their necks; but those which are either white, or black, are refused for labour.

Epirus. Epirus yeeldeth also very great and large Oxen, which the inhabitants call Pircis, because that their first Rock or Seminary were kept by King Pyrrhus: howsoever other way, that they have their name of their fiery flaming colour: they are also called Larani of a Village Larim, or of Larim, a chief Next-herd: of whom Abhenus maketh mention, who received this great breed of Cattel of Hercules when he returned from the slaughter of Grecus: who reigned about Amphareis and Ampholochi, where through the fame's of the earth and goodness of the Fatture they grow to so great a stature. Other call them Cepriani, I know not for what cause, yet it may be probable that they are called Larani, by reason of their broad Nothris, for Rines in Greek signifieth Nothris: but the true cause of their great bone and stature is, because that neither sex were suffered to couple one with another, until they were four years old at the least, and therefore they were called Ate or Setus, and were the proper goods of the King; neither could they live in any other place but in Epirus, by reason that the whole Countrey is full of sweet and deep pastures.

All the Oxen in Fulgar are white at the time of their Calving, and for this cause the Poets call that Countrey Argozoon. If that Oxen or Swine be transported or brought into Haiipanda, they grow to great, that the Oxen have been taken for Elephants, and their Swine for Mules, but I take this relation to be hyperbolical.

There are Oxen in India which will eat flesh like Wolves, and have but one horn, and whole hoofs; some also have three horns; there be other as high as Camels, and their horns four foot broad. There was a horn brought out of India into Poem the second, which received three Angiobrae of water, amounting the leath to thirty English gallons of wine measure; whereby it may be conjectured of how great quantity is the beaft thatbare it. The Indiuns both Kings and people, make no small reckoning of these beafts, (I mean their vulgar Oxen) for they are most swift in course, and will run a race as fast as any horse. So that in their course you cannot know an Ox from a Horfe, waging both gold and silver upon their heads; and the Kings themselves are so much delighted with this pastime, that they follow in their Wagons, and will with their own mouths and hands provoke the beasts to run more speedily; and herein the Ox exceedeth a Horfe, because he will not accomplish his race with sufficient celerity, except his rider draw blood from his fides with the spur, but the Oxes rider need not to lay any hands or pricks at all upon him, his only ambitious nature of overcoming (carrying him more swiftly then all the rods or spurs of the world could prevail on him). And of this game, the lowell of the people also are very greedy, laying many wagers, making many matches, and adventuring much time and price to see their event.

Among the Indians there are also other Oxen which are not much greater then great Goats, who likewise in their yoaks are accustomed to run many races, which they perform with as great speed as a Grecian Horfe; and all these Oxen must be understood to be wild Oxen.

There be Oxen in Ludria (which are Artbule affirmed) that have their ears and horns growing both together forth of one fleem. The Oxen of the Garamantes, and all other Neat among them, feed with their necks doubled backward, for by reason of their long and hanging horns, they cannot eat their meat, holding their heads direectly straight. The self same is reported of the beafts of Triagodisse: in other things they differ not from other Oxen, save only in the hardness of their skin, and theye Oxen are called Opifhianus.

In the Province of Bangala, are Oxen (saith Paulus Venetus) which equal the Elephant in height. The Oxen in Myjsia have no horns, which othre affirm also of the Scythians, whereasof they aflign this reason,
reason, because the universal bone of the skull hath no Commiſsuro joint opened, and cannot receive any humour flowing unto it, by reason of the hardneſs reſtilling, and the veins belonging to this bone are weaker and thinner then in other ; for which alſo they are more unfit to convey nourishment to the place: and to the neck of these beaſts muſt needs be more dry and leſſe ſtrong, because the veſsels are very little. The Oxen have bunces growing on their baſcets like Cats, and upon them do they bear their burdens, being taught by the diſcipline of men, to bend on their knee to receive their load.

Among the Nomades (which winter their Catteł about the Marſhes of Mod⃞) there are alſo certain Cattel without hoſns; whereof ſome are so naturally, the other have their hoſns faſhed off, as soon as they grow forth, because of all the parts of their body, they only can endure no cold.

There be Oxen in Phrygia and Etrurſea which are of a flaming red colour, of a very high and winding neck, their hoſns are not like any other in the world, for they are moved with their ears turning in aſſeſsiable manner fomeſtimes one way and fomeſtimes another.

The Syran Oxen caſled Perib are of great ſtrength, having a broad forehead. ſtrong hoſns, and fearful or courageſſe agrit, being neither too ſmall nor too ſeant of their bodies; and they are uſed both for war and alſo for running.

The Oxen of the Belſian Provinces, expecially Frieſeland and Holland, are alſo of very great force: for it had been found by good experience, that one of them hath weighed ſixteen hundred pounds Troy weight: and when the Earl of Hotchſlate was at Mecklen in Frieſeland, there was preſented unto him a great Ox, which being killed, weighed above two ſeventh thousand and twenty eight pound. The which thing being fo ſtrange as the like had not been befores time obſerved; to the intent that ſucceeding ages might not miſtrace ſuch a memorable report, the ſaid Earl cauſed the full picture of the ſaid Ox, to be set up in his Palate, with an incription of the day and year when this Ox was delivered and killed.

Of COWES.

HAVING thus noted briefly the Countries wherein Oxen are bred and nourished, with their ſeveral forms: it muſt be alfo obſerved, that Kiene or Cowes which are the female of this kind, are likeſwife found in all the places before tied with ſeſpondent and ſeemable quanſties, qualities, members, parts, and other accidents to such creatures appertaining; excepſed alwaies thoſe things which belong to their sex, which principally concern their milk. And firſt of all the Kiene of moft plentiful Milk in all Italy, are about Altina a City of the Venetians, near Aquileia, which Kiene are of the ſmalleſt body, and yet the greaſteſt labourers, who are not yoaked or coupled together by their necks as in other Countries, but only by their Ŝeads.

The Cowes of Arabia have the moſt beautiful hoſns, by reaſon of aboundance of ſmear, which flow to them, feeding them continually with ſuch generous liquor as naturally doth encreafe them.

The Phrycean Kienes are not admitted to the Bull till they be four year old at the leaſt, which thing cauſed them to grow to a very high and ſaſtle gture: whereof there were ever four hundred kept for the Kings ſtore.

These Kiene do grow at one time ſeven or eight gallons of Milk, of Wine measure, and they are fo tall, that the person which milketh them muſt ſtan upright, or else ſtoe very little: neith'er ought this ſeen incredible, for it is evident that the Cowes of the Phoenicians were fo ſta‐ble, that a very ſmall man could not milk them except he ſtoe upon a ſhootfoot.

The manner is in Germany and Heſtia, that about April there take Kiene to hire, which have none of their own, and other Kiene to ſtare them out to other; and the common price of a Cow for six moneths is payed in Butter, and is rated at seventy five pounds, twelve ounces to the pound: which payment is due to the owner, or money to that value. Other again, buy Kiene and let them forth to ſtare, referring the Calf to ſeſeſeves; and if by the negligence of the Cow herd or ſtareſ of them, the Cow call the Calf, then is the hire bound to anwer the value, but if it miscarry without his negligence (as oftentimes they may) then is the loſfe equall to the Loca‐tor or Farmer. Yet it is noted, that the Kienes of greaſteſt bodies, are not alwaies both or moſt plentiful in Milk; for the Cowes or Caw of Altina in Italy, are of little bodies, but yet very full of Milk.

The principal beneſt of Cowes Milk is for making of Butter, for the Milk it self, the Cheese and Whay, are not fo fit for nourishment of man, as are thoſe of Sheep; and the reaſon is, because the Milk of Kienes is faſteſt of all other, and therefore the name of Butter, which is in Greek, Buſtrimos and Bouyron, and Buynum in Latin, is derived properly from this kind of Cattel. The Cow herdes do alſo for their profit, obferve the paffure and food, which doth alſo above other multiphe Milk; and therefore they give their Kienes Trifſite, or Three-leaved grass: and Medoc, (which is a kind of Clover graffe) Verches, Pule, and Beans, for Beans have a great beneſt to multiply Milk: likewise I have been bundles of Hemlock, or an herb much like unto it, (which we call Hartſtongue) given to milch Kienes.

There
There is an herb much like Crow-foot, called of the German, Butterblumen, and in English, Butter-flower, which is used to colour Butter, for thereby is the whiteness thereof taken away: they will not eat Walwort or night-shade (commonly called Deaths herb) but if they eat herbs whereupon falleth an Honey-dew, then will their Milk be wonderful sweet and plentiful: there is no food so good for Cows, as that which is green, if the Countrey will afford it; especially if they love the wet and watery places, although the Butter coming from the milk of such beasts, is not so wholesome as that which is made of such as are feed in dryer Pastures. The like care is had of their drink, for although they love the coldest and clearest waters, yet about their time of Calving it is much for better them to have warmer waters, and therefore the Lakes which are heated and made to come by the rain, are most wholesome to them, and do greatly help to ease their burden and pains in that business.
Of the Cow.

Paulus reports a wonder in nature, of the Rivers Miltius and Charadus, running through the City Patra, that all the Kie which drink of them in the Spring time, do for the most part bring forth males, wherefore their herdmen avoid those places at that time. Kie for the most part before their Calving, are dry and without milk (especially about Torana). They are also purged of their menses in greater measure, then either Goats or Sheep, which especially come from them a little before or after they have been with the Bull ; howsoever Artifical faith, that they come from them a little after they have been five moneths with Calf, and are discerned by their urine ; for the urine of a Cow is the thinnest of all other.

These beasts are very lustful, and do most eagerly desire the company of their male, which if they have not within the space of three hours after they mourne for it, their lust isswageth till another time. In a Village of Egypt called Sychias (under the government of the Hemophilus) they worship Venus under the title Thentis in the shape of a Cow, perswading themselves that there is great affinity between the Goddess and this beast ; for by her mournful voice she giveth notice of her love, who receiveth the token many times a mile or two off, and so presently runneth to accomplish the lust of nature : and for this cause do the Egyptians picture Jf with a Cows horns, and likewise a Bull to signific hearing. The signes of their Bulling (as it is termed) are their cries, and disorderly forwaking their fellows, and resifting the government of their keeper. Likewise, their secret generation forth more then at other times, and they will leap upon their fellows as if they were males : besides after the manner of Mares, they oftener make water then at other times.

The most cunning herdmen have means to provoke them to desire the Bull, if they be flack, Secrets to proc- or if all they withdraw from them some part of their meat (if they be fat) for that will make them saper to conceive ; then take they the genitals or stones of a Bull, and hold it to their nose, by smelling whereof are provoked to desire copulation ; and if that prevail not, then take they the tender part of Shrimps, which is their fish, and beat them in water till they be an ointment, and therewith anoint the breasts of the Cow, after they have been well washed, untill it work upon her. And some affirm, that the tail of an Eel put into her bath the fame virtue ; other attribute much force to the wise liquor, to procure lust and conception.

They are a great while in copulation, and some have gesshed by certain signes at the time of copu- lation, whether the Calf prove male or female; for say they, if the Bull leap down on the right side of the Cow, it will be a male, if on the left, it will be a female : which conjecture is no longer true, when then the Cow admitteth but one Bull, and conceiveth at the first conjunction, for which cause the Egyptians deepeth a woman bringing forth a maiden child, by a Bull, looking to the left hand, and likewise beholding a man child, by a Bull, looking to the right hand.

They are not to be admitted to copulation before they be two year old at the leaft, or if it may be four ; yet it hath been seen, that a Heifer of one year had conceived, and that another of four moneths old hath likewise defined the Bull ; but this was taken for a moniler, and the other never thrilled.

One Bull is sufficient for fifteen Kie, although Varro faith, that he had but two Bulls for threecore and ten Kie, and one of them was two year old, the other one. The best time for their copulation is about the time of the Dauphins appearance, and so continueth for two or three and forty daies, which is about June and July, for those which conceive at that time, will bring forth their young ones in a moist temperate time of the year : and it hath been observed, that an Ox immediately after his gelding, before he had forgotten his former fire and inclination, his seed not dried up, hath filled a Cow, and the proved with Calf.

They go with Calf ten moneths, except eighteen or twenty daies ; but those which are Calved before that time, cannot live ; and a Cow may bear every year (if the Country wherein she liveth is full of grasse, and the Calf taken away from her at fifteen days old). And if a man desire that the Calf should be a male, then let him tie the right side of the Calf at the time of copulation ; and for a female bind the left. Others work this by natural observati- on, for when they would have a male, they let their Cattel couple when the North wind blow- eth ; and when a female, they put them together when the air is Southerly. They live not above fifteen years, and thereof ten times they may inender. The best time to Calve in, is April, because then the Spring bringeth on grass, both for themselves, and to increaie milk for the young ones.

They bear not but in their right side, although they have twins in their belly, which happeneth very seldom, and the beast immediately after her delivery, must be nourished with some good meat, for except she be well fed, she will for sake her young to provide for her self : therefore it is requisite to give her Vetches, Millet-feed, and milk mingled with water, and scorched Corne, and unto the Calves themselves, dried Millet in milk, in the manner of a maff : and the Kie muft also be kept up in stables, so as they may not touch their meat at the going forth, for they are quickly brought to forfake and loath that which is continually before them : and it is observed that when Kie in the Summer time do in greater number above cultum go to the Bull then at other times, it boeroken- eth and foreweeneth a wet and rainy winter, for it cannot be (faith Albertus) that a beast so dry as is a Cow, can be increaseth in moisture, which thirreth up the defire of procreation, except there be a mutation in the air unto abundance of moisture. And to conclude this discourse of a Cow, in ancient time they were wont to call light women Heifers, Harlots, and Kine, by reston of
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of two famous harlots of Athens, Chena and Salmonchba, and from this came the fiction of Io, whose fable is at large protracted by Ovid, how the being the daughter of Idaus, was in a darknese brought upon her by Jupiter, by him ravished, which mist being espied by Juno. the defendd to the earth, and Jupiter fearing his wives jealousy turned the said Io into a Heifer, from which shape she was afterwards delivered and married to Osiris the King of Egypt, and after her death was worshippd by the Egyptians for a god, and called Set, unto whom they hierurised Geese which were called Sacra Lince.

In the choice of Kie, you must observe this direction, you must buy them in the month of March, let them be young, not past their first or second calf, their colour black or red, seldom brown or white, bright coloured, specially red, brown legs, blakith horns smooth and beautiful, high foreheads, great eyes and black, hairy and grisly ears, flat Nostrils like an Ape, but open and wide, their back bones bending somewhat forward, black lips, long and thick necks, most broad fair creets, descending from the neck, well ribbed, a great belly, the back and shoulders very broad, the buttocks broad, with a long tail hanging down to their heels, and their neuter part in many places creped and curled, well let and compacted legs rough and short, straight knees, and their bunches hanging over; their small feet, not broad but round, standing in good distance one from another, not growing crooked or play-footed, and their hoofs smooth and like one another every way. Finally, it were a profitable thing to prosecute natures perfection in every one of their several parts, but I spare to speak any more of the Females, and returning again to the story of Oxen from which we have digressed, leaving the readers who desire to hear more of this discourse of Kie to other Authors, who purposely describe every part more particularly.

To begin therefore with their description, because among-folded beasts they are of most dignity and worth, especially in Italy, where the bounds of their best priviledged and flourishing Cities, were first of all declared and laid out, by the lowering together of an Ox and a Cow in one yoke. Magn Carthaginensis teacheath, that the time to provide or buy oxen, is best in the time of March, because then in their lean bodies, which they fell them cannot cover their faults so well, as if they were fatter, and also if they should be unruly and stubborn, they may be the more easily tame, before their flesh increase their strength.

Their notes or marks must be thefe, let them be young, having square and great limbs, a found body, thick and short, having his muscles flanding up red and round, and all his body smooth, his horns black, strong and large, without crooking or windng, after the fashioned of a half moon, great and rough ears, their eyes and lips black, broad Nostrils and flat upward, a long thick and fof, neck, his creft descending down to the knee, a great breast, large shoulders, big belly, long, light, ftraight sides, broad loins, a ftraight back defending a little, and a round pair of buttocks, ftraight, round and fine, short legs, good knees, great hoofs, and long tails rough and grisly. And it is to be noted, that the Oxen of a mans own Country breed, are better and to be preferred before strangers, becaufe he is already naturally fitted to the air, food, water, and temper of the soil: for it is not good to bring them from the Mountains to the Valleys, becaufe then they will grow laifie and fat, and fo into diætes: neither from the Valleys to the Mountains, becaufe they will quickly grow out of heart through want of their first deep and fat palurie; and above all, have regard to match them equally in yoke, as fo one may not overbear the other. Oxen loose their teeth at two or three year old, but not all as a Horfe doth, their nerves are harder, but not so hard as a Buls; their fih is dry and melancholick, their horns are greater and larger then are a Buls, for the fame reason that Eunuchs and gelded perffons can never be bald; for copulation weakeneth the brain, only a Bull hath a stronger forehead then an Ox, becaufe the humour that should grow forth into horns, is hardned under the bone: and the horns of Kie which are also bigger then a Buls; may through heat be made flexible with wax or water; and bend every way: and if when they are thus made soft, you may divide them into four, that is, every horn in two, they will so grow afterward, as if every heaft had four horns, and sometime through the thickness of their fcul, closing up the part where the horn should grow, and the smallnes of their veins in that place to feed the horns, there come no horns at all, but remain polled; And it is reported that they have a little fone in their head, which in the fear of death they breath out. Their teeth do all touch one another, and are changed twice, they chew the cud like fheep, wanting a row of their upper teeth, that is four of them, their eyes are black and broad, and their heart full of fines, yet without any bony lubftance, although Pliny affirmeth that sometimes in the hearts of Oxen and Horfes are found bones.

Their creft called Palm cometh of Pius their hair, and it is nothing else but long strakes in their hair, whereby the generofity and thomach of the beast is apparent. A Cow hath two udders under her loins, with four spears, like a Goat and a Sheep, because the concoction and juice of their meat may better descend to the lower parts then to the upper; their navell is filled with many veins, their hair fhort and soft, their tail long, with harder hair then in the other parts of the body; their milk is long and not round, their reins are like the reins of a Sea-calf, and by reason of their dry bodies they grow very fat, and this fat will not easily be difolved, but their manner of feeding mainainteth their strength, for they which eat much are flow in the chewing, and speedy in the concoction, for they do better preserve their fat which eat flowly, then those that eat hastily and with more greedines.

Or the choice of Kie.

The description of Oxen in common.

Time best to provide Oxen.

Outward marks of good Oxen.

Their several parts.

The reasons why some Oxen are polled, Athenians.

Arifotle.

Pliny.

The parts of a Cow different from Oxen.

Galen.
Of the Ox.

It hath been already shewed, that some Oxen will eat flet, and tear wilde beastes in pieces, the people of Persia give to their yoked or working Oxen fish, and also in the Province of Adam, and where their Horfes, Sheep, and Oxen, eat dryed fish, by reason that the abundance of heat doth dry up their palture: neither is anything so plentiful among them as fish: the like is reported of the people Hottentot, and Ceylons, and of Maymun a City of Arabia, and in Frisland: in the Province of Norway, there is an herb growing in waters, which is so much desired of their Cattel, that they will thrust their heads into the water above their ears, to bite that to the roots: and the Oxen of the Northern ocean illands of Germany do grow so fast, that they are indangered to die thereby.

The most common food for Oxen, is the same that is already specified in the former discourse of Kie; namely, Three-leaved grasse, Clover grasse, all green herbs, Hay, Beans, Vetches, Chaife, and in some places Barley and Straw. There is also a monethly diet or food given to Oxen, for in January and February, they give them Vetches, and Lupines, bruised in water among Cafffe or Peafe, so bruised and mingled, and where is want of such pulse, they may give them preflings of Grapes dryed and cleansef, which is not turned into wine, and mingle them with chaife for the Cattel to eat, but the Grapes themselves are much better before the prefling, with their small twigs or leaves, because they are both meat and drink, and will fat an Ox very speedly.

The like may be added of boughs, of Laurel, Elmpe, and other leaves, and also Nuts and Acornes, but if they be not wearey and fed with Acornes till they loath them, they will fall into febs. In March and April, give them Hay, and from April unto June give them Graffe, and fuch green meat as may be found abroad; Afterward all the Summer and Autumn, they may be satisfied with the leaves of Elmpe, Bay, Holm, and especially that kind of Oak which is without prickles, and therefore they cannot abide Juniper. In November and December, while the feed time lafteth, they must have as much given them as they can derive, either of the forenamed food, or else of some better if need require; for it must be principally regarded, that the Cattel fall not into leannes in the Winter time, for leannes is the mother of many ficknefles in Cattel, and their utter overthrow. and therefore the benefits by their full feeding are many, as may appear by that common proverbs., Bas ad autumnam, that is, an Ox to a whole heap, to signify such men as live in all plenty and abundance.

The like care must be had of their drink, for the Neat-herd must diligently look unto their drink, that it may be alway clear, and it is reported of the rivers Cruibus and Sbabri, that the Cattel which drink of their water do turn white, whatsoever colour they had in former times.

They will live in strength and perfection twelve years, and their whole life is for the most part but twenty, Kie live not fo long; the means to know their age is by their teeth and their horn, for it is observed that their teeth grow black in their age, and their horns wax more circled as they grow in years, although I dare not affirm that every circle betokens a years growth, (as some have written) yet I am assured the smooth horn sheweth a young beast. Moreover, although Kie will endure much cold and heat both in Winter and Summer, yet must you have more regard to your Oxen, and therefore it is required that they in the Winter cold weather be kept dry and houfed in halls, which must be of convenient quantity, In every Ox may be lodged upon straw, the floor made higher under their forefeet then their hinder, so as their trine may peaceably and not stand to hurt their hooves: and there be also allowed for the standing and lodging of every Ox eight foot in breadth, and a length answereable. The like regard must be had to their manger and rack, whereof the flaves must not fland above one foot, or rather lefte from one another, so they may not draw out their meat and lappen it underfoot.

But all the diet and food that the wit of man can ordain, will do them no manner of good if regard be not had to their bodily health, and preversation of strength, for which cause they must receive an ordinarie medicine every quarter of the year; that is, in the end of the Spring, Summer, Autumn, and Winter; which in some places is thus made and given in potion, they take of Cypress, and Lupine leaves an equal quantity, beat them small, then set them in water in the open air a day and a night, and afterward give unto every one for three daies together warmed as much as a wine pinte.

In other places they give them to prevent sicknefs, a raw Egge, a handful of salt in a pint of wine: and other put into the meat of Oxen, the form of new oil mingled with water, if it a little at once until they be accustomed unto it, and afterward more, and this they do every fourth or fifth day. Cato receiteth a certain vow or prayer, which the old Idolatrous Romans were wont to make for the health of their Cattel, to Silvanws Mars, which was on this manner. First, they take three pound of green wheat, and of Lard four pounds, and four pound and a half of flathie fisnews, and three pints and a half of wine, then put them into earthen pots with hone, and put in the wine by it self, and this they did yearly, but no woman might know how it is made, or be present at the time of the preparation, and it being made must be presently consumed by fire. Unto this ridiculous and superstitious idle invention, serving more to express the folly of man, then to benefit either man or beast, I may add that kind of sacrifice made for beasts, which Pliny calleth Dops, that was made in the Spring time when the Pear-tree did bloomm, the manner whereof was thus, They did offer to Jupiter Dapalí a bowl of wine, on the same day the herd-men and herds make their sacrifice, saying in this manner, O Jupiter Dapala, I offer unto thee this cup of wine, in the behalf of my self, family and
and Cattel, if thou wilt perform that unto them which belongeth to thee, be good to this wine beneath, be good to this my sacrifice: Afterward the party washed his hands, and then drank the wine saying, O Jupiter Dolius, be good to this my sacrifice, be good to this inferior wine, and if thou wilt give part thereof to Venus: the sacrifice being ended he took Millet-feed, Lentils, Osipnun, and Garlic: Tun in Cats; wherewith if any Reader be offended, let him remember to pay such poor remedies, and commend his Cattel to the true God, that fave them and beaft. The Drudk of the Gauls called a certain herb growing in moyst places Samum; which being gathered by the left hand of them that were falling, they gave it for an Antidote to Oxen and Swine. And Cato telleth of another superfluous cure for Oxen, when a man took the horn of a Hart, and laid it upon the Chapell of Pan, and set upon it a burning Candle, which must not be forgotten, but alway thought upon in the day time, calling upon holy Demusariis, which foolish people have thought as it were a witchcraft, to cure the evils of their Cattel.

But to let passe these and such like trifles, let us follow a more perfect description and rule to cure all manner of diseases in this Cattel, whose safeguard and health next to a man, is to be preferred above all others: and first of all the means whereby their sickness is discovered may be considered as all Latitudine or wearisomeness through overmuch labour, which appeareth by forbearing their meat, or eating after another fashion then they are wont, or by their often lying down, or else by holding out their tongue, all which and many more signs of their diseases, are manifest to them that have observed them in the time of their health: and on the other side it is manifest, that the health of an Ox may be known by his agility, life and firing, when they are lightly touched or pricked, starting, and holding their ears upright, fulnes of their belly, and many other ways.

There be also herbs which inrease in Cattel divers diseases, as herbs bedewed with Hond brungeth the Murrain, the joyce of black Chamerion killeth young Kie like the Chine, black Hellebore, Aegnam, or Wolf-bane, which is that graffe in Cilicia, which inflameth Oxen, herb Henry, and others. It is also reported by Aphaeste, that in a piece of Thracia, not far from that City which is called the City of Mediae, there is a place almost thirty furlongs in length, where naturally groweth a kind of barley, which is good for men, but pernicious for beafts. The like may be said of Aegolabros, Orbanache and Asylus, but I will halfe to the particular description of their diseases.

In the first place is the Malis or Graunders already spoken of in the story of the Aife, which may be known by these signs, the oxes haire will be rough and hard, his eyes and neck hang down, matter running out of the nose, his pace heavy, chiving his cud out, his backbone sharp, and his meat loathsome unto him; for remedy hereof take Sea-onions or Garlic, Lupines or Cipres, or else the foam of oil. And if a beaft eat Hogs dung, they presently fall sick of the Pities, which infecteth the herbs and graffe they breathe on, the waters whereof they drink, and the flats and lodgings wherein they lie. The humors whith annoy the body of Oxen are many, the first is a moist one called Malis, influing at the nofe, the second a dry one when nothing appeareth outwardly, onely the beaft foraketh his meat, the third an articular, when the fore or hinder legs of the beaft halt, and yet the hoofs appear found, the fourth is Furcimius, wherein the whole body breaketh forth into matter buncches and biles, and appear healed till they break forth in other places, the fifth Subtercenten, when under the skin there runneth a humour that breaketh forth in many places of the body; the sixth a Subrenal, when the hinder legs halt by reason of some pain in the loins, the seventh a Maunge or Leprose, and lastly a madnes or Phrensie, all which are contagious, and if once they enter into a herd, they will infect every beaft if they be not separted from the sick, and speedy remedy obtained.

The remedies against the last-foven are thus described by Columella. First take Oxipanun and scabroser roots mingled with Fennel-feed and meaat of beaten wheat rath-ripe; put them in spring water warmed with Hond nine spoufons at a time, and with that medicine anoint the beaft of the beaft, then take the bloud of a Sea-faife, and for want thereof a common Snail, and put it into wine, and give the beaft in his nofe, and it hath been approved to work effectually. It is not good at any time to furp Oxen to running, for chastening either move them to loosening of the belly, or drive them into a Feaver: now the signs of a Feaver are these, an immoderate heat over the whole body, especially about the mouth, tongue and ears, tears falling out of the eyes, hollownes of their eyes, a heavy and hooping drowzie head, matter running out of his nofe, a hot and difficult breath, and sometime fighting and violent beating of his veins and loathing of meat: for remedy whereof, let the beaft fail one whole day, then let him be let blood under the tail failing, and afterward make him a drink of bole-worfe flakles sod with oil and liquor of fish fauce, and let him drink it for five daies together before he eat meat; afterward let him eat the tops of Lentils, and young snall Vine branches, then keep his nofe and mouth clean with a fponge, and give him cold water to drink three times a day, for the beit means of recovery are cold meats and drinks, neither must the beaft be turned out of doors, till he be recovered: When an Ox is fick of a cold, give him black wine, and it will prefently help him.

If an Ox in his meate taif of Hens dung, his belly will prefently be torment and, and swell unto death if remedy be not given; for this malady, take three ounces of parsley feed, a pinte and a half of Cammion, two pounds of honey, beat thefe together and put it down his throat warme, then drive the beaft up and down, as long as he can stand, then let as many as can stand about him rub
rub his belly, until the medicine work to purgation: and \textit{Verginia} adddeeth, that the ashes of Elime wood well red in oil, and put down the beasts throat, cureth the inflammation of hen-dung. If at any time it happen, that an Ox get into his mouth and throat a horse-leech, which at the first will take fast hold, and tuck the place the holds (be it mouth or throat) til the have kild the beast; if you cannot take hold on her with the hand, then put into the Oxes throat a Carse, or little hollow pipe, even to the place where the Leech sucketh, and into that pipe put warm oil, which as soon as the Leech feelith, the presently leaveeth hold.

It fortunate sometimes that an Ox is rung or beaten with a Serpent, Adder, Viper, or other such venemous beati; for that wound take sharp Trifoly, which growth in rockie places, strain out the juice and beat it with salt, then fearthe the wound with that ointment, till it be wrought in. If a field-mouse bite an Ox, so as the dint of her teeth appear, then take a little Cumin or soft Pitch, and with that make a plaster for the wound; or if you can get another field-mouse, put her into oil, and there let it remain till the members of it be almoxt rotten, then bruise it and lay it to the fore, and the same body shall cure, whose in nature gave the wound. Oxen are also much troubled with a disease called the Hide-bonde; for remedy wereof, when the beast is taken from his work, and panteth, then let him be sprinkled over with wine, and put pieces of fat into his mouth: if then you perceive no amendmet, then seethe some Laurel, and therewith heat his back, and afterward with ill and wine fearthe him all over, plucking his skin up from the ribs, and this must be done in the sunshine, or else in a very warm-place.

For the febs, take the juice of Garlic, and rub the beast all over; and with this medicine may the biting of a Wolf or a mad Dog be cured: although other affirm, that the hoof of any beast with Brimfione, Oil, Water and Vinegar, is a more present remedy; but there is no better thing than Butter and Thale Urine: When they are vexed with worms, pour cold water upon them, afterward anoint them with the juice of onions mingled with Salt.

If an Ox be wrinched and strained in his fine ws, in travel or labour, by crumbling on any root or hard sharp thing, then let the contrary foot or leg be let blood, if the finews swell: If his neck swell, let him blood, or if his neck be winding or weak (as if it were broken) then let him blood in that ear to which the head bendeth. When their necks be bald, grinde two tile together, a new one and an old, and when the yoak is taken off, cast the powder upon their necks, and afterward oil, and so with little reit the hair will come again.

When an Ox hangeth down his ears and eateth not his meat, he is troubled with a Cephalalgie; that is, a pain in his head: for which seethe Thyme in Wine, with Salt and Garlic, and therewith rub his tongue a good space; also raw Barly steeped in Wine, helpeth this disease. Sometime an Ox is troubled with madness, for which men burn them benwixt the horns in the forehead till they bleed: sometime there is a Fie which biteth them continually, driveth them into madness; for which they are wont to call Brimfione and bay sprigs sod in water in the Pattures where they feed, but I know not what good can come thereby. When Oxen are troubled with leam, put a sprig of black Hellosor through their ears, wherein let it remain till the next day at the same hour. All the evils the eyes are for are the molt part cured by intusion of Hony, and some mingle therewith Ammoniak, Salt and Bat-tieck. When the palat or roof of their mouth is so swelling that the beast forkeeth meat, and bendeth on the one side, let his mouth be pared with a tharpe instriment, or else burned or abasted some other way, giving them green and soot meat till the tender fore be cured: but when the cows swell, for remedy wheerof they fell them away to the Butcher for slaughter: it filleth out very often that there grow certain bunches on their tongues, which make them forake their meat, and for this thing they cut the tongue, and afterward rub the wound with Garlic and Salt, till all the feamy matter issue forth.

When their veins in their cheeks and chaps swell out into ulcers, they soothen and wath them with Vinegar and Lees, till they be cured. When they are liver-sick, they give them Rubache, Multram, and Gentian, mingled together. For the Cough and short breath, they give them twigs of Vines or Juniper mingled with Salt; and some use Betony.

There is a certain herb called Apleon or Citterneb, which consumeth the milts of Oxen, found by this occasion: in Cete there is a River called Proterus, running betwixt the two Cities Gnosof and Gottina, on both sides thereof there were herts of Cattel, but those which fed neer to Gottina had no Spleen, and the other which fed neer to Gnosof were full of Spleen: when the Physitians endeavored to find out the true caufe hereof, they found an herb growing on the coast of Gottina, which diminished their Spleen, and for that caufe called it Apleon. But now to come to the diseases of their beast and stomack, and first of all to begin with the Cough, which if it be new, may be cured by a pinte of Barley meal with a raw Egg, and half a pinte of sod wine: and if the Cough be old, take two pounds of beaten Hyop sod in three pints of water, beaten Lentils, or the roots of Onions washed and baked with Wheat meal given fasting, do drive away the olded Cough. For thornets of breath, their Neck-herds hang about their neck Deaths-herb and Harts-wort: but if their Livers or Lungs be corrupted, (which appeareth by a long Cough and leaness) take the root of Hafell, and put it through the Oxes eat; then take like or equal quantity of the juice of Onions, and oil mingled, and put into a pinte of Wine, let it be given to the beast many days together. If the Ox be troubled with crudity, or a raw evil stomach, you shall know by these figues; he will often belch, his belly will rumble, he will forbear his meat, hanging down his eyes.
and neither chew the cud or lick himself with his tongue: for remedy whereof, take two quarts of warm water, thirty flakes of Balsam’s, seethe them together till they be soft, and then give them to the beast with Vinegar.

But if the cruelty cause his belly to stand out and swell, then pull his tail downward with all the force that you can, and bind thereunto Mother-wort, mingled with salt, or else give them a Glyster, or anoint a Woman’s hand with oil, and let her draw out the dung from the fundament; and afterward cut a vein in his tail with a sharp knife. When they be distermed with choler, burn their legs to the hoofs with a hot Iron, and afterward let them rest upon clean and soft straw; when their guts or intras are pains’d, they are eased with the fight of a Duck or a Drake.

But when the small guts are infected, take fifteen Cypress Apples, and so many Gauls, mingle and beat them with their weight of old Cheele in four pints of the sharpest wine you can get, and so divide it into four parts, giving to the beast every day one quantity. The excrements of the belly do deprive the body of all strength and power to labour; wherefore when they are troublesome with it, they must ret, and drink nothing for three daies together, and the first day let them forbear meat, the second day give them the tos of Wilde Olives, or beside thereof Canes or Reeds; the walks of Lantake and Myrtillus; and a third day a little water, and unto this some add dryed Grapes in six pints of sharpe wine, given every day in like quantity. When their hinder parts are lame through congealed bloud in them, whereas there is no outward appearance, take a bunch of Nettles with their roots and put it into their mouths, by rubbing whereof the condenfate bloud will remove away.

When Oxen come first of all after Winter to graffe, they fall graffe-fick, and piffe bloud; for which they seethe together in water Barly, Bread, and Lard, and so give them all together in a drink to the beast: some prauie the kernels of Walnuts put into Egggeiefis for this cure; and other take the bloody water it fell, and blow it into the beasifs Noftirs; and herd-men by experience have found that there is no better thing then Herb-Robert, to make the pilling of bloud; they must also be kept in a flall within doors, and be fed with drye graffe and the belt hay. If their horns be anointed with wax, oil, and pitch, they feel no pain in their hoofs, except in cafes where any beast treadeth and presseth another hoof; in which cafe take oil and fow wine, and then use them in a hot Barly plaifeir or pouffe laid to the wounded place: but if the plough-share hurt the Oxes foot, then lay thereunto Stone-pitch, Greafe and Brimstone, having first of all feared the wound with a hot Iron bound about with thorn wool.

Now to return to the taming and instruction of Oxen. It is said that Bussirs King of Egypt was the first that ever tamed or yoaked Oxen, having his name given him for that purpose. Oxen are by nature meek, gentle, flow, and not fubborne, because being depriv’d of his genitals he is more tractable, and for this caufe it is requisite that they be always used to hand, and to be familiar with man, that he may take bread at his hand, and be tied up to the rack, for by gentlenefs they are belt tamed, being thereby more willing and strong for labour, then if they were roughly yoaked or suffer’d to run wilde without the sociery and fight of men. Varro faith, that it is belt to tame them betwixt five and three year old, for before three it is too foon, because they are too tender; and after five it is too late, by reason they are too unweldy and fubborne.

But if any be taken more wilde and unruly, take this direction for their taming: Firft, if you have any old tamed Oxen, joynce them together, (a wilde and a tame) and if you pleasure, you may make a yoak to hold the necks of three Oxen; so that if the beast would rage and be dis disobedient, then will the old one both by example and strength draw him on, keeping him from flitting aside, and falling down. They must also be accustom’d to draw an empty Cart, Wain, or flid through some Town or Village, where there is some concourse of people, or a plow in falledow ground or fand, so as the beast may not be discourag’d by the weight and strength of the burden; their keeper must often with his own hand give them meat into their mouth, and stroke their Noses, that so they may be acquainted with the smell of a man; and likewise put his hands to their fides, and stroke them under their belly, whereby the beast may feel no displeasure by being touched. In some Countries, they wash them all over with wine for two or three daies together, and afterward in a horn give them wine to drink, which doth wonderfully tame them, although they have never been so wilid.

Other put their necks into engins, and tame them by subftracting their meat. Other affirm, that if a wilde Ox be tyed with a halter made of wooll, he will presently wax tame: but to this I leave every man to his particular inclination for this busines; only let them change their Oxens fides, and let them sometime on the right side and sometime on the left side, and beware that he avoid the Oxes heel, for if once he get the habitt of kicking, he will very hardly be refrained from it again. He hath a good memory, and will not forget the man that pricked him, whereas he will not flir at another, being like a man in fetters, who dissembleth vengeance until he be releas’d, and then payeth the perfon that hath grieved him. Wherefore it is not good to use a young Oxe to a goad; but rather to awaken his dulnefs with a whip.

These beasts do understand their own names, and dillinguish betwixt the voice of their keepers and strangers. They are also faid to remember and understand numbers, for the King of Persia had certain Oxen, which every day drew water to Suffi to water his Gardens, their number was an hundred Vefsells, which through cultom they grew to obverse, and therefore not one of them would
would halt or loiter in that business, till the whole was accomplished: but after the number fulfilled, there was no good, whip, or other means, could once make them stir, to fetch another draught or burthen. They are said to love their fellows with whom they draw in yoke most tenderly, whom they seek out with mourning if he be wanting. It is likewise observed in the licking of themselves against the hair, (but as Cicero faid) if he bend to the right side and lick that, it proceeds a storm; but if he bend to the left side, he foretelleth a calm day fair: In like manner, when he lougheth and fleemeth to the earth, or when he feedeth fuller then ordinary, it betokeneth change of weather: but in the Autumn, if Sheep or Oxen dig the earth with their feet, or lie down head to head, it is held for an affured token of a tempest.

They feed by companies and flocks, and their nature is to follow any one which strayeth away; for if the Neat-herd be not present to restrain them, they will all follow to their own danger. Being angered and provoked they will fight with strangers very irefully, with unappeasable contentions; for it was seen in Bceitas, between Curia and Veluvius, that when the herds of two Villages met in a certain plain together, they fought so long, that of three score, four and twenty were slain, and all of them wounded, eight excepted, which the inhabitants took for an ill preface or mischief of some ensuing calamity, and therefore they would not suffer their bodies to be covered with earth: to avoid this contention, skilful Neat-herds gave their Cattel some strong herbs, as garlick and such like, that the favour may avert that strife. They which come about Oxen, Bulls, and Bugeis, must not wear any red garments, because their nature riseth and is provoked to rage, if they see such a colour.

There is great enmity between Oxen and Wolves, for the Wolf (being a flesh-eating creature) lyeth in wait to destroy them; and it is said, that there is so great a natural fear in them, that if a Wolves tail be hanged in the rack or manger where an Ox feedeth, he will abstain from eating. This beast is but simple, though his aspect seem to be very grave; and thereof came the proverb of the Oxen to the yoak, which was called Ceroma; wherewithal Wrestlers and Prize-players were anointed, but when a foolish and heavy man was anointed they said ironically But of ceroma.

Again the folly of this beast appeareth by another Greek proverb, which faith, that An Ox raiseth dust which blindness his own eye; to figurate, that foolish and indifferet men flir up the occasion of their own harmes. The manifold epithets given this beast in Greek and Latin by sundry authors, do demonstratively shew the manifold conditions of this beast; as that it is called a Fower, Wilde, an earth-tiller, brazen-footed, by reason of his hard hoofs, Cerebratus, more brain then wit; horned, fibburned, horn-biting, hard, rough, untamed, devourer of graffe, yoak-bearer, fearful, overtaimed, drygdes, wry-faced, flow, and ill favoured, with many other such notes of their nature, ordination, and condition.

There remain yet of this discourse of Oxen, two other necessary Trajesis; the one natural, and the other moral. That which is natural, contains the several uses of their particular parts, and first for their flesh, which is held singular for nourishment, for which cause, after their labour which bringeth leannes, they use to put them by for fantast, or (as it is said) in English for feeding, which in all countries hath a several manner or custom. Saturn affirmeth, that if you give your Cattle when they come fresh from their pishure, Cabbage leaves beaten small with some sharp Vines and pourred among them, and afterward chaffe winowered in a fiee, and mingled with Branc for five daies together, it will much fatten and creaseth their flesh, and the sixth day ground Barly, encreasing the quantity by little and little for fix daies together.

Now the beft time to feed them in the Winter is about the Cock crowing, and afterward in the morning twilight, and soon after that let them drink: in the Summer let them have their first meat in the morning, and their second service at noon, and then drink after that second meat or eating, and their third meat before evening again, and so let them drink the second time; it is also to be observed, that their water in Winter time be warm, and in the Summer time colder. And while they feed, you must often wash the roof and fides of her mouth, for therein will grow certain Wormes which will annoy the beast, and hinder his eating, and after the washing, rub his tongue with salt. If therefore they be carefully regarded they will grow very fat, especially if they be not over aged or very young at the time of their feeding; for by reason of age their teeth grow loose and fall out, and in youth they cannot exceed in fatnes, because of their growth: above all Heifers and barren Kie will exceed in fatnes, for Varro affirmeth, that he saw a field Moufe bring forth young ones in the fat of a Cow having eaten into her boody the being alive: the selfsame thing is reported of a Sow in Arcadia: Kie will also grow fat when they are with Calf, especially in the middell of that time. The Turk use their greatest fealls and Mariages, to roast or leethe an Ox whole, putting in the Oxes belly a whole Sow, and in the Sowes belly a Goofe, and in the Gooses belly an Ege, to note forth their plenty in great and small things: but the bell flesh is of a young Ox, and the worst of an old one, for it betgetteth an ill yjuce or concoction, especially if they which eat it be troubled with a Cough or rheumy feam, or if the party be in a Consumpition, or for a woman that hath ulcers in her belly, the tongue of an Ox or Cow salted and flie afunder, is accounted a very delicate dish, which the Priets of Mercury said did belong to them, because they were the fervants of Iephach, and howsoever in all sacrifices the beasts tongue was refused as a profane member, yet these Priets made choife thereof, under colour of sacrifice to feed their dainty flamachs.

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The horns of Oxen by art of man are made very flexible and slanting, whereof are made Combes, hafts for knives, and the ancients have used them for cups to drink in, and for this caue was Bacchus painted with horns, and **Crueler** was taken for a cup, which is derived of **Kera** a horn. In like manner the first Trumpets were made of horns, as Virgil alluded unto this sentence, *Ranse siferpentem cornua cana*, and now adays it is become familiar for the carriage of Gunpowder in war. It is reported by some husbandmen, that if seed be cast into the earth out of an Oxes horn (called in old time **Cresbocha**) by reason of a certain coldness, it will never spring up well out of the earth, at the least not so well as when it is sowed with the hand of man. Their skin is used for chores, Garments, and Gum, because of a spongy matter therein contained, alfo to make Gunpowder, and it is used in navigation when a shot hath pierced the sides of the ship, prefently they clap a raw Ox hide to the mouth of the breach, which instantly keepeth the Water from entering in; likewife they were wont to make bucklers or shields or hides of Oxen and Bugis, and the seven-folded or doubled shield of **Afas**, was nothing else but a shield made of an Ox hide, fo many years, and in a piece upon one another, which caueth Homer to call it *Saca scep$ebh$ear*.

Of the teeth of Oxen I know no other use but scraping and making paper smooth with them; their gall being sprinkled among feed which is to bowen maketh it come up quickly, and killet field-mice that eat of it, and it is the bane or poison of those creatures, so that they will not come near to it, nor not in bread if they discern it; and birds if they eat corn touched with an Oxes gall put into hot water first of all, and the lees of wine, they wax thereby afomnshed: likewife Emmets will not come upon those places where, there remaineth any favour of this gall; and for this caue they anoint herewith the roots of trees. The dung of Oxen is beneficial to Bees if the hive be anointed therewith, for it killeth Spiders, Gnats, and drone-bees; and if good heed be not taken, it will work the like effect upon the Bees themselves: for this caufe they use to smoother or burn this kind of dung under the mouths of the Hives in the spring time, which so displays and disperseth all the little enemy-bees in Bee-hives that they never breed again. There is a proverb of the table of **Auga**, which **Auga** was so rich in Cattel, atal he defined the Countrie with their dung, whereupon that proverb grew: when Hercules came unto him he promised him a part of his Countrie to purge that table, which was not cleaned by the yearly labour of 3000 Oxen, but Hercules undertaking the labour turned a River upon it, and so cleansed all. When **Auga** law that his table was purged by art, and not by labour, he denied the reward; and because Phyleus his eldest Son reproved him for not regarding a man so well deserving, he called him out of his family for ever.

The manifold use of the members of Oxen and Kie in medicine, now remaineth to be briefly touched. The horn beaten into powder, cureth the Cough, especially the tips or point of the horn, which is also received against the Pitlick, or short breath made into pills with Honey. The powder of a Cowes horn mixed with Vinegar, helpeth the morphew, being washed or anointed therewith. The same infud into the Nofftrils, slayeth the bleeding: likewife anointed with warm water and Vinegar, given to a **Splentick** man for three daies together, it wonderfully worketh upon that passion: powder of the hoof of an Ox with water put upon the Kings evil helpeth it, and with Water and Honey it helpeth the apotomes and swelling of the body: and the same burned and put into drink, and given to a Woman that lacketh Milk, it encreaseth milk and strengtheneth her very much. Other take the tongue of a Cow, which they dry fo long till it may be beaten into powder, and fo give it to a woman in white wine or broath. The duff of the heel of an Ox or ancle bone, taken in wine and put to the gums or teeth doth faften them, and remove the ach away: The ribs of Oxen beaten to powder do flay the flux of blood, and restrain the abundance of monthly comres in women. The ancle of a white Calf laid forty daies and nights into wine, and rubbed on the face with white Liner, taketh spots and maketh the skin look very clear.

Where a man biteth any other living creature, seethe the fleth of an Ox or a Calf, and after five daies lay it to the fore, and it shall work the ease thereof. The fleth being warm laid to the swellings of the body, easeth them: fo also do the warm blood and gall of the same beast.

The broth of beef healeth the loofness of the belly, coming by reason of choler; and the broth of Cowes fleth, or the marrow of a Cow, healeth the ulcers and chinks of the mouth. The skin of a Ox (especially the leather thereof) warm in a shooe, burned and applied to pimples in the body or face, cureth them. The skin of the feet and nose of an Ox or Sheep, fold over a soft and gentle fire, untill there arise a certain sCRM like to glew from it, and afterward dried in the cold, windie air, and drunk helpeth (or at leaft) easeth burtines very much.

The marrow of an Ox, or the fewet, helpeth the strains of lines when they be anointed therewith. If one make a small candle of Paper and Cowes marrow, lettting the same on fire, under his browes or eye-lids which are bald without hair, and often anointing the place, he shall have very decent and comely hair grow thereupon. Likewife the fewet of Oxen helpeth against all outward poisons: so in all Leprofies, Botches, and Scurvines of the skin, the same mingled with Goose greese, and poured into the ears, helpeth the deafnes of them. It is also good against the inflammation of the ears, the fluidity and dulness of the teeth, the running of the eyes, the ulcers and rines of the mouth, and itchines of the neck. If ones blood be liquid and apt to run forth of the body,
Concerning their Milk, volumes may be written of the several and manifold virtues thereof, for the 
Philadelphia refuted all medicine, only in the Spring time when their beafts did eat graffe, they

drink Cowes milk, being perfuaded, that the virtue and vigour of all good herbs and fruits were 

received and digested into that liquor; for they gave it medicinally to them, which were fick of

the Plague, of Consumption, of an old Cough, of the Consumption of the reins, of the hardnefs of

the belly, and of all manner of poiffons which burn inwardly; which is also the opinion of all the 

Greek Physicians: and the shell of a Walnut fod in Cow-milk and laid to the place where a Serpent hath 

bitten it, itcheth it, and itayeth the poiffon.

The fame being new and warm Gargarized into the throat, helpeft the foreneffes of the kernels, 

and all pain in the Arteries, and swelling in the throat and flameth: and if any man be in danger of

a short breath, let him take daily soft pitches with the heart Mammies, and Harts fuet clarified in a

Cup of new Milk, and ithath been proved very profitable.

Where the pains of the flameth come by falfehefs, Melancoly, or defperation, drink Cow-milk,

Womans milk, or Alles milk, wherein a flint fome hath been fodder. When one is troubled with a

defire of going often to the floo, and can eafe nothing, let him drink Cow-milk and Alles-milk

fold together: the fame also heaved with gads of Iron or fleet, and mingled with one fourth part of

water, helpeft the Bloody flux; mingled with a little Hony and a Buls gall, with Common and

gourds, leaved to the Navel: and foam afterfe, that Cow-milk doth helpe conception if a woman be

confumed with the whiteflow, fo that her womb be indangerd, let her drink a purgation for her

upper parts, and afterward Alles milk, fait of all let her drink Cow-milk and new wine. (for forty

days together if need be) fo mingled that the wine appear not in the milk, and it hall fill the flux. 

But in the use of milk, the rule of Hippocrates must be continually observed, that it be not used with

any sharp or tart liquor: for then it curdeth in the flameth, and turneth into corruption. The whay of

Cow-milk mingled with Hony and Salt, as much as the taff will permitant and drunk, loofetheth the

hardness of the belly.

The marrow of a Cow mingled with a little meat, and with new cheefe, wonderfully flatteth the

Blody flux. It is affirmed, that there is in the head of an Ox, a certain little bone, which only in

the fear of death he caufeth out at his mouth, if this bone be taken from them suddenly by cutting

the head, it doth make children to breed teeth eatily, being tooon tyed about them. If a man

or woman, drink of the fame water, whereof an Ox drank a little before, it will eafe the headach:

and in the second venter of a Cow there is a round black Stone found, being of no weight, which is

accounted very profible to Women in hard travails of child-birth. The Liver of an Ox or Cow

dried, and drunk in powder curdeth the flux of blood. The gall of a Cow is more forcible in operation

then all other befts gals whatsoever. The gall of an Ox mixed with Hony draweth out any thorn

or point of a needle or other Iron thing out of the feth where it sticketh. Likewise it being mingled

with Alone and Myrthre as thick as hony, it cureth those evils which creep and annoy the privy

parts; laying it upon afterward Beets foid in wine.

It will not fuffer the Kings evil to grow or spread it self if it be laid upon it at the beginning.

The hands washed in an Oxet gall and water, are made white how black foret they were before

time; and if purblind eyes be anointed with the gall of a black Cow, one may read any

writing the more plainly: there is in the gall of an Ox a certain little bone, like a ring, which

the Philofofers call Aether and some Grael and Nestam, which being beaten and held to ones

Nole, it cleareth the eyes, and maketh that humour do dilate to annoy their: and if one take

thereof the quantity of a Lintel feed, with the juice of Beets, it is profitable against the Pal-

ling evil. It one be deaf or thick of hearing, take the gall of an Ox and the urine of a Goat;

or the gall of Goole: likewise, it caufeth the headach in an Ague, and applyed to the temples

provoketh feep, and if the breasts of a woman be anointed therewith it keeps her milk from

curdling.

The milk of an Ox is eaten in hony for eafeing the pains of the milk in a man, and with the skin that

a Calf caufeth out of his dams belly, the ulcers in the face are taken away: and if twenty heads of Gar-

lick be beaten in a Oxes bladder, with a pinte of Vinegar, and laid to the back, it will cure the milk.

It is likewise given against the Spleen, and the Colick made like a plaifer, and layed to the Navel

till one sweat.

The urine of an Ox caufeth a cold flamath to recover, and I have been that the urine of a Cow

taken in Gargarizing, did cure intolerable ulcers in the mouth. When the Bee hath tafled of the

flower of the Corn-tree, the presently dyeth by loofenes of the belly, except the taff the urine of a

Man or an Ox.

There are likewise many ues of the dung of Oxen made in Physick, whereof Authors are full,

but especially against the Goose, plaiftering the fick member therewith hot and newly made: and

against the Dropifie, making a plaifer thereof with Barley meal and a little Brimstone alperled, to

cover the belly of a man. And thus much for the natural properties of this kind, now we will

briefly proceed to the moral.

The moral ues of this beall, both in labour and other things, do declare the dignity and high

account our forefathers made hereof, both in Vintage, Harvett, Plowing, Carnaghe, Drawing,

Sacrificing,

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Sacrificing, and making Leagues of truce and peace; in so much as that if this failed, all tillage and vintage mukt in many places of the world be utterly put down; and in truth, neither the fowls of the air, nor the Horse for the battle, nor the Swine and Dogs could have no sufficiency but by the labor of Oxen: for although in some places they have Mules, or Camels, or Elephants, which help them in this labor, yet can there not be in any Nation a neglect of Oxen; and their reverence was so great, that in ancient time when an offender was to be fined in his Cattel (as all amerciements were in those days the Judge might not name an Ox, until he had first named a Sheep; and they fined a final offence to two Sheep and not under, and the greatest offence criminal, at thirty Oxen and not above, which were redeemed, by giving for every Ox an hundred Asses, and ten for every Sheep.

It is some question among the ancients, who did first joyn Oxen together for plowing; some affirming that Aristem first learned it of the Nymphs, in the Island Ge; and Didimus affirm, that Dionysius Son of Jupiter and Ceres or Pioferpine, did first of all invent the plow. Some attribute it to Briger the Athenian; other to Triptolemus, Ofiris, Habider a King of Spain; and Virgil affirmeth most confidently, that it was Ceres, as appeareth by this verse:

Prima Ceres fitro mortalibus vetera terram
Infinita, &c.

Whereunto agreeeth Servius: but I rather incline to Josephus, LaCroamius and Ensebius, who affirm, that long before Ceres was born, or Offin, or Hercules, or any of the residu, there was a practicre of plowing, both among the Hebrews and Egyptians; and therefore as the God of plowing called by the Romans Jguginus (because of yoaking Oxen) was a fond abration from the truth, so are the residu of their inventions about the first man that tilled with Oxen: seeing it is laid of Cain and Noah, that they were husbandmen and tilled the earth. The Athenians had three several plow-feals which they observed yearly, one in Seizmas, the other in Kerkr, and the third under Pelusius: and they call their managi-sealls, plow-sealons, because then they endeavored by the seed of man to multiply the world, in procreation of children, as they did by the plow to encrease food in the earth.

The Grecians had a kind of writing called Baustraphelon, which began, turned, and ended as the Oxen do in plowing a furrow, continuing from the left hand to the right, and from the right hand to the left again, which no man could read, but he that turned the Paper or Table at every lines end. It is also certain, that in ancient time, the leagues of truce and peace were written in an Oxes hide, as appeareth by that peace which was made by Tarquininus, betwixt the Romans and the Gabii, in which was raised up in the Temple of Jupiter, as Dionysius and Pompeius Secutus affirm (in the likenes of a buckler or shield: ) and the chief heads of that peace remained legible in that hide until their time, and therefore the ancients called the Oxes hide a shield, in regard that by that conclusion of peace, they were defended from the wars of the Gabii.

And there were certain people called Homolotti by Herodotus, who were wont to strike up their leagues of peace after war and contention, by cutting an Ox into small pieces, which were divided among the people that were to be united, in token of an inseparable union. There be that affirm, that a Team or ox of Oxen, taking six or eight to the Team, will plow every year, or rather every season a hyde of ground; that is, from account 20 Manfas or in English and German account 30 Acres; which hath gotten the name Jugaera from this occasion, as Eustabius and Farinus report. When Sicyon the husband of Dido, who was daughter of Ageron and Biter to Pygmaion, wandered to and fro in the world with great fole of treasure, he was slain by Pygmaion secretly, in hope to get his wealth: After which time, it is said, that he appeared to his wife Dido, bidding her to save her life from her cruel brother; who more elateed money then nature, she fled into Lybia, taking with her some Tyrians among whom she had dwelled, and a competent sum of money; who being come thither, creaved of Ithas King of Namadus, to give her but so much land as the could compaith in with an Oxes hide, which with much ado she obtained, and then did cut an Oxes skin into small and narrow thongs or ties, wherewith she compassed in so much as builded the large City of Carthage, and first of all was called the New City, and the Callie thereof Byfia, which signifieth a Hide.

Eustabius also reporteth another story to the building of this City, namely that it was called Carthage of one of the daughters of Hercules, and that when Elisa and the other companions of Dido came thither for the foundation of the City, they found an Oxes head, whereupon they were disencouraged to build there any more, supposing that Omen betokened evil unto them, and a perpetual slavery in labour and misery, such as Oxen live in, but afterward they tried in another corner of that ground, wherein they found a Horfes head, which they accepted as a good signification of riches, honour, magnanimity, and pleasure, because Horses have all food and maintenance provided for them. Among the Egyptians they paint a Lion for strength, an Ox for labor, and a Horse for magnanimity and courage, and the Image of Meda which among the Pharaohs signifieth the Sun, is pictured in the face of a Lyon holding the horns of a striving Ox in both hands, whereby they signifie that the Moon doth receive light from the Sun, when she beginneth to be separated from her beams.

There is in the Coasts of Babylon a Gem or precious stone like the heart of an Ox, and there is another called Sarvites, which representeth the flessh of an Ox. The ancients had like-
wife, for great regard of this beast, that they would neither sacrifice nor eat of a labouring Ox; wherefore Pytheus was condemned when he had desired meat of Teoconemus in Ulysses, for his hungry companion the Son of Hyle, because by violence he took from him one of his Oxen and slew him. A crowned Ox was also among the Romans a sign of peace; for the Souldiers which kept the Castle of Anubus near the river Euphrates against the Turms and his Army, when they yielded themselves to mercy, they descended from the Castle, driving before them a crowned Ox; for this manifold necessity and dignity of this beast came the Idolatrous cultum of the Heathens, and especially the Egyptians, for they worshipp'd him instead of God calling him Apis and Epaphus whole choyse was on this fort. He had on his right side an exceeding splendid want of feet, and his horns crooking together like the new Moon, having a great bunch of their tongue; they, called Cantharum; neither do they suffer him to exceed a certain number of years, or very big, for these caues they give him not of the water of Nile to drink, but of another consecrated well, which hindereth his growth: and also when he is come to his full age, they kill him, by drowning him in another consecrated well of the Priests: which being done, they seek with mourning another (having shuved their heads) to substitute in his place; wherein they are never very long but they finde one, and then in a holy Ship, for that purpose, they transport and convey him to Memphis. And the Egyptians did account him a blessed and happy man, out of whose fold the Priest had taken that Ox-God. He hath two Temples erected for him, which they call his Chambers, where he giveth forth his Augurins, answering none but children and youths playing before his Temples: and refusing aged persons, especially women; and if any not sacred, happen to enter into one of these Temples, he dyeth for it, and if into the other, he fore-sleweth some monstros cruel event, as they fondly imagine.

The manner of his answer is privately to them that give him meat, taking it at their hands; and they observe with great religion, that when Germanicus the Emperor came to ask counsel of him, he turned from him and would not take meat at his hand; for presently he was ill. Once in a year they shew him a Cow, with such marks as he hath, and alway they put him to death upon the same day of the week that he was found; and in Nilus near Memphis, there was a place called Philae, where were preferred a Golden and a Silver dish, which upon the birth or Calving days of Apis, they threw down into the river, and those days were happy; wherein they affirm that no man was hurt by Crocodiles. The Egyptians do also consecrate an Ox to the Moon, and a Cow to Urania. It is reported that Myrmicus King of Egypt, fell in love with his own Daughter: and by violence did ravish her; the not able to endure the conscience of such a fact, hanged her self: whereupon the King her impure father, did bury her in a wooden Oxen, and so placed her in a secret place or chamber, to whom daily they offer many odours; but the mother of the maiden did cut off the hands of those Virgins or Women that attended her Daughter, and would not refuse her how to vile a contempt. There were also many other pictures of Oxen, as in Carystus and Eretria; and most famous was that of Perillus, which he made and presented to Phalaris the Tyrant of Agrigent, shewing him; that if he would torment a man, he should put him into that Oxet over a fire, and his voice of crying should be like the loughing of a Heifer; which thing being heard of, the Tyrant to shew his detestation of more strange invented torment then he had formerly used, he called Perillus, that prefentated unto him, to be put into it alive, and so setting it over a fire, made experiment of the work upon the workman, who bellowed like a Cow, and was so tormented to death that it damnable and dangerous invention; which caused Ovid to write thus:

Et Phalaris taurum violentum membra Perilli
Tornavit: infelix imbuit author opus.

When an Ox or Cow in ancient time did dye of themselves, (Viz.) if it were an Ox, they buried him under the walls of some City, leaving his horn flinking visibly out of the earth, to signifie the place of his burial, for when his flesh was consumed, they took it up again, and buried the bones in the Temples of Venus in every City; but the body of a dead Cow they cast into some great River near adjoining. The Poets have signified a certain Monfer called Minotauros, having in part the form of a man, and in part the form of a Bull; and they say, that Pasitaeus the Daughter of the Sun and wife of Minos, King of Crete, fell in love with a Bull, and by the help of Dedalus, she was included in a wooden Heifer, covered with a Cows hides, and so had copulation with the Bull, and so came that monfer Minotauros included in a labyrinth; and contrived the Athenians, who had slain his son Androgus, to rend every year seven young men, and seven maides to be given to that Monfers to feed upon, for he would eat mans flesh. At last Theseus son of Aegeus King of Athens, came into that labyrinth, and slew that Minotaurus, and by the help of Ariadne escap'd out of the labyrinth. Other relate the story in this manner; that when the Cretensians would have expelled Mi nos from his Kingdom; he vowed that whatsoever likenes first appeared out of the Sea for sign of victory unto him, he would sacrifice it to the Gods, if he did enjoy his Regiment: and thereupon a goodly Bull came unto him out of the Sea, wherewithall he was delighted: But after he had recovered his Kingdom in quiet, he kept that Bull in his own hands, and sacrific'd another; and that by this Bull was the Minotaurus begotten on his wife Pasitaeus. But the truth is; that when Minos was in danger to lose his Kingdom; one Taurus, a valiant Prince and Captain, came with a Navy.
of good fouldiers, and established him in quiet. Afterward falling in love with Penelope King Minos's wife, he lay with her in the house of Dedalus: which Dedalus wrought with the Queen to give him his pleasure, and that the Minotaur was a Monster in Crete, that had the face of an Ox, and the other members like a man, such an one was seen in Arisbotes time. Although other take it for a fiction: because the Romans had it pictured in their Ensigns of war, until Caius Marius altered it to an Eagle, which remaineth to this day. Alietus yeddeth this reason, why the Romans gave such an armes, to signify that hecereiae becometh a Captain, and that proud and crafty counsels do hurt the authors of them.

**Limine quad cecro obscura e caliginos monstrum**

Cenfus brevis Dedalus in lateribus:

Depithum Romanum phalanx in prete fuit,

Semistisque vivae signa superba bone:

Noua multitudo debet eundem secreta latere

Consilia, auctor cognita testina nivea.

It is reported also, that when Cadmus went from Delphi to Phocis, an Ox did direct him in the way, and was his guide: which Ox he was brought out of the herbs of Pelion, having in both his sides a white spot: it must needs be underlood of the Moon, for Cadmus flying by night; having the Moon to shine upon him (which is Hieroglyphically deciphered by the Ox,) gave him light and direction to another City. It were endless to prosecute the several speeches, proverbs, allusions, emblems, plays, prizes, and hieroglyphicks made upon Oxen: whereby, men and women, Cities, Regions, and People have taken denomination from Oxen; but also some of the scar in the firmament: therefore I will not proceed to those devices, but only touch the sacrifices made with Oxen, and so conclude this story.

It cannot be denied, that the prime institution of sacrifices, was from, by, and for the Ordinance of God, to teach the world to worship him in blood for sin: which could not be expiated but by the blood of the only immaculate Son and Lamb of God; and therefore I will but remember how corruption polluted that Ordinance, which was purely without idle Ceremonies intituted by the everlasting God; and yet was by man's invention made wretched, horrible and damnable, through abuse of the fact, that other wife by divine constitution (as appears in holy Scripture) was heavenly, honourable and blest.

To begin therefore with the original of that Heathenish and Paganish sacrifice, in stead of God, the only true and divine Efficiency, to whom all sacrifice and divine worship was due, and whose creatures, both Men, Oxen, and all other living and visible things are; they offered unto all the hosts of Heaven, the Sun, and Stars, the Heathen Gods, Jupiter, Mars, Minerva, Pantheus, and others: and if the Sacrifice were costly and sumptuous, it was called Heorombe. Now before their Sacrifice they made Prayers, burned Incense for odours, presented Praenms (as they were termed) certain preparations and cakes made of Barley and Salt, (called Ulobetes.) After which, the Priest turned him sometimes to the right hand, and sometimes to the left, and then began to take the griffe hars growing on the Oxes fore-head betwixt his horns, making a taste of them, and calling them in the fire to begin the Sacrifice. Then did he give into the hands of the people standing by, little pots of Wine likewise, to taste for Sacrifice, and then he which killed the beast drew his knife, or axe, or cleaver, from the head to the tail of the beast. Now in every Sacrifice they had burning torches, which were lawful for none to carry but for men, and not women; then the Priest commanded to kill the Sacrifice, which sometime they did by knocking him on the head, if the beast were to be sacrificed to Hell, and those that were therein; for they sacrificed a barren Cow, or a black Sheep to those ghosts. But if the Sacrifice were for Heaven, and to the powers thereof, they lifted up his head and cut his throat: then put they under him their Sphagian vessels to receive his blood, and when the beast was fall down, they flayed off his skin.

Then did the Priest or Flamen divide the entrails, that so he might make his augurium (the bowels being proved at the Altar.) Having looked into the bowels, they took out of every gut, member and part, a first fruit, moulten them together in the meal of green wheat-corn, then was it given to the Priest, who put thereunto frankincense, herbage, and fire, and so burned them all together, which was called a perfect Host. But if they sacrificed to the gods of the Sea, then did they first of all wave the bowels of the beast in the Sea-floods before it was burned. The best Sacrifices were fatted and white Oxen or Kine, such as had never been under yoke: for the beast used to labour was accounted unclean: they never offered in Sacrifice one under thirty days old, nor over five years by the Laws of the Priests. When the Spartans overcame their enemies by stratagem, they sacrificed to Manna one, but when by open force, they sacrificed a Cock; for they esteemed more of an unbloody then a bloody victory. When a man sacrificed a Cow to Minerva, he was bound to sacrifice a Sheep and an Ox to Pandrosus.

When the Lorenzani in a publick Spectacle would make a Sacrifice, they wanted an Ox: for which cause they gathered together so many sticks of small wood, as made the Image of an Ox artificially conjointed together, and so setting it on fire burned it for an offering: whereupon a Lorenzani Ox, was an Ironical Proverb, for a Sacrifice of no weight or merit. It is also reported, that an Heifer being brought to the Altar of Minerva to be sacrificed, did there Calve; wherefore the
Of the Calf.

A Calf, is a young or late enaged Bull or Cow, which is called in Hebrew, Egel, or Par: and sometimes ben-bafer, the son of an Oxe. Yet Rabbi Solomon, and Abraham Ema, expound Egel, for a Calf of one year old. The Saracen of that word call a Calf Hesel. The Graecians, Melchos; whence of is derived Mojclesis: but at this day they call him Muskaris, or Melchior. The Italians, Vitello, the French, Veu; the Spaniards, Terena de Veneritudo, signifying tenderness; and sometimes Biceps, and Vicero: the Germans, Vn Kalb; the Flemings, Kalf; and the Latines, Vitulus, of the old word Vitel, signifying to be wanton, for Calves are exceedingly given to sport and wantonnese, or as other suppose from the Greek word Iatrus, came Vitulus: and therefore the Latines do not alway take Vitulus for a young or new foaled beast, but sometime for a Cow, as Virgil Elog.

And this word (like the Greek, Melchos) signifies male and female: whether by divers Authors both the Graec and Latines, are added divers Epithets by way of explication, both of the condition, inclination, and use of this young beast; calling it Wilde, ripe for the temples, unarm'd, weak, sucklings, tender, wandring, unhorn'd, and such like. And because the Poets assign that was turn'd ed into a Cow, and that the violet herbe was asphill'd by Jupiter for her meat; they derive Viole, a Vi- olet, from Vitula a Calf, by a kinde of Graecian imitation.

It is also certain that the honor of this young beast have given demination to some men, as Pom- ponia Vitulii, and Vitulii Niger Tarantrans, and Vitellius was derived from this Item or them, al- though he were an Emperour. The like may be said of Melchors in Greek, signifying a Calf; for there was one Mofchet a Sophaht that drank nothing but water, and there was another Mofbus, a Grammarian of Socratus, whom Athenaeus doth record, was a familiar of Aristobulus, and also of another, a Poet of the Buccliers; and this ferveth to fhow us, that the love our Ancelors bare unto Calf- tel, appeared in taking upon them their names, and were not ashamed in those elder times, where- in wisdom and invention was most pregeable, to glory in their herds from which they receiv'd main- tenance. But to the purpoze, that which is said of the severall parts of an Oxe and a Cow, belongeth also to a Calf; for their Anatomy differeth not, because they are conceived and generated by them, and in them: and also their birth, and other fuch things concerning that, must be inquired in the discourse of a Cow.

It is reported by an obscure Author, that if the hoof of a Calf be not abollved or finisht in the Dams belly before the time of Calving, it will dye. And also it must be obser'd, that the same diseases which do infect and harm an Oxe, do alfo befall Calves, to their extreme perill: but they are to be cure'd by the same fore-named remedies. And above the residue, these young beasts are troubled with worms, which are ingendered by crudity, but their cure is to keep them fasting till they have well digerst their meat, and then take two pipes half sod, and half raw, beaten together, and let the juice thereof be poured down his throat; otherwise take dry figs and fritches beaten together with Santonic, called Lavender-cotten; and so put it down the calves throat as aforesaid, or else the fat of a Calf and Marrube with the juyc of Leeks, will certainly kill these Evils. It is the manner to regard what Calves you will keep, and what you will make of and kill either for sacriice, as in an ancient time, or private use, and to mark and name those that are to be reserved for breed and labour, according to these verses:

Poet parum curat, vitulus traducitur omnium,
Et quos aut pecoris malum submittere habende.
Contraque notas & nomina gentis invensus,
Antr aris ferreare factis, aut seindere terram,
Et campum horre arbitale frallis inventure glebis.

And all these things are to be performed immediately after their weaning: and then in the next place you must regard to geld the males, which is to be performed in June, or as Mogus faith, in May, or at the farthest let them not be above a year old; for else they will grow very deformed and small: but if you let them after two years old, they will prove stubborn and intractable; wherefore it is better to geld them while they be young ones, which is to be performed not with any

The definition and name.

The etymology of Vitulus.

The disease of a Calf.
The cure of worms.

To choose Calves for future.
any knife or iron instrument, because it will draw much blood, and endanger the beast through pain, but rather with a cloven reed or stick, pressing it together by little and little: but if it happen that one of a year or two years old be to be libbed, then you must use a sharp knife, after you have pressed the stones into the cuds, and cut them out at one stroke, and for flanching of the blood, let the cod, and the ends of the veins be feared with an hot iron, and so the wound is cured as soon as it is made.

And now the time for the effecting hereof, is best in the wane of the Moon, either in the Spring or Autumn; but it is good to leave as many of the veins and nerves of the virile member untouched and whole as may be, that so he may not lose any condition of a male, except the power of generation. And if the wound be overmuch given to bleed, lay upon it ashes with the ipume of fuller, which is apt to itch blood in all green wounds; and that day let him not drink, and eat but a very little meat: for three days after give him green tops or grafts, soft and easy to chew, and at the third days end, anoint the wound with liquid pitch, ashes, and a little Oyl, which will soon cure the scar and keep the flies from flunging or harming it. If at any time a Cow call her Calf, you may put unto her another Calf, that hath not suck enough from his own Dam; and they use in some Countries to give their Calves Wheat-bran, and Barley-meal, and tender meat; especially regarding that they drink morning and evening. Let them not lie together in the night with their Dam, but alinder, until their fucking time, and then immediately separate them again, unless the Cow be well fed when the Calf sucketh; her ordinary food will yield no great tribute of Milk; and for this cause you must begin to give the Calf green meat betimes. Afterward being weakened, you may suffer those young ones to feed with their Dams in the Autumn, which were calved in the Spring. Then in the next place, you must regard the timing of the beast, being ready for labour, which is expressed in the former treatise of an Oxe.

The Ancients called Victoria by the name of the Goddess Vitula, because they sacrificed unto her Calves, which was termed a Vitalic: and this was usual for victory and plenty, as is to be seen at large in Grelows, Macrobius, Xenius, Ovid, and Vngil: but the Heathens had this knowledge, that their Gods would not accept at their hands a one Calf for a Sacrifice, although it were brought to the Altar; and if the tail of the Calf did not touch the joynts of his hinder legs, they did not receive him for Sacrifice. And it is said of Euminius Paulus, when he was to go against the Macedonians, he sacrificed to the Moon in her declaration eleven Calves. It is very strange, that a Calf being ready to be sacrificed at the Temple of Jerusalem, brought forth a Lamb, which was one fore-coming sign of Jerusalem destruction. But Aristoteles declareth, that in his time, there was a Calf that had the head of a child, and in Lusisia a Town of Helibia, was there a Calf which in his hinder parts was a Hart.

When Charles the fifth, went with his Army into Africk, and arrived at Larbera, a Noble City of Sardinia, there happened an exceeding great wonder; for an Oxe brought forth a Calf with two heads; and the woman that did owpe the Oxe, presented the Calf to the Emperor; and since that time I have seen the picture of a more strange beast calved at Bonne, in the Bifhoppriek of Colon, which had two heads; one of them in the side not bigger then a Hares head, and two bodies joyned together; whereof the hinder parts were smooth and bald, but the tail black and hairy; it had also feuen feet; whereof one had three hoofs: this Monster lived a little while, and was brought forth in Anno 1552: the 16. day of May, to the wonder and admiration of all them, who either knew the truth, or had seen the picture.

Butchers are wont to buy Calves for to kill, and sell their flesh; for in all creatures, the flesh of the young ones are much better then the elder, because they are moist and soft, and therefore will digest and containe more easily: and for this cause Kids, Lambs and Calves, are not out of deaon in any time of the year; and are good from fifteen days to two months old, being ornaments to the Tables of great Noble men, which caused Virgilius to make this Distichon:

Afflusse habeas vitulum tua prandia in ufas,
Cui medica & sapida juncta repare caro est.

And principally the Germans use the chawthen, the head, and the feet, for the beginning of their meals; and the other part either roasted, or baked, and sometime sod in broath, and then buttered, spiced and fauced, and eaten with Onions.

The Medicines arising from this beast, are the same that come from his Sires before spoken of, and especially the flesh of a Calf doth keep the flesh of a new wound, (if it be applied thereunto) from swelling, and being sodden, it is precious against the bitings of a mans teeth: and when a mad Dog hath bitten a man or a beast, they use to pare the wound to the quick; and having sodden Veal mingled with the fetw and heel, they lay some to the wound, and make the patient drink of the broth: and the same broth is sovereign against all the bitings of Serpents. The horns of a Calf sod soft, are good against all intoxicate poysen, and especially Hemlock. The powder of a Calves thigh drunk in Womans Milk, cureth all filthy running Ulcers; and out of the brains of a Calf they make an Ointment, to looopen the hardnes of the belly. The marrow softneth all the joynts, driveth away the bunches arisinf in the body; having an operation to faoten, fill, dry and heat. Take Oyl, Wax, Rulf, and the marrow of a Calf, against all bunches in the face: and Calves marrow with an equal quantity of Whay, Oyl, Rose-cake and an Egg, do soften the hardnes of the
the cheeks and eye-lids, being laid to for a plaiter, and the same mixed with Cummin, and infused into the ears, helsthe pains of them: and also eafeth the Ulcers in the mouth.

The marrow with the lewet composeth together, cureth all Ulcers and corruptions in the Secrets of Men and Women. The Fat pounded with Salt, cureth the Louzy evil, and likewife the ulcerous fores in the head. The same mixed with the fat of a Goofe, and the juice of Bafli or wilde Cum- man, and infused into the ears, helpeth deafnefs and pains thereof. The fat taken out of the thighb of a Calf, and fod in three porringers of water, and uppeth up, is good for them that have the Flux: and the dung of a Calf fried in a pan, laid to the Buttoks and Secrets, doth wonderfully cure the Bloody flux: also laid to the reins, provoketh Urine; and sod with Rue, cureth all the inflammati ons in the feat of a man or woman. The Sewet of a Calf with Nitre, alfiawgeth the dwelling of the gods, being applied to them like a plaifter: and the Sewet alone, doth cure the peeling of the Nails. The Liver with Sage leaves cut together, and preffed to a liquor, being drunk, eafeth the pain in the small of the Belly. The gall mingled with powder of a Harts-horn, and the Seed of Marjoram, cureth Leprofies and Scurs; and the gall alone anointed upon the head, driveth away mits. The milk of a Calf is good for the milk of a man, and for Ulcers in the mouth; and glew made of his bones, as thick as Hony, and anointed upon the leprous place, cureth the fame, if it be fuffered to dry thereupon.

With the dung of Calves they perfume the places which are hurt with Scorpions; and the afses of this dung with Vinegar, layeth bleeding: Marcellus magnifieth it above measure, for the cure of the Gout, to take the fime of a Calf which never eat gras, mixed with lees of Vinegar; and also for the deafnes of the ears, (when there is pain withall) take the Urine of a Bull, Goat, or Calf, and one third part of Vinegar well sod together, with the herb Fulonna, then put it into a fagon with a small mouth, and let the neck of the Patient be perfumed therewith.

Of the supppofed Bafli CACUS.

There be some of the late Writers, which take the Cacus spoken of by Virgil in his eight Book of Æneids, to be a wilde beast, which Virgil defcribeth in these words:

His spes unius, uacuo non amota recettu:
Sambominitis Carci: foeces quam dira tegebat,
Sulis inacongrum radit: femperque rocent,
Caepe tegebat humus: fortis et unce aequitibus
Ora virum triqui pendebat palida tuba;
Hie monstro Vulconius erat pater: ille atra
Ore vomintis magna fe mole ferbat.
Nec quantum exsulmir carto tuendo:
Fulonna femper itaque estinatis faucibus ignes.

That is, Cacus was half a beast and half a man, who had a cave in the earth against the Sun, his Den replenished with the heads of men, and he himself breathing out fire, so that the earth was warmed with the slaughter of men flain by him, whose slaughter he fattened upon his own doores, being supposeth to be the fion of Fulcon. And there be some that affirm this Cacus, to have wafted and depopulated all Italy; and at length when Hercules had flain Geryon, as he came out of Spain through Italy with the Oxen which he had taken from Geryon, Cacus drew divers of them into his cave by their tails: but when Hercules misfled daily fome of Cattell, and knew not which way they frayed,at laft he came to the den of Cacus: and seeing all the steps fland forward, by reason the cattell were drawn in backward, he departed; and going away, he heard the loughing of the Oxen for their fellows, whereby he discovered the fraud of Cacus: whereupon he presently ran and took his club, the Monfer being within his cave, closed up the mouth thereof with a wonderful great stone, and fo hid himfelf for fear: but Hercules went to the top of the Mountain, and there digging down the fame, until he opened the cave, then leaped in suddenly and flew the Monfer, and recovered his Oxen.

But the truth is, this forged Cacus was a wicked servant of Eoander, which used great robbe ry in the Mountains, and by reafon of his evil life was called Cacus; for Cacus in Greek signifieth evil. He was faiid to breath forth fire, because he burned up their corn growing in the fields, and at laft was betrayed of his own Sifter; for which caufe he was defied, and the Vir gins of Jfuba made Sacrifice to her: and therefore it fhall be idle to profecute this fable any farther (as Albertus Magnus doth) it being like the fable of Æidea, which the Poets fign was a Bird of the earth, and being invincible burned up all Phogyila, and at laft was flain by Minerus.
The History of Four-footed Beasts.

Of the Camel.

Although there be divers sorts of Camels, according to their several Countries; yet is the name not much varied, but taken in the general sense of the denomination of every particular. The Hebrews call it Camel; the Chaldeans, Camel; and the Arabians. French, Camello; the Arabic, Camel Alongeb: Algazar. The Persians, Salbut; the Saracens, Smyhur: the Turks call a company of Camels traveling together, Caravanis. The Italians and Spaniards call a Camel, Camella; the French, Chameau; the Germans, Kamelheit; all derived of the Latin, Camelus; and the Greek, Camelos. The Hibernians, call it Velebid: and the reason of the name Camellus, in Greek, is, because his burden or load is laid upon him kneeling or lying, derived (as it may seem) from Campellus merus, the bending of his knees, and flownees of pace: wherefore a man of a flow pace, was among the Egyptians deciphered by a Camel. For that cause, there is Town in Syria called Ganganela; that is, the house of a Camel, erected by Punicus, the Son of Hyphasis, allowing a certain provision of food therein for wretched and tyred Camels. The Epithets given to this beaft are not many among Authors, for he is tarmed by them rough, deformed, and thrilling; as Inventional.

Dormus paterent immania membrum Camelis.

And Persus in his fifth Satyre faith;

Telle recens primus piper e fliente Camelis.

Of the name.

Artemidorus.

The Etymology of the word, Horde.

The kinds of Camels.

Of the generation of Bactrian Camels.

The parts and colour of their Camels.

The several parts of a Camel.

Silvaticus.

Aristotle, Pliny.

The food of Camels.

There are of them divers kinds, according to the Countries wherein they breed: as in India, in Arabia; and in Bactria: All those which are in India, are said by Diodorus to be bred in the Mountains of the Bactrians, and have two bunches on their back, and one other on their breast, whereupon they lean; they have sometimes a Bore for their Sire, which feedeth with the flock of the Camels; for as Mules and Horses will couple together in copulation, so also will Bores and Camels: and that a Camel is so indangered sometimes, the roughness of his hair like a Bore or Swans, and the strength of his body, are sufficient evidences; and these are worthy called Bactrians, because they were first of all conceived among them, having two bunches on their backs, whereas the Arabian hath but one. The colour of this Camel is for the most part brown, or pale; yet there are herds of white ones in India.

Pseudont Labi brought two strange things into Egypt, a black Camel; and a man which was the one half white, and the other half black in equal proportion; the which caused the Egyptians to wonder and marvel at the shape and proportion of the Camel, and so laugh at the man: whereupon it grew to a Proverb, a Camel among the Egyptians, for a matter fearful at the first, and ridiculous at the last.

The head and neck of this beaft is different in proportion from all others; yet the Ethiopian have a beaft called Nabim, which in his neck remembeth a Horse, and in his head a Camel. They have not teeth on both sides, although they want horns, (I mean both the Arabian and Bactrian Camel:) whereof Aristotle diputeth the reason, in the third Book of the parts of creatures, and fourteenth chapter. Their necks are long and nimble, whereby the whole body is much relieved; and in their neck toward the other part of the throat, there is a place called Anbar, wherein a Camel doth by spear or sword, most easily receive his mortal or deadly wound.

His belly is variable, now great, now small like an Oxes; his gall is not distinguisht within him like other beafts, but only carried in great veins, and therefore some have thought he had none, and assigned that as a cause of his long life. Between his thighs he hath two udders, which have four sphears depending from them like a Cow. His genital parts are confected, and standeth upon a finew, inomuch as thereof may a string be made, for the bending of the strongest bow. The tail is like the tail of an Ass, hanging down to their knees, they have knees in every leg, having in their former leg three bones, and in the hinder four. They have an ancle like an Oxes, and very small buttocks, for the proportion of their great body: their foot is cloven, but so, that in the under part it hath but two fisures or clefts, opening the breadth of a finger, and in the upper part four fisures or clefts, opening a little, and having a little thing growing in them, likeas is in the foot of a Goose: The foot it self is flihy like a Bear, and therefore they are flihy with leather when they travail, lest the hanging of their feet caufe them to tire. Aristotles affirmeth, that he had seen Camels with whole feet, like a Horses, but their feet (although flihy) are fo tyed together with little lungs that they never wear; and their manner of going or pace is like a Lyons, going walking as the left foot never out-goeth the right, whereas all other beafts change the setting forward of their feet, and lean upon their left feet while they remove their right; but these after step after step, so as the left foot behide, followeth the right before, and the hinder foot followeth the left before. Thofe Camels which are conceived by Bores are the strongest, and fall not fo quickly into the myre as other, although his load be twice fo heavy.

Camels love grafs (called Sekennath) and especally Barley, which they eat up wonderful greedily until all be in their stomoch, and then will they chew thereupon all the night long: so that the greatnes of their belly to lodge their meat in before concoction is better then the benefit.
benefit of their upper teeth, because he can ruminate and chew it so often as he please. There is a certain herb, which hath a seed like a myrtle seed, that is poison to worms, and this seed is food for Camel's wherever they grow. It is therefore called Camel-thorn, and Afterpur in the Arab. tongue. When the Province of Aden, both Sheep, Oxen, Horses, and Camels, eat a kind of fish, and their beax being dry and flate, then new and fresh, by reason the immoderate heat in that region burns up all pateure and frutes: neither is there any beast which is so easily fed as a Camel. They will not drink of clear or clean water, but of muddy and limy, and therefore they ramp in it with their feet. They will endure thirst for three or four days together; but when they come to drink, they suck it in huge measure, recompensing their former thirst, and providing against which is to come. Of all kinds of Bedouins are least troubled with thirst.

They are, by one side to another, otherwise than any other beasts do: this beast is very hot by nature, and therefore wanton and full of sport and wrath; braying most fearfully when they are angered. They engender like Elephants and Tygers; that is, the female lying or sitting on the ground, which the male imbraceth like other males, and continue in copulation a whole day together. When they are to engender, they go unto the secretest places they can finde; herein excelling in modesty the ancients Maslages, who were not ashamed to lie with their wives in the open field, and publick view of one another, where as brute beasts by instinct of nature, make the procreation of their kind to be a most secret shameful honest action.

At the time therefore of their lust, they are most unruly and fierce, yielding to none, not to their own keepers: the best time of their copulation is in September, in Arabis, they begin to ingender in the third year of their age; and so within ten or eleven moneths after she is delivered of young, being never above one at a time, for twain come not in her great belly; so the goeth a year before the conceive again, although her young be separated or weaned, before which time they do not commonly. Unto their former modesty for their copulation, we may add another divine instinct and most true observation about the same, for the male will never cover his mother, or his sister; whereof it is sincerely reported, that when a certain Camel-keeper (defirous to try this secret) having the male, sent a female to a camel, which he also kept, he so covered the female-mother-Camel in all parts of her body, except her secrets, that nothing could be seen of her, and so brought her faithful son to cover her; which according to his present rage he performed. As soon as he had done it, his manner and owner pulled away the mask, or disguifie from the dam, in the presence of the son; whereby he instantly perceived his keepers fraud, in making him unnaturally to have copulation with his own mother. In revenge whereof he ran upon him, and taking him in his mouth, lift him up into the air, presently letting him fall with noise and cry underneath his murdering and man-quelling feet; where, with unappallable wrath and blood-dripping livor, he pressed and trode to pieces the incest marriage-causer, twixt him and his dearest mother; and yet not herewith satisfied, like some reasonable creature, depriv'd of heavenly grace, and carried with deadly revenge against such uncleanesses, being persuaded that the guilt of such an offence could never receive sufficient expiation by the death of the first defiler, except the beguiled party suffered also some smart of penalty; adjudging himself guilt, and no longer worthy to live by nature's benefit, which had so violated the womb that first conceived him, and therefore running to and from as it were a Hang-man for himself, at last found a steepy rock, from whence he leaped down to end his life; and although he could not prevent his offence, yet he thought it best to cleanse away his mothers adulterie with the sacrifice of that blood which was first conceived in that wombe which he had defiled.

These Camels are kept in herds, and are as swift as Horses, according to the measure of their strength, not only because of their nimblenes, but also because their frides and reach doth gather in more ground: for which cause they are used by the Indians for race, when they go to fetch the gold which is said to be kept by the Formice Lyons, which are not much bigger then Foxes: yet many times do these Lyons overtake the Camels in course, and tear the riders in pieces. They have been also used for battel or war (by the Arabians in the Persia war;) but their fear is so great of an Horse, that (as Xenophon faith in the institution of Cyrus) when the Armies came to joyst, neither the Camel would approach to the Horse, or the Horse to the Camel; whereupon it is accounted a base and unprofitable thing for a man to nourish Camels for fight; yet the Persians for the fight of Cyrus in Lydia, ever nourished Camels and Horses together, to take away their fear one from another. Therefore they are used for carriage, which they will perform with great facility, being taught by their keepers to kneel and lye down to take up their burthens, which by reason of their height a man cannot lay on them; always provided, that he will never go beyond his ordinary lodging and bating place, or endure more then his usual burthen; and it hath been seen that one of these Idarian Camels, hath carried above ten Minars of corn, and above that a bed with five men therein. They will travel in a day above forty ordinary miles; for as Pliny faith, that there was from Tiona to Gaza, sixty and two lodging places for Camels, which was in length one thousand five hundred thirty and seven miles.

They are also used for the plow in Numidia, and for this cause are yoked sometimes with Horses, but Hecalegalius, like as the Tartarians, yoked them together not only for private spectacles and plays; but also for drawing of Wagons and Chariots. When they desire to have them free and strong for any labour in the field, or war, they use to geld both the male and the female, the manner
Of the Camel.

whereof is in this fort. The male by taking away his liones, and the female by fearing her privy parts within the bum and lips thereof with a hot iron, which being so taken away, they can never more join in coition; and these are more patient in labour and thrift, and likewise better endure the extremity of fond in those parts, having this skill, that if the mili of rain or fond, do never so much obscure the way from the rider, yet doth the remember the fame without all fagering.

The urine of this beaft is excellent for the use of Fullers; of the hair called Biber, or Camels Wool, is cloth made for Apparel, (called Cemelote, or Camels hair,) and the hair of the German Camels is so soft, that it may be therein compared with the softest Milejion Wool, whereof their Princes and Priests make their garments; and it is very probable, that the garments of Saint John Baptist was of this kinde. In the City of Calacis, (under the great Cam) and in the province of Brgaria, is cloth made of the hair of Camels, and white wool (called Zambilotto) shewing most gloriously; but the beft of this kinde are in the land of Gog and Magog.

It is forbidden in holy Scripture to eat a Camel, for although it chew the cud, yet is not the hoof altogether cloven; and besides, the flesh thereof is hard of digestion, and the juycy thereof very nourishing, heating the body above measure; yet many times have men of bafe condition and mindes eaten thereof, as in Arabia, and in the Kingdom of Penzen; and Athenes affirmeth, that the King of Persia was wont to have a whole Camel rodded for his own table at his royal feastings; and Heliogabalus likewise caufed to be prepared for himself the heels of Camels, and the spurs of Cocks and Hens, pulled of alive, and whole Offtriches and Camels; saying, (though faffly) that God comanded the Jewes to eat them. Camels milk is wholeome for meat, because it is thinnet of all other, and because thereof it breedeth fewer obstructions; and is good for softning of the belly. For the natural disposition of this beaft: it is partly already related, whereby the singular use thereof may be collected: yet there are certain proverbs and stories thereof farther expressinge their qualities.

It is difdainfull, and a discontented creature: whereupon it is laigned of the Poets, that they befooth Jupiter to give them Horns, with which Petition he was so offended, that he took from them their ears, and therefore in that, those are reproved, which are to farre in love with other things they want, that they desire to lofe the things they have. Likewise the wantonnes thereof appereath by the proverbs of a dancing Camel, when one taketh upon him more then his skill will serve to discharge: yet hath not this beaft beene free from ignorance; for when the Emperor Jupiter had found the Treaty of Artaces the Armenians, he caufed him to ride through the Citie upon a Camel, to be shamed for his offence, although in former times it was a kinde of triumph and honor to be carried upon a Camel, led through a City.

In the lake of Aflatites, wherein all things sink that come in it, many Camels and Bulls swim through without danger. The Arabians sacrifice a Camel to the unknown God, because Camels go into foreign Countries, and likewise sacrifice their Virgins before they are married, because of the chaitlity of this beaft, and the Sagaretes with great observance, keep the combat of Camels, in the honour of Minerva.

These Beasfts are hated of Horfes and Lyons, for when Xerxes travelled over the river Gobocrt, through Pontia and Cretfonia; in the night time the Lyons defended into the camp, and touched no creaturestherein, except the Camels, whom they destroyed for the most part.

A Camel will live in the foil wherein he is bred, fifty or an hundred years; and if he be translated into any other Nation, he falleth into madness or fcas, or the gow, and then they live not above thirty years. There is a kinde of graffe that groweth by the high ways in the Country of Babylon, that killett Camels when they taste thereof.

There are also medicinal properties in Camels, for by reaſon he is of a hot and dry temperament: if a man infected with poyfon, be put into the warm belly of a Camel newly slain, it lootheneth the power of the poyfon, and giveth strength to the natural parts of the body. The fat taken out of the bunch and perfumed, cureth the Hemmorhoides; and the blood of a Camel fried, is precious against the bloody flux, or any other loofenes of the belly; the brain dried and drunk with Vinegar, helpeith the Falling-evil; the gall drunk with Hony, helpeith the Quinzy: and if it be laid to the eye-brows and forehead, fod in three cups of the best Hony, it cureth the dimnes of the eyes, and avoideith the flect that groweth in them: and if the hairs of a Camels tail be wound together like a string, and ryed to the left arm, (Pliny affirmeth) they will deliver one from a quartan Ague.

The milk of Camels newly delivered of young, helpeith obstructions, and all shortenes of breath; and is also good against the Dropifie and hardness of the milk. Alfo when one hath drunk poyfon, this is a good Antidote, and amendeth the temper of the body. The fime of Camels dried to duff with Oyl, will cripe and curl the hair, and stay bleeding at the nofe; and the same hot, is good against the Gout.

The urine is most profitable for running fores, there have been which have preferred it five years together; and ufed against hardness of the belly; washing also therewith fore heads: and it helpeith one to the fene of smellings, if it be held to the nofe: likewise against the Dropifie, the Spleen, and the Ring-worm.
A Camel is called the Greecians, Dromos, by reason of the swiftness of his race; and also an Arabian Camel, which hath all things common with the former Babitan Camel, except, first, in the shape, for the hath but one bunch on the back, and many Nations, as the Italians, French, Germans, and Spaniards, use the word Dromedary, only without addition; the Greecians never name it without the addition of a Camel. Therefore this is a kind of Camel of lefs stature, but much swifter; for which cause it is derived from running. It cheweth the cud like a Sheep, and the other Camel: the French King had sent him from the great Turk two of these, white coloured; and I my self have seen one of them, being fifteen cubits high, wanting some nine inches, and about six cubits in length, having the upper lip cloven in the middle like a Hare, and two broad nails in his feet, which in the upper part appeared cloven, but underneath they were whole and fitting without division, and round in proportion like a pewter dish: It hath also a hard bunch on its back, whereon it leaned, sitting down and rising; and also upon either knee one: these are said to live fifty years; but the Babitans an hundred: they were used for drawing of Chariots, and great prefents for Princes; and when they go to war, every one carryeth two Archers, which fit upon him, back to back, shooting forth their darts, one against the front of the enemy, and the other against the protectors and followers.

They are able to go an hundred miles in a day, bearing a burden of fifteen hundred weight; yet sometimes two thousand, bending upon his knee to take up his load and rider, which received; he riseth up again with great patience, being obedient and ruleable; yet kicking when he is angry, which is very seldom: and therefore Terence did significantly describe a good servant by the name of Dromos, derived from Dromos, a runner: And for the conclusion of the History of these two sorts of Camels, I will here add the relation and memorable observations of Johannes Leo Afer, in his ninth Book of the description of Africk, in his own words following.

"A Camel is a gentle and pleasant tame beast, whereof there are plenty in Africa, especially in the Deserts of Lybia, Numidia, and Barbary: by which African affine their own wealth; for when they contend who is the richest Prince or Noble-man among them, they say he was worth, or hath so many thousand Camels, and not so many thousand Crowns. And he that hath Camels, liveth among them like a Gentleman; because he can at his pleasure travel into the Deserts, and fetch Merchandise from far, which the greatest Prince or Noble-man cannot without them, by reason of the drought of those places. And of these kinds of creatures, there are to be seen in all parts of the world, both in Asia, Africk, and Europe; for the Tartarians, Cossians, Dalmatians, and Turkomans use them in Asia; and the Turkish Princes convey all their carriages upon them in Europe: Likewise do all the Arabians in Africa. But it must be observed, that the African Camels are much more worth than the Asian, for they can endure travel for forty and fifty days together, with very little or no meat, except sometimes in the evening, when they are unloaded, they go to the hedges, thorns, and other green places, and there eat any small thing they meet withal, as leaves and such like, wherewith they remain satisfied, whereas the Asian can perform no such journey, except they be kept far and well fed: and it hath been proved by good experience, that one of the Africans hath travelled fifty days without meat, first wearing away the fat in their bunchy back, then about their skin and breast, and lastly, about their ribs, never giving over till it was not able to bear one hundred weight.

But the Africans must always carry provender to sustain their beasts, never travelling but they have one Camel laden with meat, for the other laden with carriage, and so induce a double charge: and when the Africans go to any Marts or Fairs being to return empty and unloaded, they take no thought for their Camels food. Of these Camels there be three kinds, one of them called Egenian, (being broad and tall) and therefore apt to bear packs and burthens, but not before they be four year old, and after their ordinary load is one thousand weight of Italian meafure, being taught by the jerking of a small rod, on the breast or knees, to lie down for their burthens, and afterward to rise up again. And the Africans do use to geld their Camels, referring but one male for the covering of ten females.

Another kind of their Camels they call Becbebas, such as have two bunches, one for burthen, and the other for a man to ride upon: and the third sort are called Ragunabils, which are of lower stature and leaner bodies than the residue, unfit for burden and therefore are used for the faddle, by all the Noblemen of Numidia, Arabia, and Lybia: being able to run an hundred miles a day, and performing long journeys with little or no provender: for the King of Tombatu being to send to Dara, or Selimieha, (which is distant from his Court nine hundred miles) his messenger performeth it upon one of these Ragunabils, within the space of eight days.

In the beginning of the Spring they are most frolick and unruly, because then they incline to generation: at which time, they rage and fall upon many that come unto them, and especially those from whom they have received blows, remembering at that time, and requiring their former injuries, upon such as wronged them, whom if they can take in their mouth, they lift them up into
The History of Four-footed Beasts.

They can easily endure thirst, five, nine, or fifteen days in necessity; neither will their keeper give them drink at three days thirst, for fear to harm them. As these Camels are pleasant and profitable, so also they seem to participate with the nature of man: for they being wearied, no spur or stroke can make them hasten to their journey end; therefore in Ethiopia and Barbary, they sing certain songs behind the Beast, which to revive their decayed spirits, that they set forward so fast, forgetting their tyred limbs, to their journeys end, that their keepers can hardly follow.

I have also seen in Acair, a Camel, that could dance at the sound of a Timbrel, being thereunto taught when he was young by this means; first, he was brought into a room like a stable, the pavement whereof was made hot by a fire underneath it, and without doors flood a Musician playing on his Timbrel; the Camel, not for love of the music, but for the heat under his feet, lifted up first one foot, and then another, as they do which dance, and so the heat increasing, he likewise did lift up faster, whereunto he was accustomed for the space of ten months; at every time one hour and a half, during which time the Timbrel still sounded; so that at last, use framed Nature to such a strain, that hearing a Timbrel, he instantly remembered the fire that was wont to punish his feet, and so prentently would leap to and fro like a dancer in publick spectacle, to the admiration of all beholders.

Of the two sorts of Camelopardals.

Of the name. This Beast is called in Hebrew, Zamar; Deut. 14. which the Arabians translate Saraphab; and sometime Gryphus, Gryaffe, and Zarafa; the Chaldeans, Doba, and Ana; the Persians, Seraphab; and the Septuagint Grecians, Camelopardis, which word is also retained by the Latins, whereunto Albertus
Of the Allocamelus.

Albertus addeth Orasius, and Orasius. The Ethiopians call it Nkin, from whence cometh Anabula, and Pausanias translateth it an Indian Sheep, so indeed Anabula may be Englished a Wilde Sheep.

There were ten of these seen at Rome, in the days of Gordianus the Emperor, and before that time, Cesar being Dictator, and such an one was sent by the Sultan of Babylon to the Emperor Frederick, so that it is without question that there is such a beast, which is engendred of a Camel and a female Libard, or Panther, as Horace faith;

Diversum confusum genus Panthera Camelto.

But the same which the Latins call Panthera the Gracians call Pardalis. The head thereof is like to a Camel, the neck to a Horse, the body to a Harts; and his cloven hoof is the same with a Camel: the colour of this Beast is for the most part red and white, mixed together, therefore very beauti-

full to behold, by reason of the variable and interchangeable skin, being full of spots: but yet they are not alway of one colour. He hath two little horns growing on his head of the colour of iron, his eyes rowing and frowning, his mouth but small like a Harts, his tongue is near three foot long, and with that he will so speedily gather in his meat, that the eyes of a man will fail to behold his haft, and his neck diversely coloured, is fifteen foot long, which he holdeth up higher then a Camel, and far above the proportion of his other parts. His forefeet are much longer then his hinder and therefore his back declineth towards his buttocks, which are very like an Affe. The pace of this beast differeth from all other in the world, for he doth not move his right and left foot one after another, but both together, and so likewise the other, whereby his whole body is removed at every flep or train.

These beasts are plentiful in Ethiopia, India, and the Georgian region, which was once called Media. Likewise in the Province of Aesia in India, it is called Surnaja, and in Aesia, Surnoppa, and the latter picture before fet down, was truly taken by Melchior Lavige at Constantinople, in the year of salvation 1559. by the light of one of thefe, lent to the great Turke for a present: which picture and description, was afterward lent into Germany, and was imprinted at Norimberge. It is a solitary beast, and keepeth altogether in woods, if it be not taken when it is young: they are very tractable and eafe to be handled, so that a child may lead them with a small line or cord about their head, and when any come to see them, they willingly and of their own accord turn themselves round as it were of purpose to shew their soft hairs, and beautiful colour, being as it were proud to ravish the eyes of the beholders.

The skin is of great price and estimation among Merchants and Princes, and it is said that under neath his belly, the coloured spors are wrought in fashion of a fifters net, and the whole body so admirably intercoloured with variety, that it is in vain for the wit or art of man, once to go about to endeavour the emulous imitation thereof. The tail of the beast is like the tail of an Affe, and I cannot judge that it is either swift for pace or strong for labour, and therefore well tearmed a wilde Sheep, because the fleth hereof is good for meat, and was allowed to the Jews by God himself for a clean beast.

Of the Allocamelus.

Juli. Capital-Pliny.

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Sceinor affirmeth, that in the land of the Giants, there is a beast which hath the head, neck, and ears of a Mule, but the body of a Camel; wherefore it is probable, that it is conceived by a Camel and a Mule: the picture whereof is before set down, as it was taken from the fight of the beast, and imprinted with a description at Middelborough in the year 1558. which was never before seen in Germany, nor yet spoken of by Finny.

They saith that it was an Indian Sheep, out of the region of Petra, and so was brought to Antwerp, six thousand miles distant from that nation. It was about two yards high, and five foot in length, the neck was as white as any Swan: the colour of his other parts was yellowish, and his feet like an Ostrige-Camels: and although it were a male, yet it did render his urine backward: it was afterward given to the Emperor by Thessalia Ius, a Citizen of the neather Celen. It was a most gentle and meek beast like the Camelopard, not past four year old: wherefore I thought good to express it in this place, because of the fimilitude it hath with the manners of the former beast, although it want horns and differ in some other members.

Of another Beast called CAMPE.

Iderus Siculus maketh relation, that when Diumius with his Army travelled through the desert and dry places, annoyed with divers wilde beastes, he came to Zambira a City of Libya, where he flew a beast bred in those parts called Campe, which had before that time destroyed many men, which action did persuade him among the inhabitants a never dying fame, and that therefore there might remain a continual remembrance to all posterity of that fact, he raised up there a monument of the plain beast to stand for evermore.

Of the CAT.

A Cat is a familiar and well known beast, called of the Hebrews, Catul, and Schenar, and Schenard; of the Grecians, Athetos, and Kater, and Kats; of the Saracen, Kats; the Italians, Gatta; and Gato; the Spaniards, Gata, and Gatos; the French, Chat; the Germans, Katze; the Thyrans, Kueks, and Furoz, (which is nigh for a Cat by Albertus Magnus) and I conjecture, to be either the Persian or the Arabic word. The Latin call it Felis, and sometimes Marilgear, and Muske, because it catcheth Mice, but most commonly Gatos, which is derived of Catus, signifying wary. Owed faith, that when the Giants warred with the Gods, the Gods put upon them the shapes of Beasts, and the fitter of Apollo lay for a spy in the likenes of a Cat, for a Cat is a watchful and wary beast seldom overtaken, and most attendent to her sport and prey: according to that observation of Mutilan:

Non sumps er marialis, ille invadere perniam,
Nimius, hic rimos acuot observat acuas.

For and for this cause did the Egyptians place them for hallowed beastes, and kept them in their Temples, although they allused the use of their skins for the cover of Shields, which was but an unreasonable theft, for the footmen of a Cats skin is not fit to defend or bear a blow: It is known also, that it was capital among them, to kill an Ibis, an Afpe, a Crocodile, a Dog, or a Cat; in so much as, that in the days of King Ptolemy, when a peace was lately made betwixt the Romans and the Egyptians; and the Roman Ambassadors remaining still in Egypt, it was ordained that a Roman unawarely killed a Cat, which being by the multitude of the Egyptians eluded, they presently fell upon the Ambassadors houses, to rafe down the same, except the offender might be delivered unto them to suffer death: so that neither the honour of the Roman name, nor the necessities of peace, could have restrained them from that fury, had not the King himself and his greatest Lords come in person, not so much to deliver the Roman Cat-murderer, as to safeguard him from the peoples violence. And not only the Egyptians were fools in this kind, but the Arabians also, who worshipped a Cat for a God; and when the Cat dyed, they mourned as much for her, as for the father of the family, shaving the hair from their eye-lids, and carrying the beast to the Temple, where the Priests salted it and gave it a holy funeral in Babuscum, (which was a burying place for Cats near the Altar) wherein may appear to all men, in what miserable blindness the wittie men of the world, (forsoaking, or deprived of the true knowledge of God) are more then captivated, so that their wretched estate cannot better be expressed then by the words of St. Paul, Whan they thought to be wise, they became fools.

Once Cats were all wild, but afterward they retired to houfes, wherefore there are plenty of them in all Countries: Matrual in an Epigram, celebrated a Pannonian Cat with this difficion;

I annamnus molicis nungam dedit Umbria Cattis,
Mavitul haec domina mittere denuo pudens.

The
The Spanish black Cats are of most price among the Germans, because they are nimble, and have the softest hair fit for garment.

A Cat is in all parts like a Lion, except in her sharp ears, wherefore the Poets feign, that when Venus had turned a Cat into a beautiful woman, (calling her Aetius) who forgetting her good turn, contended with the Goddeffe for beauty; in indignation whereof, she returned her to her first nature, only making her outward shape to resemble a Lion; which is not altogether, but may admonish the wifelt, that fair and foun, men and beafts, hold nothing by their owne worth and benefite, but by the virtue of their Creator: Wherefore if at any time they rife againft their maker, let them think to lofe their honour and dignity in their belte parts, and to return to basenes and inglorious contempt; out of which they were first taken, and howsoever their outward shape and condition please them, yet at the belte are but beasts that perish, for the Lions suffer hunger.

Cats are of divers colours, but for the most part grifled, like to congealed ice, which cometh from the condition of her next: her head is like unto the head of a Lion, except in her sharp ears: her fifths is soft and smooth: her eyes glitter above measure, especially when a man cometh to see them on the fuddain, and, in the night they can hardly be endured, for their flaming aspect. Wherefore Democritus describing the Persian Smeragde faith that it is not transparent, but filleth the eye with pleafant brightnes, such as is in the eyes of Panthers and Cats, for they call forth beams in the shadow and darknes, but in fumme, they have no fuch clearnes, and thereof Alexander Aphrodis given this reason, both for the fight of Cats and Bats, that they have by nature a molt sharp spirt of feeling.

Albertus comparath their eye-light to Carbuncles in dark places, because in the night they can see perfectly to kill Rats and Mice: the root of the herb Valerian (commonly called Pho) is very like to the eye of a Cat, and whereassoever it groweth, if Cats come thereunto, they infantly dig it up, for the love thereof; as I my self have seen in mine own Garden, and not once only, but often, even then when as I had caused it to be hedged or compass'd round about with thornes, for it smelleth marvellous like to a Cat.

The Egyptians have observed in the eyes of a Cat, the increase of the Moon-light, for with the Moon they skin more fully at the full, and more dimly in the change and wane, and the male Cat doth also vary his eyes with the Sun; for when the Sun arifeth, the apple of his eye is long: toward noon it is round, and at the evening it cannot be feen at all, but the whole eye sheweth alike.

The tongue of a Cat is very attractive and forcible like a file, attenuating by licking the flesh of a man, for which caufe, when he is come near to the bloud, fo that her owne fpittle be mingled therewith, she falleth mad. Her teeth are like a faw, and if the long hairs growing about her mouth (which some call Grammi) be cut away, the loileth her courage. Her nails sheathed like the
the nails of a Lion, striking with her forefeet, both Dogs and other things, as a man doth with his hand.

This beast is wonderful nimble, setting upon her prey like a Lion, by leaping, and therefore the hunteh both Rats, all kind of Mice, and Birds, eating not only them, but also fish, wherewith all she be well pleased. Having taken a Moufe, the first playeth with it, and then devoureth it, but her watchful eye is most strange, to see with what pace and soft steps, the taketh birds and fies; and her nature is to hide her own dung or excrement, for she knoweth that the favour and preference thereof, will drive away her sport, the little Moufe being able by that foil, to smell the preface of her mortal foe.

To keep Cats from hunting of Hens, they use to tie a little wide Rew under their wings, and so likewise from Dove-coates, if they set it in the windows, they dare not approach unto it for some secret in nature. Some have said that Cats will fight with Serpents, and Toads, and kill them, and perceiving that she is hurt by them; the prefently drinketh water and is cured: but I cannot confent unto this opinion; it being true of the Weasell shall be afterward declared.  

Potizium, 
fheweth by experience that Cats and Serpents love one another, for there was (faith he) in a certain Monaftery, a Cat nourifhed of the Mons, and suddenly the molt parts of the Mons which used to play with the Cat fell fick: whereof the Phyfiffians could no caufe, but some fecret poifon, and all of them were affured that they never caufed any: at the lat a poor labouring man came unto them, affuring that he saw the Abbey-cat playing with a Serpent, which the Phyfiffians underhanding, prefently confented that the Serpent had emptied some of her poifon upon the Cat, which brought the fame to the Mons, and they by fworlding and handling the Cat, were infected therewith; and whereas there remained one difficulty, namely, how it came to paffe, the Cat her felf was not poisoned thereby, it was resolved, that for as much as the Serpents poifon came from him but in play and sport, and not in malice and wrath, that therefore the venom thereof being loft in play, neither harmed the Cat at all, nor much endangered the Mons; and the very like is obferved of Mice that will play with Serpents.

Cats will also hunt Apes, and follow them to the woods, for in Egypt certain Cats set upon an Ape, who prefently took him himself to his heels, and climbed into a tree, after whom the Cats followed with the fame celerity & agility: (for they can falfen their claws to the barke and run up very fpeedily,) the Ape fceeing himfelf overmatched with number of his advancers, leaped from branch to branch, and at lat took hold of the top of a bough, whereupon he did hang fo ingeniously, that the Cats durft not approach unto him for fear of falling, and fo departed.

The nature of this beaffis, being the place of her breeding, neither will the farry in any ftrange place, although carried far, being never willing to forfake the house, for the love of any man, and molt contrary to the nature of a Dog, who will traveile abroad with his matter; and although their matters forfake their houses, yet will not these beaffs bear them company, and being carried forth in clofe baskets or facks, they will yet return again or lofe themselves. A Cat is much delighted to play with her image in a glaffe, and if at any time the behold it in water, prefently the leapeth down into the water which naturally the doth abhor, but if the be not quickly pulled forth and dryed the dyeth thereof, because the is impatient of all wet. Thofe which will keep their Cats within doors, and from hunting birds abroad, must cut off their ears, for they cannot endure to have drops of rain difhild into them, and therefore keep themselves in harbour. Nothing is more contrary to the nature of a Cat, then is wet and water, and for this caufe came the proverb that they love not to wet their feet. It is a neat and cleanly creature, oftentimes licking her own body to keep it neat and fair, having naturally a flexible back for this purpofe, and washing her face with her forefeet: but fome obferve, that if the put her feet beyond the crown of her head, that it is a prefage of rain, and if the back of a Cat be thin the beaff is of no courage or valour. They love fire and warm places, whereby it often falleth out that they often burn their Coats. They defire to lie foft, and in the time of their luft (commonly called cat-wralling) they are wide and fierce, especially the males, who at that time (except they be gelded) will not keep the house: at which time they have a peculiar direful voice. The manner of their copulation is this, the female lyeth down, and the fenfibly inflates, and their females are above meafeure defirous of procreation, for which caufe they provoke the male, and if he yeeld not to their luft, they beat and claw him, but it is only for love of young, and not for luft: the male is moft libidinous, and therefore feeing the female will never more engender with him during the time her young ones fuck, he killeth and eateth them if he meet with them, (to provoke the female to copulation with him again, for when she is deprived of her young, the seeketh out the male of her own accord,) for which the female moft warily keepeth them from his fight. During the time of copulation, the female continually cryeth, whereof the Writers give a double caufe; one, because he is pinched with the talons or claws of the male in the time of his luftful rage; and the other, because his seed is fo fiery hot, that it almost burneth the females place of conception. When they have lithered, or as we commonly say kitted, they rage against Dogs, and will suffer none to come near their young ones. The beft to keep are such as are littered in March; they go with young fifty days, and the females live not above five or seven years, the males live longer, especially if they be geld or lubb'd; the reafon of their short life is their ravelling of meat which corrupteth within them.

They
Of the Cat.

They cannot abide the favour of ointments, but fall mad thereby; they are sometimes infected with the falling exu-11, but are cured with Geleum. It is needless to spend any tune about their loving nature to man, how she flattered by rubbing, her skin against ones Lees, how she the whirihed with her voice, having as many turns as turns, for the hath one voice to beg and to complain, another to tell her delight and pleasure, another among her own kind by flattering, by billing, by spitting, as much as some have thought that they have a peculiar intelligible language among themselves. Therefore how the beggih, playeth, lepeth, looketh, catcheth, tofeth with her foot, rich up to flings held over her head, sometimes creeping, sometimes lying on the face, playing with one foot, sometime on the belly, sniffing now with mouth, and anon with foot, apprehending greedily anything, save the hand of a man, with diuers such critical actions, it is needless to stand upon, so much as Catius was wont to say, that being free from his Studies and more urgent with affairs, he was not ashamed to play and sport himself with his Cat, and by vertue thereof he well be called an idle man pastime. As this beast hath been familiarly nourished of many, so have they payed dear for these love, being required with the loffe of their health, and sometime of their life for their friendship: and worthily, because they which love any beast in a high measure, have so much the less charity unto man.

Therefore it must be considered what harms and perils come unto men by this beast. It is most certain, that the breath and favour of Cats consume the radical humour and deltoiy the lungs, and therefore they which keepe their Cats with them in their beds have the air corrupted, and fall into severall Hecticks and Consumptions. There was a certain company of Munks much given to nourish and play with Cats, whereby they were so infected, that within a short space none of them were able either to say, read, pray, or sing, in all the Monastery; and therefore also they are dangerous in the time of Pestilence, for they are not only apt to bring home venemous infection, but to poison a man with very looking upon him; wherefore there is in some men a natural dislike and abhorring of Cats, their natures being so composed, that not only when they see them, but being near them and unfeen, and hid of purpose, they fall into passion, frettings, sweating, pulling off their hats, and trembling fearfully, as I have known many in Germany; the reason whereof, because the contamination which threatens their bodies which is peculiar to every man, worketh by the presence and offence of these creatures: and therefore they have cried out to take away the Cats.

The like may be said of the feath of Cats, which can seldom be free from poison, by reason of their daily food, eating Rats and Mice, Wrens and other birds which feed on poison, and above all the brain of a Cat is most venemous, for it being above measure dry, floppeth the animal spirits, that they cannot passe into the ventricle, by reason whereof memory faileth, and the infected person falleth into a Phrenzie. The cure whereof may be this, take of the water of sweet Marjoram with Terra femina the weight of a great mingled together, and drink it twice in a moneth, putting good store of spices into all your meat to recreate the spirits withall, let him drink pure Wine, wherein put the seed of Diosmou. But a Cat doth as much harm with her venemous teeth, therefore to cure her biting, they prescribe a good diet, sometime taking Hony, Turpentine, and Oil of Rifes met together and laid to the wound with Century: sometime they waft the wound with the urine of a man, and lay to it the brains of some other beast and pure Wine mingled both together.

The hair also of a Cat being eaten unawares, floppeth the Artery and causeth Suffixation: and I have heard that when a child hath gotten the hair of a Cat into his mouth, it hath so cloven and stuck to the place that it could not be gotten off again, and hath in that place bred either the wens or the Kunki evil. To conclude this point, it appeareth that this is a dangerous beast, and that therefore as for nececity we are constrained to nourish them for the suppreffing of small vermine: so with a wary and discreet eye we must avoid their harms, making more account of their life then of their perrons.

In Spain and Gallia Narbon, they eat Cats, but first of all take away their head and tail, and hang the prepared flesh a night or two in the open cold air, to exhale the favour and poison of it, finding the flesh thereof to be almost as sweet as a Cony. It must needs be an unclean and impure beast that liveth orly upon vermin and by ravening, for it is commonly said of a man when he needeth, that he hath eaten with Cats: likewise the familiars of Witches do most ordinarily appear in the shape of Cats, which is an argument that this beast is dangerous to soul and body. It is laid that if bread be made wherein the dung of Cats is mixed, it will drive away Rats and Mice. But we conclude the story of this beast with the medicinal observations, and tarry no longer in the breath of such a creature compounded of good and evil. It is reported that the flesh of Cats failed and sweetened hath power in it to draw wens from the body, and being warmed to cure the Hemorrhoids and pains in the reins and back, according to the Verse of Euseb.

Et lumbis lumbis praefat adeus opem.

Ayllius prescribeth a fat Cat fod for the Gout, first taking the fat, and anointing therewith the fiek part, and then wetting Wool or Tow in the same, and binding it to the offended place.

For the pain and blindnes in the eye, by reason of any skins, webs, or nails, this is an approved medicine: Take the head of a black Cat, which hath not a spot of another colour in it, and
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and burn it to powder in an earthen pot leaded or glazed within, then take this powder and through a quill blow it thrice a day into thy eye, and if in the night time any heat do thereby annoy thee, take two leaves of an Oke, wet in cold water and bind them to the eye, and so shall all pain flee away, and blindness depart although it hath oppressed thee a whole year: and this medicine is approved by many Physicians both elder and later.

The liver of a Cat dried and beat to powder is good against the stone: the dung of a female Cat with the claw of an Oul hanged about the neck of a man that hath had seven fits of a Quartain Ague, cureth the same: a nesting powder made of the gall of a black Cat; and the weight of a great three of taken and mingled with four crowns weight of Zambach, helpeth the convulsion and wryneck of the mouth: and if the gall of a Cat with the black dung of the same Cat, be burned in perfume under a woman travelling with a dead child, it will cause it presently to come forth: and Pliny faith that if a pin, or thorn, or fish bone, stick in one mouth, let him rub the outside against it with a little Cats dung, and it will easily come forth. Given to a woman suffering the flux, with a little Rozen and Oul of Roses, it stayeth the humour; and for a Web in the eye of an horse, evening and morningblow in the powder of Cats dung, and it shall be cured.

Of the Wilde CAT.

A Li Cats at the beginning were wide, and therefore some do interpret Im, Is. 34. for wide Cats: and the Germans call it Bonenweiter, that is, a tree-rider, because the huntest Birds and fowles from tree to tree. The Spaniards callet h it Gato-montes, and in some places of France it is called Chatcarrat. There are great store of them in Helvetia, especially in the Woods, and sometime near the waters, also being in colour like tame Cats but blacker, such as in England is called a Poolcat. I saw one of them, which was taken in September, and observed, that it was in length from the forehead to the top of the tail, four full spans, and a black line or strake all along the back, and likewise some black upon the legs; buttwixt the breast and the neck there was a large white spot, and the colour of her other parts was dusky, red, and yellow, especially about the buttocks, the heels of her feet were black, her tail longer then an ordinary house Cats, having two or three black circles about it, but toward the top all black.

They abound in Scandinavia, where the Linxes devour them; otherwife they are hunted with Dogs, or shot with Guns, and many times the Countrey men seeing one in a tree, doth compass it about with multitude, and when the leapeth down kill her with their Cubs, according to the verse of Nervians:

--- Felemque minacem
Arboris in truncus, longis perfigere tis.

In the province of Malabar, thefe Cats live upon trees, because they are not swift to run, but leap with such agility, that some have thought they did flie: and verily they do flie, for they have a certain skin, which when they lie in quiet, cleaveth or shrinkeith up to their bellies, but being fir’d, the same spreadeth from their forefeet to their hinder, like the wing of a Bat; by vertue whereof they flay up themselves in the air, pasling from tree to tree like a fowl; as also doth the Poniique Moule, as shall be declared afterward.

The skins of Wilde Cats are used for garments, for there is no skin warmer, as by experience appearseth in Scythia and Moscovia, where their women are clothed with the fur of Cats, but especially for buskins and sleeves with their hair turned inward, not only against cold but for medicine, against contracted sinews, or the Gowt. The fat of this beast is refered by some for heating, softening, and displaing tumours in the flesh: and whatsoever Kafis or any other faid of the houfe Cat before in the medicinal parts, that also appertaineth to this, except as in all other, fo it falleth forth herein, that the virtues of the wilde kind is more effectual then the tame.

There are some among the Elavians and Germans, which eat the flesh hereof, accounting it delicate, having firft cut of the head and tail; they cannot abide the fume of Rews, or of bitter Almonds; there is nothing memorable in the nature of this beast that I can learn, except that which is related by Aetius, that when men are bitten by Crocodils, this beast by a natural instinct hating a Crocodil, will come about the wounded perfon, otherwife fearing the presence of man.

We may hereunto add the beast which is bred in America, called Heyratt, spoken of by Thevetius: which name signifieth a beast of Hoany, and the reason is, because it defireth Hoany above meate, for it will climb the trees, and coming to the caves of Bees, it will with much dexterity take out the Hoany with their nails, that it neither hurteth the Bees, or receiveth harm by them. It is about the bignefs of a Cat, and of a Chefeft-natur colour.
Here is among the Suybians and Sarmatians a four-footed wild beast called Colur, and some Salac; the name, in Latin; of the Polomants, Subae, of the Moscovite, Sorga; of the Tartarians, Artem, and Snak; of the Turks, Acmes; being in quantity and stature between a Ram and a Hart, and duskie white coloured, but the young ones yellow: of a strong swiftness and celerity in course. Her manner is to drink by the boles in her nostrils, whereby the veineth up abundance of Water, and carryeth it in her head, so that she will live in dry pastures remote from all moisture a great season, quenching her thirst by that Calmer in her head.

They are most plentiful to be found in Tartaria, in Pomer, where are so many plains, that a man can see nothing but heaven and earth; Likewise they are found in Moscova, in Podicia, and about the River Nepr, and Burythems: they can never be taken but by wearisomeness: wherefore if men follow them with Pipes and Tumbrils, playing upon them, they so weary themselves with leaping and running to and fro, being compassed in by multitudes of men, that they fall down for weakness, and so are taken. They live in fleeks together, sometimes five hundred; and after Febr in the Spring, two hundred in a troop: having a Snout like a Hogs, they endure much hunger, but no cold.

In March they dig up with their Horses a certein root, whereof they eat, and presently their lust for generation encreaseth unto rage; so much that for satisfying thereof they continue in that act both male and female, until they lose all strength of body, lying half dead on the earth by the space of 24 hours, not being able to go or stand during which time they are often taken alive, but when they come again to themselves, they rather die then endure to be tamed.

The flesh of them is very sweet and wholesome, they conceive and bring forth for the most part twins, or two at a time; their greatest enemy is a Wolf (for in the Winter and snow they hunt and kill them.) Their horn are about four palms in length, growing upright or bending very little and very sharp, whereby they can pierce the belly of a Horse, or other beast that standeth over them; at the root they are about six inches compassed, and so growing leffe and leffe to the top, one of them weigheth about nine ounces; the blade toward the point is transparent, being held against the light or sun, because it is white and thin, but the otherpart is duskie and thicker, and therefore it is not penetrable by the eye of man. There are about 14 circles like rings compassing about the horn, one above another, but the uppermost is not perfect. This horn is of great price, being a present for any Noble man, for in Turkey they are sold for six Cossian thillings; yet I know no other use of them, but either to make hafts for knives, or else horns for Spectacles.

This beast liveth altogether in the plains except in snow, and then he runneth into the Woods; where he may be taken more easily, and killed with the stoke of a Staffe. When the Tartarians know in what plains they lie, their King cometh and with a multitude of men compasseth them and wearyeth them by muckin as aforesaid. All this was related to me by one that had killed of them above two hundred with his own hand (faith that right honorable and most learned Gentleman Johannes Bonaventura, Baron of Balziar a Palamian.)
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Of the cont.

Among the divers kinds of Hares, Conies have the third rank, being therefore called in Latin, Lepusculi, (as it were little Hares) and some time Levertide, as it were a Leveret or young Hare, as well as Cuniculus: whereof the reason is, that it maketh holes in the earth, for Cuniculus was a Latin word for a hole or cave in the earth, before it was taken for a Cony: Scaphian in the singular, and Sechbanim, in the plural, Levit. 14. and Psa. 104. is taken in Hebrew for a Cony or Conies, and not for a Hedge-hog, as the Septuagint translate, or for a Porcupine, although they live also in Caves and secret places of the earth; and therefore Choerogallem, or Choerogallem, or Choerogallem, cannot signify a Cony: as the Septuagint translate Scaphan, but a Hedge-hog, as the word derived from the face of a Hog doth most evidently declare, which can by no means agree with a Cony. In the 14. of Deut. the word Scaphan is joyned with a Hare, because it is a beaif neer of kind unto it, for it is evident, that both of them chew the cud, howsoever a Cony hath not a simple cloven foot into two parts. A Cony also is called Aadoo, because of the roughnefs of his feet; The Cœule calleth it Tcaph; the Arabians, Vebar; the Persians, Bezanarab; and the Arabians, following some times the Greeks, call it Altrach, that is, Hares. The Greeks call it vulgarly Skele and Daifop, Cœnichus, Scemex, and Lapis, Georycho a Hare digging, living in the earth. The Italians call it Conigli the French, Conin; the Spaniards, Conio; the Germans, Kinnigle, or Kœne; and sometime Kœnein; the Itarians, Kralik or Krilik.

There are few Countries wherein Conies do not breed, but the most plenty of all is in England, they are also in an Island where are but few men near unto Denmark, or as it is now called Furtoli in Italy. Likewise in all Spain, especially in those parts near unto Lombardy, whereupon Appius in Varro did write to one of his acquaintance which had tarried long in Spain, that he thought he was there following or hunting of Conies, because as their multitude is great, so it would ask long time to take them. Among the Balceans are also great store of Conies, and once they so abounded there, that the people were constrained to entreat at the hands of Augustus, a military company of Romans to destroy them; and when Camillus was besieging the City Vetii in Italy, he learned of the Conies, which had undermined a whole City in Spain, likewise to take and overthrow that City by their example of undermining, whereupon Martial said:

Monspiravit tacitus hollibus ille vis

Vegetius saith, that the proverb Cuniculus agere took his beginning, when one by secret underminings, and not by open violence overthreweth a Town or Nation. There are also, faith Albertus,
Of the Cony.

*Albimus,* great store of wilde Conies in *Bohemia,* so like a Hare as one beast may be like another, fave only they seem stronger, and are shorter and leffer, which thing cau'd *Baptista Eura* to write thus:

*Crediteram leporem, sic forma simillima fallit,*

_Amto superflavit, dense vel aure pares._

Pet. Marlyse likewise affirme in his *Ocean Decades,* that in *Curiana* a region of the new found world, are Conies for colour, quantity, and hair like a Hares, which the inhabitants call *Vitis,* and there are two little Ilands called *Cunicularias,* which feem to be denominated of Conies, standing between *Corfica* and *Sardinia.* For their feveral parts, they are moft like unto a Hare, except in their head and tail which is shorter, and their colour which is alway brighter, and leeffe brown and fandy: or else sometimes Conies are white, black, grifelfl, tauny, bleftvwh, yellow spotted, ath-coloured, and fuch like. And *Abfurdifalit,* that in fome places, they are alfo green, and their skins are of great ufe through the world, especially in all the North and Eft for garments, facings, and linings. The gray and yellowvwh are the work, but the white and black are more precious, especially of the *Engli{h}l* if the black be afperfed with fome white or filver hairs: and in their ufe the Bucks are moft durable, yet heavier and hardier. The belly is moft loft, gentle, and eafe, and therefore more fcty, although of leffe continuum. Their feth is very white and fweet, especially of the young ones, being about fourteen or twenty dayes old, and fome have devifed a cruel delicate meat, which is to cut the young ones out of the dams belly, and to defte and eat them, but I truft there is no man among Christians fo inhumanely gluttonous, as once to defce or approve the sweetnefs of fo foul a dish: but the tame ones are not fo good, for in *Span* they will not eat of a tame Cony, because every creature doth partake in that wherein he liveth, and therefore tame Conies which are kept in a clofe and uffeft air, by reafon of their own excrements, cannot taft so well, or be fo wholefome as thofe which run wilde in the mountains and fields, free from all infection of evil air.

They love above all places the rocks, and make Dens in the earth, and whereas it is faid, *Phl. 104.* that the ftony rocks are for the Cony, it is not to be underftood as if the feet of the Cony could pierce into the rock, as into the earth, and that the diggett her hole therein as in loofer ground; but that finding among the rocks holes already framed to her hand, or elfe fome light earth mingleth therewith, the more willingly entrench thereinto, as being more free from rain and floods then in lower and loftier ground; for this caufe they love alfo the hills and lower grounds and woods where are no rocks, as in *England* which is not a rocky Country, but wherefoever he is forced to live, there the diggett her holes, wherein for the day time she abideth; but morning and evening commeth out from thence and fitteth at the mouth thereof.

In their copulation they engender like Elephants, Tygres, and Linxes, that is, the male leapeth on the back of the female, their privie parts being fo framed to meet one another behind, becaufe the females do render their urine backward: their secrets and the feed of the male are very fmal. They begin to breed in fome Countries, being but fix moneths old, but in *England* at a year old, and fo continue bearing by moneth at the leffe feven times in one yeare: if they fettle in *March* or *April,* then in the Winter they do not engender at all; and therefore the Authors fay of thefe and Hares, that they abound in procreation, by reafon whereof, a little foare will serve to encrease a great bowth. Their young being littered are blind and fee not till they be nine dayes old, and their dam hath no fucht for them, till the hath been fix or seven hours with the male, at the leffe feven hours with the female, thefle fuffet them greatly defirous to go to the Buck, and if the be not permitted prefently, the is fo far displeafed that the fhe will not be fo inclined again for 14 days after.

I have been alfo credibly informed by one that kept tame Conies, that he had *Doe* which littered three at a time, and within fourteen daies after, they littered four more. Their ordinary number in one litter is five, and fometimes nine, but never above: and I have feen that when a Doe hath had nine in her belly, two or three of them have perifhed and been opprefled in the womb by fuffocation. The males will kill the young ones, if they come at them like as the Bore cats, and therefore the female doth alfo avoid it carefully, covering the neft or litter with gravell or earth, that fo they may not be defcovered: there are alfo fome of their females very unnatural, not cauring for their young ones, but fuffet them to perifh, both becaufe they never provide a warm litter or neft for them, as alfo becaufe they forfake them being littered, or elfe devour them. For the remedy of this evil, he that loveth to keep them for his profit, mult take them before they be delivered, and pull off the hair or fleth underneath their belly, and fo put it upon their neft, that when the young one cometh forth, it may not perifh for cold, and fo the dam will be taught by experience of pain to do the like felf: *Thus far Thomas Gypfin an English Psysician.* For Conies you may give them Vine-leaves, Fruits, Herbs, Graffe, Bran, Oatmeal, Mallows, the parings of their meat Apples; likewife Cabbages, Apples themelves, and Letteuce; and I myfelf gave to a Conye blew Wolfe-bane, which the did prefently eat without hurt, but Gallinglye and blind Nettle they will not eat. In the Winter they will eat Hay, Oats and Chaffe, being given to them thrice a day: when they eat Greenes they mult not drink at all, for if they do, it is hazard but they will incur the Dropifie: and at other times they mult for the fame caufe drink but little, and that little must be alway freth. It is alfo dangerous to handle their young ones, in the abifence of the dam,
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Albertus.
The medicines in a Cony.

for her jealoufie will eaisily perceive it, which caufeth her so to disdain them, that either the biteth, forfaketh, or killeth them. Foxes will of their own accord hunt both Hares and Conies, to kill and eat them.

Touching their medicinall properties, it is to be observed that the brain of Conies hath been eaten for a good Antidote againit poison: fo alfo the Hart which is hard to digeited, hath the fame operation that is in treacle. There is alfo an approved medicine for the Squinacy or Quinfie: take a live Cony, and burn her in an earthen pot to powder, then take a spoonful of that powder in a draught of wine, and drink the molt part thereof, and rub your throat with the refidue, and it shall cure with fped and ease, as M arcelius faith. The fat is good againit the stopping of the bladder and difficulaty or urine being anointed at a fire upon the hairy place of the secrecs, as Alex. Benedictus affirms. Other things I omit concerning this beaf, because as it is vulgar, the benefits thereof are commonly known.

Of the Indian little P I G - C O N T.

I Received the picture of this beaf from a certain Noble-man my loving friend in Paisi, whose parts it is not needfull to decrire, feeing the image it self is perfpicuous and eafe to be obserued. The quantity of this beaf doth not exceed the quantity of a vulgar Cony, but rather the body is shorter, yet fuller, as alfo I obserued by thofe two, which that noble and learned Phyfician Job. M unzing erus fent me. It hath two little low ears, round and almoft pil'd without hair, having alfo short legs, five claws upon one foot behind, and fix before; teeth like a mouse, but no tail, and the colour va- riable. I have feen of them all white, and all yellow, and alfo different from both thofe: their voice is much like the voice of a Pig, and they eat all kinds of Herbs, Fruits, Oats, and Bread; and fome give them water to drink, but I have nouriffed fome divers moneths together, and never given them any water, but yet I gave them moift food, as Herbs, Apples, Rapes, and fuch like, or else they would incur the Dropifie.

Their flefh is sweet for meat, of a yellowifh colour, like the Larde of Swine, and therefore not fo white as is our vulgar Cony: they do not dig like other Conies, and for the farther description of their nature, I will express it in the words of M unzing erus aforefaid, for thus he writeth.

"One of the males is sufficient in procreation for seven or nine of the females, and by that means "they are made more fruitful, but if you put them one male to one female, then will the venerous "falacity of the male procure abortion. It is affirmed that they go threefcore daies with young "before they litter, and I saw of late one of them bear eight at one time in her womb, but "three of them were lifted. They bring forth in the winter, and their whelpes are not blinde as "are the Conies. They are no way fo harmful as other are, either to bite or dig, but more tractable "in hand, howbeit untamable. If two males be put to one female, they fight fiercely, but they will not "hurt
Of the Buck and Doe.

"hurt the Rabbits. As the male is most libidinous, so doth he follow the female with a little murring noise, bewraying his appetite for generation, without wrath, and these are also called "Spanish Cones, by Peter Martyr, whose nature except in their abundant superfoetation cometh nearer to Hogs then Cones.

Of the Fallow Deer, commonly called a BUCK and a DOE.

There are some beasts (saith Pllmy) which nature hath framed, to have horns grow out of their head like fingers out of the hand, and for that cause they are called Platicyrtos: such is this vulgar Fallow Deer, being therefore called Cervus Palmatus, that is a palmed Hart, by reason of the similarity the horn hath with the hand and fingers. The Germans call this beast Dam, and Damlin, and Damhitz. The Italians Dais and Dasis; the French, Dain, and Daim. The Spaniards, Garn, and Gaza. Certain, the Cretans vulgarly at this day Agrimi, and Platigus; and Ariophite, Pros; the Latins, Damna, and Damulis, because, de mano, that is, it quickly flyeth from the hand of man having no other defence but her heels; and the female scepta, and the Polonians, Lani. It is a common beast in most Countries, being as corpulent as a Hart, but in quantity resembleth more a Roe, except in colour.

The males have horns which they lose yearly, but the females none at all: their colour divers, but most commonly branded, or fannie on the back, like the furrow of a new plowed field, having a black colour and o-strake down all along the back: a tail almost as long as a Calves, their bellies and sides spotted with white, which spots they lose in their old age, and the females do especially vary in colour, being
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What Hippelaphus is.

Aristotle.

A bearet in the blood.

By being sometimes all white, and therefore like unto Goats, except in their hair which is shorter. The horns of this beast are carried about every where where to be seen, and therefore this is also likely to be the same beast which Aristotle calleth Hippelaphus as some would have it; yet I rather think that Hippelaphus was like to that rare seen horse which Francis the first of that name King of France, had presented unto him for a gift; which was engendred of a Horse and a Hart, and therefore can have no other name then Hippelaphus, signifying a Horse-hart.

In the bloud of theke kind of Deer are not thininges or Fibres, wherefore it doth not congeal as other doth, and this is assign'd to be one cause of their fearfull nature; they are also said to have no gall: in their horns they differ not much from a Harts (except in quantity) and for their other parts they much resemble a Roe-buck: their flesh is good for nourishment, but their bloud doth increase above measure melancholy, which caused Hiera to write thus of it, after his discours of the Roe.

Damula aduia magis si matris ab ubere rapa est, Huic prior in nostro forte erit orbis locum; For the preparation or dressing of a Buck, we shall lay more when we come to the description of a Hart. Albertus translacteth the word Alzagel a Fallow Deer, and fayeth that the fleth thereof is very hurtful, being cold and dry, and bringeth the Hemorrhoids if it be not so fedonned with Pepper, Cinnamon, Mustard seed, and Hony, or else Garlick, which caused Juvenal to cry out upon the excess of rich men for their fealls and delicate fare, being compared with the Ancients which lived upon fruits, in these words following, as they are left in his eleventh Satyre.

Olum ex quavis arbore mons fiebat, At nunc divitiis canandi nulla coluphis: Nil homines, nil dama supit, putare iustitir Unguentum atque rore, Of the medicines.

Of the second kind of Deer the ROE-BUCK.

There is so great difference among writers about the name of this beast, that it is a difficult and hard matter to set down certainly, in the prime and original tongues, the true and perfect denomination thereof, yet I will endeavour to go as near the mark as can be, by laying together all the probabilities that I find in other, or observe by my self. To begin then with the Hebrew as the fountain of all the refidue, they call it Zeb:i, and the feminine hereof Zebah, and therefore in Deut. 14. it is permitted to the Jewes to eat; and the plural of the Maleculine is Zebaim, and of the feminine Zebaubh. The Chaldean translation calleth it Thabia, which in the Acts of the Apostles cap. 9. is called Tabitha, and is interpreted Dorcas, a Roe: and sure it is probable that the Hebrews do call a Roe, because of the outward beauty thereof, being full of spots upon a ground or skin of another colour, shewing with great delight pleasant to the beholder, which caused Martial to write this Diliehion;

Delicium parvo donatis dorcad a natu, Jactatis soleb bance mittere turbus vofigs. The representation both of male & female.

The Persians call this beast Abu. The Arabians, Thabius, which cometh neer to the Chalde word; the Germans Reeb or Reh, and the male Reh-becke, and the female Reh-gist; the Hyrians, Senna or Sana; the French, Chevoux, and Chevroujauge. The Spaniards, Zoito, or Cabrenzello-manso; the Italians, Caprio, and Capiro for the male, and Capriola, and Capriola for the female.

The Greeks, Dorcas, as the Septuagint do every where translate, which Strabo termeth corruptly, Zorcos, alias Doros, Nexus, Nebras, and vulgarly as at this day Zarkosi; and Doralis, Doradonis, for a little Roe. The Latins do also use the word Dorcas in common with the Greeks, and besides Capreus and Capreulus for a little Goat, for I do not think that any learned man can find any difference betwixt
Of the Roe-Buck.

These beasts are most plentiful in Africa, beyond the Sea of Carthage; but they are of another kind, where Aristotle denied to be in Africa: there are also in Egypt, and in Germany, and in the Helvetian Alps. Likewise in Catacapa beyond Nileus, in Arabia, in Spain, and in Lybia: and it is to be observed, that the Lybian Roes do never go over the Syrian Mountains. *Hellenus* doth deliver these things of the Lybian Roes, which for the colour and parts of their body may seem to belong to all. They (faith he) are of admirable velocity or swiftness; but yet inferior to the Lybian Harces, their belly is parted with black stripes and drops, and the other parts of their body are of a red yellowish colour, they have long feet, but longer ears, their eyes black, and their horns are an ornament to their heads.

Their swiftness doth not only appear upon the earth, but also upon the waters; for with their feet they cut the waters when they swim as with Oares; and therefore they love the lakes and strong streams, breaking the floods to come by fresh pasturage, as Sweet-rushes and Bul-rushes. Their horns grow only upon the males, and are set with fix or seven branches, but the females have none, and therefore also they differ in horn from the Fallow-deer: so as they cannot be called Platyceles, for their horns are not pointed like a hand, and although they be branchy, yet are they shorter; they differ not much from the common Deer, but in their horn: and whereas the horns of other beasts are hollow toward the root, whereunto entereth a certain bony substance; the horns of these (as also of the vulgar Buck and the Elks) are solid, without any such emptiness: only they are full of pores. It hath also been believed, that a Roe doth not change her horns, because they are never found; whereas in truth, they fall off yearly as doth a Hart, but they hide them, to the intent they should not be found.

It hath likewise been thought, a Roe was called in Greek, Dorcus; because of the quickness of her sight; and that she can see as perfectly in the night as in the day; and not only for her self, but the learned Physicists have observed a certain vicious humor about her bowels, which being taken forth, and anointed upon a mans eyes, which are dark, heavy, and near blinde, it hath the same effect to quicken his eye-sight. It is also said of them, that they never wink, no not when they sleep; *Pliny*. 

*Avicen.*
The Countries breeding Roes, Marcellis.
*Albertus.*
*Pliny.*
*Sturtius.*
*Pliny.*
*Paufanias.*
*Bellonius.*
*Edlebach.*

The reason of the Latin name.
The History of Four-footed Beasts.

Cardium. fly, for which confess, their blood is prescrib'd for them that are purblind. The tail of this beast is shorter and leffer then is the fallow-Deers, infomuch as it is doubtful whether it be a tail or not.

The place of their abode, They keep for the most part in the Mountains among the rocks, being very swift, and when they are pursued by Dogs, (Martial faith) they hang upon the rocks by their horns to deceive the Dogs, after a manner strange to fall and kill themselves, and yet have no harm, whether the Dogs dare not approach, as appeareth in this Epigram:

Pendentem summa capream de rupe videbis,
Cejaram ferres, decipit illa Canes:

Yet this doth better agree with the wilde Goat then with the Roe, as shall be manifested in due time. 

Their concord with other beasts, Alcanum faith, that the Cynocephali, men with Dogs faces, live upon the flesh of Roes and Bugles, in the Wilderness of Egypt: and also it is usual to conclude them in Parks; for they will agree very naturally with Hares and Swine: wherefore in the Lordship which Varro bought of Pilil, it was seen how at the sound of a Trumpet, both Roes and Boars, would come to their usual places for meat: and although they be naturally very wilde, yet will they quickly grow tame and familiar to the hand of man; for Blanquus did nourish many at Rome. Being wilde, they are hunted with Dogs, shot with Guns, taken in nets; but this falleth out seldom, because they live most among the woods. They are most easily taken in the Woods. When they are chafed, they defire to run against the wind, because the coldness of the air refresheth them in their course; and therefore they which hunt them place their Dogs with the winde; for sometimes against the hunters minde, do what they can to the contrary, she taketh her course that way: but Harts when they hear the barkings of Dogs, run with the wind, that the favour of their feet may pass away with them. They are often taken by the counterfeitfeating of their voyce, which the hunter doth by taking a leaf and hipping upon it.

They are very good meat (as Bibliothetae affirmeth) and that the Indians dress at their feates whole Lynes and Roes for their gheats to eat, and the Sophists in their Banquet, which is described by Athenæus, had Roes therein: and therefore Florus affirmeth it before the fallow-Deer, alladging the agreement that is betwixt it and the body of man, being dresse daccording to Art.

Simon Sethi.
Aestuella.

Hic optarit feret nobis feminae calce
Uda levis, multicae mosisque coquenda foci.

And therefore also affirmeth, that it excelleth all wilde beasts whatsoever, being not only fit for nourishment, but for the sick; as for them that have the Colic, or the Falling Evil, or the Tympany: and therefore they be bleft at a year old, or under. Likewise their broth with Pepper, Lovage, seed of Rue, Parley, Honey, Mulford, and Oyl; and for sauce to the meat, they take Pepper, Rue, Honey melted, and an Onyon: sometime also they see the hanches or hips, and make Patties of the fides and ribs. It is a beaft full of fear, and therefore the flesh thereof although it be very dry, yet will it engender some melancholy; of the fear Martial faith thus:

Tam differt aquila columba non est,
Ac dorso rigido fugit leo.

As the Dove from the Eagle, and the Roe from the Lyon, which afterward grew into a Proverb. It hath also some Epithets among Authors, which do confirm their disposition full of fear: as flying, weak, wanton, and such like; yet will they fight one with another so fiercely, that sometime they kill each other.

They fear also the Woolls, whereof came the proverbe, that first of all the Roes will be joyned to the Woolls, to express an incredible fear. They have also been used for Sacrifice to Diana, for the Sabritae women in Patras, did lay upon her great Altar whole Harts, Roes, Roes, and other beasts alive: and the Capita did eat the males; but religiously worshipp'd the females, not daring to eat them, because they believed that Isis loved them dearly.

Of these beasts the Island Caepress beyond Surrentum in Campania, where Tiberius had a famous Caite, and was ennobled by his presence; but since the decay thereof, it is now celebrated for the multitude of quails that are found therein.

The remedies or medicines coming from this beast are these: first, the flesh of them eaten, is good against all pains in the small guts, for it dryeth and layeth the belly. Flamy affirmeth, that the teeth of a Dragon tyed to the finews of a Hart in a Roe skin, and wore about one's neck, maketh a man to be gracious to his Superiors, and them to be favourable and pitiful to him in all his supplications; and if the white flesh in the breast of the Hanta, & seven hairs thereof with the genital of a Hart, be tyed in a piece of Roe skin, and hanged about a Woman's neck, it maketh that her womb shall suffer no aborrtions; but these things are trivial, and not to be believed but at pleasure. I know that the tail of a Dragon tyed to the Nerves of a Hart in a Roe skin, the fuet of a Roe with Goose-grease, the marrow of a Hart, and an Onyon, with Rozen, and running Lime, do wonderfully help the falling Evil. (If it be made into a plaster.)

Sextus faith, that if one give the brain of a Roe drawn or pressed through a ring to an Infant, it will
Of the Deer-Goat.

will preserve him for ever from the Falling sickness and apparitions. The liver of a Roe fed in salt water, and the eyes of a purblind man held over the same or reek thereof, are cured of their blindnes: and some fetch it in a little cup, and anoint the eyes with the scum or froth coming from it. The same liver being burned to powder, and the dust cast on a man bleeding, stayeth the flux or flux. The gall of this beast mixed with Wine, and the Meal of Lupines the weight of a groat, and Honey, take away the spots of the face: and the same gall mixed with water, helpeth a Sun-burned face, and freckles: The same with Hony Attick, taketh away the dimnes from the eyes, and with the juice of a gourd anointed upon the eye-brows, causeth that where the hair hath been pulled off, that it never shall grow again: and this gall is alway the better for the age thereof, and as Hippocrates did prescribe, it must be kept in a silver pipe or box.

For the tingling of the ears, take with this gall the Oyl of Roses, with the juice of an Onion beaten together, and unstilled warm into the ears for a present remedy: so also, with the Oyl of Roses only, it helpeth the pain in the teeth, and with the Hony Attick, all swellings or pains in the jaws or chaps, putting thereto Myrrhe, Saffron, and Pepper. The same gall with a little Hogs-bread, and the powder of burnt Allum with Anise-seed, made into a Suppository, procureth loosening, if the party have not the Hemerhoids.

Also the gall taken with Hony, and the juice of Eglantine, cureth the exulceration of the virile member by anointing it. The Spleen being drunk, helpeth windiness, and the milt is commended against the Colick and biting of Serpents.

Against the jaundice they take the dung of a Roe dried and sifted, and drink it in Wine; the same also to drunk cureth the Ague: and because the Roe-buck doth wonderfully love his female, there be some that affirm, that if a woman eat the bladder of a Roe, it will likewise make her husband to love her exceedingly.

Of the first kind of Trachelaphus which may be called a Deer-Goat.
Here is another kind of like a Deer (although conceived of a Buck-Goat and a female Hart) that I cannot but express the figure and brief narration thereof (as is in the foregoing page.) It is like a Deer (except the beard and bristles growing about the shoulders) and Pliny affirmeth, that they are found about the river Phasis, in Arabia and Arachote, which is a City of India so called of Arabia, a river issuing from Canopus which the Greeks call Tragelaphus, and the Germans, Ein Brandbirze; and some think this beast to be mentioned by the name of Age, in Deut. 14. This doublet is the same beast which Aristotle calleth Hippelaphus, because he attributed the self same things to it that Pliny assigneth to this, both for the beard, the bristles, and deep hair about the shoulders, which hangeth down like the mane of a Horse.

The similitude both in proportion and quantity holdeth with a Hart in the feet which are cloven, and that the female thereof doth want horns. The horns of the male are like the horns of a Roe. Therefore howsoever some have imagined that there is no such beast to be found in the world, they are rather to be pitied then confuted, for it is not to be doubted, that neither the Ancients, nor other, ever have seen all the divers and marvellous shapes of Beasts, which are to be found in many remote and far distant places of the world, especially in Arabia and India, where are many Deferts; and therefore the reason why they affirm this, is, because they never saw any such, and so it is to be understood: for the rare pictures of these beasts called in ancient time Canabra, whereupon children were carried in Pageants and fhews, gave them occasion to think, that these were but mens devises, and that God never ordained such creatures. Georgius Fabritius which sent me this picture, both among other things write unto me very probably, that this kinde is only distinguished from other in form, name, and strength, and not in kinde: and this being more strange and left known among men, was called by the Greeks, Tragelaphus; being greater then the vulgar Deer, deeper haired, and blacker in colour, and this (faith he) is taken in the Ridings or Forrests of Mifena, bordering upon Ebomina, and the common sort of hunters hold opinion, that by reason it loveth to lie where Coals are made, and in their dust, feeding upon such grass as grows as and in those places, therefore the Germans call it Brandbirze, and so the Foxes which resemble them in colour, are called Brandysobze.

It is for certain that these are greater and stronger then Harts, their upper part of the back being black, and the noather near the belly not white (as in a Hart) but rather blackish; but about his genitals very black. I have seen the horns to have seven spires or branches, growing out of one of them, being palmed at the top. These are like to those which are called Achaines in Greek, by reason of their pain and sorrow: and Kummerer in German, because they live in continual sorrow for their young ones, while they are not able to run out of their dens, belike fearing by some influence of nature, left their tender and weak age, should betray them to the Hunters, before they be able to run away.

The Figure of another TRAGELAPHUS, or DEER-GOAT, exprest by BELLONIUS.

The description of the several parts.

Here is another Tragelaphus (faith he) whereof I finde no name among the French: it wanteth beard, and the hair thereof resembleth an Iber-Goat, (whose description followeth afterward among Goats:) the horns hereof are like a Goats, but more crooked and bending, compassing behind, as a Rams do, which he never lofeth. His face, nose, and ears, are like a Sheeps, the skin of his eads being very thick and hanging down. His legs are white like a Sheeps; his tail white; his hairs are so long about his neck and flomach, that you would think it werebearded. His hair on the shoulders and breast black, and it hath two great spots on its flankes on either side: the nostrils are
are black, the beak or face white; so also is the belly beneath, but the description hereof seemeth rather to agree with a Nygarg, or Mufson, of which I shall speak afterward.

I do rather approve the relation of another of this kind, which was sent unto me by that most learned English Physician: Mr. Cog, which as he writeth unto me, was brought in the year 1561: out of the Country of Mauritania, which was cloven-footed, and liveth for the most part in the Mountain parts of that Country, being given to a fancy between a fallow-Deer and a Hart, the body more like a Hart, and the side branded and hanging down: a shorter and thick neck, the colour in the Winter black and red, set one with another; the beard like a Goat, but more divided and turned backward; his hair very long, even to his knees, a mane full of bristles, stretched out in length through his whole neck, but especially about the top of his shoulder-blades, where it standeth like bunchedes, being in colour darker then in other parts of the body; and the hinder legs are covered with longer and harder hairs down to the pattern. (as I think) for no other cause but to defend them from harm in his leaping: and the hoof of this beast was more strange (for being, as was said before) the outward hoof in his fore-legs is longer and greater then the inward, and contrary in the hinder: and the inward clove thereof is longer and greater, and the outward smaller and shorter; so as on either side you would think one of them was the hoof of a Goat, and the other of a Hart, both of them hollow and without sockets; whereof I can give no other reason, then the pleasure of nature, which hath so provided, that whereas this beall liveth among the rocks, and sharp places of the Mountains, his foot-steps are by his hollow hooeums more firm and stable, because by that means, the itones and sharp-pointed rocks entree into them to stay them up from hiding: but it is more strange in the females hoofs, for they have upon the top and upper face of them three or four pleasent impressions, (as it were of carved or embroidered flowers, if a man mark them earily) which I think are given unto them only for ornament and delight.

Either iex looee every year their hoofs; and Harts do their horns, that nature may shew their resemblance in their feet to a Hart, as he doth in their head to a Goat. His ear is short like a Goats, but his eye, genitale, itones, and tail, like a Hart, though somewhat shorter. The horns like a Rams, crooked and distingued in the middle, by a black line all their length, which is two Romae feet and one finger, and in compass at the root, one foot, one palm and a half, standing one from another, where they differ most not above one foot, three palms, one finger and a half. The rugged circles going about them, toward the top are bunche, and toward the bottom or root they are low, with beaten notches or impressions.

They are not at the top ditant one point from another, above one foot and a palm. The length of their face, from the crown to the tip of their nose, one foot and three fingers: the breadth in the hee-head, where it is broadest, two palms and one finger.

The height of this beast not above three foot and a half, except where his mane standeth, and the whole length hereof from the crown of the head to the tail is four feet and a half and two fingers.

It hath only teeth beneath on the neither chap, and those in number not above six, neither did I observe any defect in them. It cheweth the cud like other cloven-footed beaull. The nostrils are black from whom the upper lip is divided by a long perpendicular line. It is a gentle, pleasant & wanton beast; in the disposition rather resembling a Goat then a Hart, desiring the steepell and flipperey fields whereon it leapeth, and from whence (it is reported) that it doth call down it felt head long upon the horns naturally, that by them it may the violence of his fall or leap, and then flyeth his body upon the fore-knees.

It will run a pace, but it is most excellent in leaping, for by leaping it ascended the most highest Mountains and Rocks. The females are greater: then the males, but not in horn or hair, it cical Grai, Oats, Chesfi, Hay, and Bread, they bring forth twins every time: and this we call in England a Barbary Deer. Thus fur Doctor Cog.

Of the HART and HINDE.

The male of this beall is called in Hebrew, Aid, Deur. 14. and the Arabians do also retain that word in their translations; the Persians call him Gueunen; the Septuagint, Elphos; the Greeks in this day Lapite Pediakte; and Saint Jerom for the Latines, Cerusus; the Chaldees, Attu; the Italians, Cerue; the Spaniards, Cerro; the French, Cerf; the Germans, Hiriz, or Hirs, and Hebrews; the Flemings, Hert; the Polishians, Golien; the Ilyrians, Jelii, elfi. The female or Hind Likewise term'd in Hebrew, Asit; and sometime Ali, and Aitike; the Latines and Italian, Cerus; the Spaniards, Cerue; the Germans, Hinde, and Hind, and the Germans more specially, Hin, and Webrecht; the French, Biche; and the Palomans, Lamiti. The young Fawns or Calfs of this beall they call in Latines, Formali; the Greeks, Nerebas; the Hebrews, Ofare; the German, Hindecal.

Also it is not to be forgotten, that they have divers other names, to dillinguish their years and Countries, as for example: when they begin to have horns, which appear in the second year of their age like boddins without branches, which are in the Lattin called Subale, they are also called Subulons; for the similitude they have with Boddins, and the Germans call such an one Spitzbusch, which in English is called a Spitter, and the Icbains, Carbii; but the French have no proper name for this beall that I can learn, until he be a three yearling, and then they call him (in Gallo) which in Latines are called Subalons, and Farcari.
And indeed I was once of this opinion, that these Subulones were only two-yearing Harts, until I consulted with a very true of Segufium, who did assure me from the mouths of men trained up in hunting wilde Beasts from their youth; that there are a kinde of Subulones, which they call also Brocards, with straight and unforked horns except one branch, in the Mountain of Jura near the lake Lemans, and that these also do live among other Harts; for there was seen near a Monastery, called the Roman Monastery, by certain Hunters, in the year 1553, a vulgar Hart with branched horns, and his female; and likewise with a Subulan, or Brocard, which when in pursuit he was constrained to leap from rock to rock, to get to the water, he brake his leg and so was taken. These Brocards are as great in quantity as other vulgar Harts, but their bodies are leaner, and they swifter in course. They have but one branch growing out of the flem of their horn, which is not bigger than a man's finger; and for this cause in the rutting time, when they join with their females, they easily overcome the vulgar Hart, with his branched and forked horns. The Hunters call this Brocard the shield-bearer to the refidue; for by him they are delivered being hunted; for whereas it is the nature of the vulgar Hart, to get into ditches, and hide himself in hollow places when he heareth the Hounds, this Beast never coveteth any secret place to cover himself, but runneth still in the sight of Dogs, who leave the other that hide themselves, because they keep this on foot; and so when the Hunters are paffed by the lurking Harts, they return back again, being safe both from Nets and Dogs, while the poor Brocard is chased unto death. These being old, are also known by their teeth and horns, for they never change them; but it is questionable, whether they have any Hindes or females, although my Author informeth me, that he hearth there be also Hindes with horns like these, being not above one finger long; which if it be true, it is not improbable that these are the females of that kinde: whereunto I yield more easily, because the vulgar Hindes will not admit copulation with the Brocard, except they be constrained, and as it were ravished against their will, from whence it cometh that they are so rare and seldom bred: their flesh is much sweeter than the vulgar Harts.

I have therefore here expressed the figure of the head of this Beast with his horns, which is also called Anonyma, or a Burgundian Brocard, whose horns are at the longest about eighteen inches long, and at the shortest about nine inches, whereof that part which cleaveth to the head is bunchy and indented; the longest as they grow in length,
Of the Hart and Hinde.

length, do more and more stand out one from another, turning up at the top like a bow, but the letter do not stand out so far, and bend very little at the point; and whereas in the vulgar Harts the root of the horn is in a round circle, as it were fastened upon the skull of the Beast, in this the bony roots lie within the skins much deeper, as may be easily differed by comparing both together.

The reason why I call this Burgundian Hart, or Subluna Anamanta, is, because it not only wanteth the manifold branches of vulgar Harts, but that also which is called Amynta.

There are also another sort of Harts called Abchahni, bred in Crete near Achaea, whereas in all other parts of Crete there are no Harts, whereof it is affirmed by Gaza, that there was one of them which had a bough of green Ivie growing in his horns, it was conjectured that when it was young, some spring of that Ivie was taken in a flutter of the horn, which by reason of some nourishment it found in the horn natural to that tree, being like a rocky sublunation, it grew to more perfection. These are also called Synbones, although that term be also given unto vulgar Harts, to signify their full age; yet some are of opinion, that this Abchahni Hart was but an invention or pigment made in bread; for there was in ancient time a kind of loaf called Abchahni in the likenes of a Hart.

The picture of another face and horns.

I received also of that learned man John Guy, another head out of England, which he complecteth to be the head of the palmed Buck, as it was called by Julius Capitellus, which I do not take to differ from the fallow-Deer: and yet because this semeth to be of the most excellent kind, I have thought good to express it in this place, being far different from all other horns of this kind of Beasts, and more beautiful.

Harts are bred in most Countries, but the Ancients do celebrate and prefer those of Britain before other, where they are of divers colours both white and black, as Paulus affirmeth. In Oder, a region of Asia, toward the Northern Ocean, they ride upon Harts; likewise there are Harts in Sibylis and the people call Medes, which are subject to the Kings of Tartaria, make their Harts so tame, that they also ride upon them; there are none in Greece, except in the region of the Cydenites. There are also in the Woods of Helvetia, but not so many as in time past, because Democrates do not nourish game and pleasures like unto Monarchies, and therefore they are daily killed by the vulgar sort, there being no law against it.

The Harts of Illyricum, and about Arquitana, have one of their ears slit or cut afunder by nature in their dam's belly; and therefore they never go over the Mountains into other regions: (as indeed it is the property of all Harts to love their native foils above all other places.) There is a City called Dora, in Africa, near the banks of Euphrates, where are many flocks of Harts, of whom many times some are slain with Harts, and others as they swim away to their accustomed solitudes are oppressed in the water by the weight of Oares, and so taken. They are for the most part land-coloured, and intermingled with some white spots, especially the Hinde and their Calvts, and sometimes milk-white, which happeneth unto them by some defect in their nourishment before they be calved; and for natural imbecility: so have I seen white Bears, Hares, Quails, Partridges, and Swallows.

When Apollanius and his Colleagues travelled by Parara, a City of India, they suddenly heard a noise like the sound of a pipe, and while they looked about to see what it signified, they perceived that it was the pipe of a Keeper or Forrester, which governed a whole flock of white Harts: such an one was the Hart of Servotius that noble Captain, whereby he led his Army, as they were perplexed by it, who affirmed that it was a Spanish Prophet or Wizard given to him by a certain Luipanis, whom he took in an Island of Portugal, saying moreover, that he was inspired by Diana, and that the had authority from her that Goddes to admonish him, and make the hearts of his Soldiers, cleave fast unto him; and therefore if at any time he miscarried in his proceedings, he could easily pacifie them from mutinies, in saying that his Hart set him upon that enterprize, to putting off the fault cunningly from himself to the beast for fear of detection, wherefore also these were tied in the Braucan of Graccia, and their feth being foster, is peculiarly termed by the French, Patijon; These do excell all other in the Beauty of horns, which are very high, yet grow they not to their bones or skalps, but to their skin, branching forth into many speers, being

Of the region breeding Harts.

Of the region breeding Harts.

Of their horns, and the beauty of them.
solid throughout, and as hard as stones, and fall off once every year, but if they remain abroad in the air, where some wind and rain fall upon them, so as now they are wet, and anon dry again, they grow as light as any vanishing or hollow substance, as I have proved by experience, finding some which have been lost by them in the Woods: wherefore I gather that they are of an earthly matter, concrete and hardened with a strong heat made like unto bones. It must be understood that the males only are horned, and yet have they small benefit by them, because (as I find) they grow but within their skin, and these also they lose every year in the Spring time. At one year old they have nothing but small bunches, as it were fragmentations of their horns to one growing on their head; at two years old they appear more perfectly, but straight and simple; at three years they grow forked into two spears, at four into three, and so increase every year in their branches till they be fix, and above that time you cannot certainly discern their age by their head, for their horns or spears grow not more in number, although their years make them greater in quantity; yet the old Harts do want these two branches, which the Gracians call Angymetari, and the Latins, Adimincula; because they first come forth; and I have heard there were Harts horns in an Apothecaries shop of Antwerp, which had every one fifteen branches upon one item, which if it be true, it goeth beyond all experience. Every year in the month of April, they lose their horns, and so having lost them, they hide themselves in the day time, inhabiting the shadowy places, to avoid the annoyance of flies, and feed only during that time in the night. Their new horns come forth like bunches at the first, and afterward by the increase of the Sun's heat, they grow more hard, covered with a rough skin, which the Hunters for honours fake call a Velvet head, and as that skin dryeth, they daily try the strength of their new head upon trees, which not only scrapeth off the roughness, but by the pain they feel in rubbing them, they are taught how long to forbear the company of their fellows; for at last, when in their chafing or fretting of their new horn against the tree, they can no more feel any smart or grief in them, they take it for high time to fortake their solitary dwellings, and return again to their former condition, like one that is supplied with new arms, after the loosing of his old. The tender and new horns the Germans call Marchi, and Kolben: these being taken from the Beatt, are accounted among great Noble men a delicate dish of meat. Cyprius saith to have a Hart with four horns, which was called Nicerous, and by him dedicated to Apollo, which I do therefore remember in this place, because it is seldom seen, that an Hart can bear naturally above two horns. Authors do generally affirm, that when a Hart hath lost his horns, he hideth them in some secret places, because he understandeth some secret vertues are contained in them, which mankind seeketh for, and therefore he either envyeth the good of another, or fearing lest they bewray him hereafter to Hunters, taketh the best care and providence his defcription can afford, that they never come to the handling of men. When the people asked Apollo, what they should do with Protes their Tyrant, the Oracle answered, that he should go to that place where Harts cast their horns: whereby it was gathered, that he should be flain and buried in the earth, and this caused the Proverb, Ubis est abjicitur cornu, to signify a desperate busines: yet could it not be agreed, whether the Hart make more account of his right horn or his left, and therefore Arifiole affirmeth, that the left horn is never found; and Pliny, that the right horn is never found.

This difference may be reconciled with ease, for right and left are so earneum for three causes, or three manner of ways. First, properly in all creatures, according to the beginning of motion. Secondly, for similitude or likenesses, as the right and left side of Images, statues, &c. Thirdly, improperly when the right side of one thing standeth against the left side of another, being opposite, as when two men stand face to face, and by this reason may the left horn of Arifiole, and the right horn of Pliny signify all one thing: but we know that the horns of Harts are found yearly both in Fields and Woods.

The wilde Harts of Sarmacia neere Turkie, have the greatest horns of all other, for it hath been proved, that one pair of them have weighed forty pounds Troy weight and above: and there they lose their horns in March, neither do they fall off together, but first one, and then the other, and after the first falling, it is manifest, that a certain worm getteth on them, and maketh upon them many circles and little furrows, whereby the root or baits is weakened, the horn groweth very white in that place, and yet not without some appearance of blood remaining, which cleaveth to it, from the first falling off: for, when the head of this Beatt is disarmed, there issueth blood from the skull, and in appearance the naked place is like a wound, and yet it is wonderful to mark, that within those three days the same is heald and filled with the blood which congealeth in that place first to a finew, and afterward to a hard bone, so as in August at the farthest, the horns are perfect; and therefore the Egyptians to describe a long-lived man, picture a Hart losing his horns every year, and now coming in their place. If any man be defirous to know the reasons, why only Beats of this kind lose their horns in this manner; I will not spare my pains to set down the beef, which Authors have rendered for this wonder of nature.

First, because of the matter whereof they confist, for it is dry and earthy like the substan ce of green leaves, which fall off yearly, wanting gleweing or holding moisture to continue them; and for this cause the horn of a Hart cannot be bent. Secondly, from the place they grow upon, for they are not rooted upon the skull, but only within the skin. Thirdly, from their efficient caufe, for they are hardened both with the heat of Summer and cold of Winter, by means whereof the pores to receive their nourishment liquor, are utterly shut up and stopped, so as of necessity their native heat dyeth, which
Which falleth not out in other Beasts, whose horns are for the most part hollow, and fitted for longer continuance; but these are of leffers, and the new bunches swelling up toward the Spring, do thrust off the old horns, being held either by the bougets of trees, by the weight of the hornes; or by the willing excusion of the beaith that beareth them. Domenicus and other (as Glinus and Achelans) give other reasons, but because they seem to be far fetched, I will omit them. Yet by the way, it is to be noted, that if a Hart be lidded or gelded when he is young, he never beareth horns, or very small ones; and if his horns be upon him at the time of gelding, they never waxe less, or greater, or fall off. The Hindes never bear horns at all, as some have affirmed, but I rather believe, Cæsar, Mercurianus, and Zemesius, who affirm upon their knowledge, that Hindes in some Countries have horns like the males: as likewise is observed in the Elephants of India. and for this cause the Poets expressed the Hinde which nourished Telepus with horns, and that which Hercules took with golden horns, and it is for certain, that in Ethiopia and Lybia, both sexes have horns.

The face of this beaith is shewy, his nostriles flar, and his neck very long; his ears; some greater, and some smaller; but in the Mount Elephas and Helpefns, they are fit. It is observ'd, that when a Hart pricketh up his ears, he wandeth sharp, very far and sure, and discovereth all treachery against him, but if they hang down and wag, he receiveth no danger. By their teeth is their age discerned, and they have four on both fides, wherewith they grinde their meat, and besides two other much greater in the male then in the female, and they bend downward to bite withall. All these beades have worms in their heads bred underneath their tongue in a hollow place, where the neck-beane is joyned to the head, which are not bigger then such as flies blow in rotten flie. They are ingendered together one with another, and they are in number twenty, as some would have it; but I was given to understand, that he that found a head of this Beait dissection, wherein were many more Wormes; and not contained in one place, but spread all over the head.

The breath is by the French-men called peculiarly Hampan, his blood is not like other Beasts, for it hath no Fibres or small veins in it, and therefore it is hardly concealed. His heart is very great, as it so falleth out in all fearful Beasts, having in it a bone like a Cross, as shall be afterward manifester. His belly is not of one fashion, as it falleth out in all other which chew the cud.

He hath no galls, which is one cause of the length of his life; and therefore also are his bowels so bitter, that the Dogs will not touch them, except they be very fat. The Aehlian Harts are said to be not so fat in their tails; and others say, that Harts have a gall in their ears. The Harts of Brillem and Ibarne, have their reins quadrupled or four-fold. The genital parts is all nervey, the tail small; and the Hinde hath udders betwixt her thighs with four spears like a Cow: Both male and female are wonderfull swift, and subtle, as shall be shewed in the discourse of their hunting. They are also apt and cunning to swim, although in their swimming they fee no land; yet do they wind it by their notes. They chew the cud like other Beasts. It is reported, that when a Hart is stung by a Serpent, that by eating Elaphoson; (that is, as some call it, Harts-eye; other Harts-thorn, or grace of God; others Wilde Ditan) it presently cureth the wound, and expelleth the poison: the same vertue they attribute to Paphadie, against the wound of a Durt.

Having thus entred into mention of their food, it is to be farther observed; that the males of this kinde will eat Dwawl or Night-shade, which is also called Deafs herb; and they also love above all other food wild Elde, so in the Summer time they keep for the most part in those places where these plants grow, eating the leaves only; and not the boughes or sprigs: but the Hinde will eat neither of both, except when the heat of a male in her belly, and then also by secret instinct of nature, the feedeth like a male. They will also eat Serpents, but whether for hatred to them, or for medicine they receive them, it is questionable. A Hart by his nose draweth a Serpent out of her hole, and therefore the Grammarians derived Elaphos, a Harts, from Elaminio tout opsius, that is of driving away Serpents.

I cannot afford to the opinion of Aelianus, that affirmeth the Serpents follow the breath of a Hart like some Philistre or amorous cup, for seeing that all Authors hold an holliety in nature betwixt them, it is not probable, that the Serpent loveth the breath of a Beait, unto whose whole body he is an enemy, with a perpetual antipathy. And if any reply, that the warm breath of a Hart, is acceptable to the cold Serpent, and that therefore the followeth it, as a Dog crepeeth to the fire, or as other beastes to the beams of the Sun; I will not greatly gain-fay it, seeing by that means it is most clear, that the breath doth not by any secret force, or vertue, extract, and draw her out of the den, but rather the comonquant quality of heat, which is not from the secret fire in the bones of the Harts throat, (as Pliny hath taught) but rather from her ordinary expiration, inspiration, and respiration. For it cannot be, that seeing all the parts of a Serpent are opposite to a Hart, that there should be any love to that which killeth her.

For my opinion, I think that the manner of the Harts drawing the Serpent out of her Den, is not as Aelianus and Pliny affirm, by feeding into the Cave a warm breath, which burneth and scorcheth the Beait out of her Den; but rather when the Hart hath found the Serpents nest, he draweth the air by secret and violent attraction out from the Serpent, who to save her life followeth the air out of her den, as when a Vessel is broach'd or venter'd, the Wine followeth the flying air; and as a Capping-glass draweth blood out of a seantifie place of the body; so the Serpent is drawn unwillingly to follow her destroyer, and not willingly, as Aelianus affirmeth.

Unto this opinion both Oribasius in his Commentaries upon the Aphorisms of Hippocrates, and Gruiterius his referrer do joyntly agree: but the Serpent being thus drawn forth, addeth
greater force to her poyson, whereupon the proverbial admonition did arise. 

Cave ne insidiae in serpentibus, cum estrella a lataribus abcelli corvi effugeris, ut enim poppet fracionum subeminent et venenum eun, that is, Beware thou meet not with a Serpent drawn out of her hole by the breath of a Hart, for at this time by reason of her wrath, her poyson is more vehement. After this fell fame manner, do the Sea-Rams, draw the Sea-Cats hid in the Subterraneous Rocks; for by smelting they prevent the Air that should come unto them for refrigeration.

There is many times strange conflicts betwixt the Hart and the Serpent, thus drawn forth; for the Serpent seeing her adversary, lifteth her neck above the ground, and gnatheth at the Hart with her teeth, breathing out very bitter hittings: on the contrary, the Hart derideth the vain endeavour of his weak adversary, reader to fight then powerful to harm him, sufferrith him to embrace both his neck and legs with his long and thin body, but at an inffant teareth it into an hundred pieces. But the most strange comates are betwixt the Harts and Serpents of Lybra, where the hatred is deeper; and the Serpents watch the Hart when he lyeth a sleep on the ground, and being a multitude of them, lay upon him together, softening their poysonful teeth in every part of his skin; some on his neck and breast; some on his sides and back, some on his legs, and some hang upon his privy parts, biting him with mortal rage, to overthrow their foe.

The poor Hart being thus oppressed with a multitude, and pricked with venemous pains, affayeth to run away, but all in vain, their cold earthy bodies and winding tails, both over-charged his strength, and hinder his pace: he then in a rage with his teeth, feet, and horns assailth his enemies, whole spears are already entred into his body, taring some of them in pieces, and beating other afunder: they never the less (like men) knowing that now they must dye rather than give over, and yeeld to their pitifuls enemy, cleave fast, and keep the hold of their teeth upon his body, although their other parts be mortally wounded, and nothing left but their heads, and therefore will dye together with their foe, seeing if they were afunder, no compaision can delay or mitigate their natural unappeasable hatred.

The Hart thus having eafe himself by the slaugther of some, (like an Elephant) at the fight of their blood, bethreith himself more busily in the eager battail, and therefore tredeth some under foot in the blood of their fellows, other he peruenct with rooth and horn, until he fee them all destroyed; and whereas the heads hang faft in his skin, for avoiding and pulling them forth, (by a divine natural instinct) he lyeth or runneth to the waters, where he findeth Sea-Crabs, and of them he makeeth a medicine, whereby he slacketh off the Serpents heads, cureth their wounds, and avendeth all their poyson; this valiant courage is in Harts against Serpents, whereas they are naturally afraid of Hares and Conies, and will not fight with them.

It is no lea strange that Harts will see Serpents, but the reason is, for medicine and cure; for sometimes the pors of his body are dulled and stubbed; sometimes the worms of his belly do ascend into the roof of his mouth, while he cheweth his cud, and there cleave fast: for remedy whereof the Hart thus affected, runneth about to seek for Serpents; for his devouring of a Serpents is a cure of this malady.

Pliny faith, that when the Hart is old, and perceiveth that his strength decayeth, his hair change, and his horns dry above custom, that then for the renewing of his strength, he first devoureth a Serpent, and afterward runneth to some Fountain of water and there drinketh, which caueth an alteration in the whole body; both changing the hair and horn: and the Writer of the Glofs upon the 42. Psalm, which beginneth, Like as the Hart desirseth the water sprayings, so longeth my soul after God's confirmation this opinion.

Vincentius Belloeucenius affirmeth, that Harts eat Serpents for to cure the dimness of their eye. But for the ending of this question, we muft confider that there are two kindes of Harts; one which by the drawing forth of a Serpent out of her hole, doth presently kill her by flaming her under feet, this eateh that Serpent, and runneth to springing water, after that he feelcth the poyson to make his body dull, and then by drinking doth vomit forth the poyson, and in the mean time looth both hair and horn; yet the Monks of Mofea affirm, that the Harts thus poysoned doth only cover her body in the cold water, and not drink thereof; for that were extaile unto her; but the feendeth forth certein tears, which are turned into a stone, (called Bezzah) of which shall be more said hereafter. The other kindes of Harts, when he findeth a Serpents, killeth it, and doth not eat it, and immediately after the vierry returneth to feed in the Mountains.

Harts are opposed by Wolves, for many Wolves together doth overcome a Hart; and therefore it is but a fable of Strabo, that the Wolves and Harts live tame together in the Woods of the Vneti. These kindes of Wolves are called Thor, and they especially fear these Wolves when they have loft their horns, and feedeth only in the night season, which caused Ovid to write thus;

Visa fugit nympha, velut perterrita fulvum
Cervum lupum, Crv. 06.

They are afraid also of the first and second kindes of Eagles, for with their wings they raise much dust about the Harts, and then they being halft blinde, the Eagles pull out their eyes, or else to beat their feathers about their faces, that they hinder their flight, and cause them to fall down headlong from the Mountains: they fear also the ganning of Foxes, and the Lynxes do likewise lye
of the Hart and Hinde.

When in wait to hurt them. There are above all other four-footed Beasts both ingenious and fearful, who although they have large horns, yet their defence against other four-footed Beasts is to run away. For this cause, in ancient times a fugitive Boy or Servant was called a Hart; and if he ran away twice, Cambanias, which Cambanias was a Spartan fugitive, that first ran to the enemy, and afterward from them came back again to Sparta. And Martial thus describeth Albéar, who being overcome by Philip King of Macedon ran away like a Hart.

The Epithets expressing the qualities of this Beast are many: as nimble, or agile, winged, or swift-paced, full of years, quick-footed, horned, wandering, fearful, flying, fugitive, light, wood- hunter, wise and lively. There are of them very audacious, for they will let upon men as they travel through the Woods: and it is observed, that the wrathful Hart hath few bunches on his horn, neither is it so long as others, but bunches at the root; yet all of them being pressed with Dogs or other wide Beasts, will fly unto a man for succour.

It is reported by Phìlìp Ideals Thbon, that in Lokba (a town of Saxoniy) there was a Hart, which before running time would every year leap over the walls, and run over Rocks and Mountains, and yet return home again, until the time that Duke Frederick dyed, and then the Hart went forth, but never returned again. The male when he feeth himself fat, liveth solitary and secret; because he knoweth the weight of his body will easily betray him to the Hunters, if he be hunted and purfued. The female commonly calveth seven the high ways, of purpose, to avoid noisome Beasts to her young one, who do more avoid the flight of man than herself. Also it is reported, that Mithridates had a Bull, a Horfe, and a Hart, for his guard, befide men, who were not to be bribed to fuffer Traytors to kill him, being a fleep. Moreover it is faid of Pelomenius Philadelphus, that having a Hinde-Calf given unto him, he brought it so tame and accustomed it to words, that at length it seemed to understand the Greek language: And Ælianus affirmed that many of the Harts of India, for that language.

When they are wounded with a Dart, and having gotten it out of their body by eating Dittany, they most carefully avoid the Sun-beams; left they shine upon the green wound, for then it will hardly be cured: but above all other arguments of their understanding, none is more firm and evident, than their fumming; for the Harts of Amanthus, Ælianus, and Carnef, (Mountains of Sibyl) when they are to swim over the Sea, to the fruitful green trees of Cypris, they come down to the Sea-shore, and there they tarry till they receive a fUCCESSful wind, and a calm water; which happening, the Captain or leader of them doth first of all enter into the water, and so the next folumthet, laying his head upon the Captains buttocks, and so consequently all the residue refting their head upon the precedent. In the hindmoft are the youngeft and weakest, that fo the violence of the flood being broken by the fringer which go before, the more infirm which follow may pafs with lefs difficulty. Thus fial they along without ffar or compafs to direct them, except their own fene of fmalting, using their legs for Oares, and their broad horns for fails. And if the fformol be weary, then flippeh he back to reft his head upon the hindmoft, and fo likewise the fcond and third, as they fee themselves enfeebled, until they arrive at the happy port of good paffure; where growing stronger, like Beasts fall to fighing for rule and government, but when the combate doth the victor and strongest, the residue do ever after yeild obedience to him. In like fort do the Harts of Epifus swim to Corny, and of Cifatino to the ifland of Curatilces.

They are deceived with mufick, for they do love that harmony, that they forbear their food to follow it. Also it is amazèd at any strange finge, for if a Hunter come behind a Horfe or Bullock, laying over his back his Bow and Arrows, they fland fmarling upon the new formed Bealf, until the Dart do end their lives.

At the time of their huf or rutting, they are above measure fierce, fighting naturally for the female, and sometimes wounding one another to death; and this falleth out most commonly in the latter end of August, at which time Artbana rifteth with the Sun, and then it is moft natural for the Hinde to conceive. In some places in October their huf arith, and also in May; and then whereas at other times the males live a part from the females, they go about like lafioious winters, feekng the company of their females, as it were at the Market of Venus.

The males in their raging defired huf, have a peculiar voyce, which the French call by a feigned word Revee; and the Germans, Bruni; and the Latins cauant Remover; and the Beafs so affected Obygione. When they finde the females, they are received with fear, then in short space one male will cover many females, continuing in this carnt appetite a month or two: their females do admit coquett, being herein like unto Cows, by reafon of the rigour of the males genetic: and therefore they fink down on their Bullocks when they feel the genital feed, as it hath been often observed in tame Harts, and if they can, the females run away, the males driving to hold them back within their fore-feets: but surely herein they differ from all other: it cannot well be faid that they are covered banding, lying, or going, (but rather running) for so are they filled with greatest celerity.

Arifócles.

Of the Harts.

Of the Harts.

Criminis.

Nebriadas.

Trix fideius illi Philipp. Cambaniae curae præfae legiti abit.

The Epithets of a Hart.

A kind of audacious Harts.

Schebelus.

Tiny.

The fuscour of a Hart, and their impliotion and use.

Arifócles.

Iphiderus.

The several kinds of Harts.

Of the swimming of Harts.

Tazetius.

Cebelus.

Optatus.

Of the crying of Harts.

Pliny.

Selinus.

Their love of mufick.

Their rage in rutting time.

Selinus.

Optatus.

Bedeus.

Their cupiditation.

Arifócles.
The History of Four-footed Beasts.

When one Month or six Weeks of their rutting is past, they grow tame again, laying aside all fierceness, and return to their solitary places, digging every one of them by himself a several hole or Ditch, wherein they lie, to allaw the strong favour of their hurt, for they stink like Goats, and their face beginneth to wax blacker then at other times; and in those places they live, until some flowers distill from the clouds; after which, they return to their pasture again, and live in flocks together as before.

The female being thus filled, never keepeth company with the male again until her burthen be delivered, which is eight months; for lo long doth the bear her young: before her Calving, the purgeth her self by eating Selena or Stir of the Mountain; and whereas the never purgeth until that time, then the emptieeth her self of pitiforous and flegmatic humour.

Then go they to the places near the high ways, and there they call forth their Calf, (for the caufes aforefaid) being more afraid of wide Beasts then Men, whom she can avoid by flying: which when they have feen, hem they and eat the Selena aforefaid, and the skin which cometh forth of her owne wombe covering the young one, finding in it some notable medicine, which the Græci caull Chorton, and not the herb Artem. and this she doth before the eye done to give her young one suck, (as Pliny affirmed.)

They bring forth one, or very seldom two, which lobby in a safeable fit for them of their own making, either in some rock, or other bulky inaccessible place; covering them, and if they be stubborn and wide, beating them with their feet untill they lie close and contented. oftentimes the leadeth forth her young, teaching it to run and leap over busses, stones, and small shrubs against the time of danger; and so continueth all the Summer time, while their own strength is most abundant: but in the Winter time, they leave and forfake them, because all Harts are feeble in the Winter season.

They live very long, as by experience hath been often mentioned; not only because they have no gall (as the Dolphin hath none) but for other caufes: also some affirm, that a Raven will live nine ages of a Man, and a Hart four ages of a Raven: whereunto Virgil agreeeth in these vers.

The history,

The Hart's

The A. Artiflate.

A. A. Artiflate.

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A. Artiflate.

That is, as the life of a man is thenceforth and fix, so a Raven doth live nine times fo many years, (viz.) 528 years. The Hart liveth four times the age of the Raven, (viz.) 2112 years. The Crow exceedeth the Hart three times, (viz.) 6336. But the Phænta which is repaired by her owne athes, furmounteth the Crow nine times and lo liveth 37524 years. The which l have set down (not for truth) but for report, leaving every reader to the cheifiel matter of credit, as in his owne discretion he conceiveth most probable.

It is confecrated of all, that Harts live a very long life: for Pliny affirmeth, that an hundred years after the death of Alexander Magnus, there were certain taken alive which had about their necks golden Collars, with an infringement that they were put on by Alexander.

In Calabria (once caull'd Iapygia and Prouenia) there was Collar taken off from the neck of a Hart by Agathocles King of Sicily, which was covered with the fleft and fat of the Hart; and there was written upon it Didoones Diana: whereby it was conjectured, that it was put on by him before the siege of Troy; for which cause, the King brought the fame and did offer it up in the Temple of Jupiter.

The life was in Acedia, when Arteolus dwell in Lynceara; for he confidentely affirmed, that he saw an old scarfed Hinde, which was dedicated to Diana, having this inscription in her Collar: Nektos omnem dedit et Illin am Agapen. When Agape natured in Troy, then was I a young Calf taken. By which it appeareth, that a Hart livest longer then an Elephant, for indeed they live long before they grow to any perfection, their youth and weakefnes cleaving falt unto them, fo is it given to them to have a longer life, for continuance in ripeness and strengthe of years.

These Beasts are never annoyed with Feneas, because their fleeth allayeth all adventitious and extraordinary heat. If he eat Spiders he intantly dyeth thereof, except he eat also Wilde Ivie, or Sea-crabs. Likewise Naven-gentil and Oleander, kill the Hart. When a Hart is in his chafe, he is greatly pained in his bowels, by reason that the skin wherein they lie is very thin and weak, and apt to be brokenn with any small stroke: and for this caufe he often flayeth to ease himself.

There is a kinde of thorns called Catus, wherewithall if a young one be pricked in his legs, his bones will never make Pipes. Befides these Beasts are annoyed with Seals and Itches in their heade and skin, teared by the French by a peculiar name (Foyer): I will not stand upon the idle conceit of Albertus, that Wafpes and Emmets breed in the heads of Harts, for he multaketh them for the worm, before mentioned.

The skins of this Beall are used for garments in some Countries, and in most places for the bottoms of Cuffions, and therefore they chufe such as are killed in the Summer time, when they are fat and moist spotted; and the fame having their hair pulled from them, are used for Breeches, Buskins, and Gloves. Likewise Pliny and Sueton affirmed, that if a man fliep on the ground
Of the Hart and Hinde.

And the bosome of young ones are applied for making of Pipes. It is reported, that the blood of Harts burned together with herb-dragon, oranches, orgament, and mustick have the fame power to draw Serpents out of their holes, which the Harts have been alive: and if there be put unto it holy Pelitiracy, it will also distract and dissipate them again.

The head and tail of a Dragon, with the hair of a Lion taken from between the brows, and his marrow, the froath or white-mouth of a victorious Horfe, the nails of a Dog, and the nerves of a Hart and a Roe, bound up all together in a Harts skin: and this is as true as the wagging of a Dogs tail doth signify a tempest. To leave these trifles scarce worthy to be rehearsed, but only to shew the vanity of men, given over to lying devils; let us come to the other natural and medicinal properties not as yet touched.

The use and benefit of the flesh.

The head and tail of a Hare or Cony have the power of Triacile for expelling of evil humors, but the Liver is intolerable in food: the horns being young are meet for Princes, especially because they avoid poison. It was a cruel thing of King Ferdinand, that caused the young ones to be cut out of the Dams belly and baked in Pailsies, for his liquorous Epicureal appetite.

The whole nature and disposition of every part of this beast is against poison and venemous things (as before recited). His bloud itayeth the loosenes of the belly and all fluxes, especially fried with Oile, and the inferior parts anointeth therein, and being drunk in Wine it is good against poisoned wounds and all intoxications. The marrow of this beast is most approveable above all, and is used for sweet odour, against the Gout, and heat of men in Confusions, and all outward pains and weakness, as Servius comprized in one sentence saying:

Et cervina potest nulceare medulla rigorem

Like wise
Likewise the fat and marrow, mollifieth or disperseth all buncches in the flesh and old swellings; all Ulcers except in the fins and legs, and with Venus-navil, the Fistula, matterly Ulcers in the ears, with Rozen, Pitch, Goose-grace, and Goat-sweat, the cleaving of the lips: and with Calves sweat, the heat and pain in the mouth and jaws. It hath also vertue being drunk in warm water, to affwage the pain in the bowels and small guts, or Bloudy flux.

The gall of a Bull, Oil of bayes, Butter, and this marrow, by anointing, cureth pain in the knees and loins and other evils in the feet of man, in the hips, and in the belly when it is colitive: it procureth flowers of Women, cureth the Gowt, Pimplies in ones face, and Ringwormes. *Ashnut* prescribeth it to be given in sweet wine with wax, unto a Horse for an old Cough proceeding of cold, after purging and heating, by holding the Horse's tongue in ones hand while the medicine is thrust down his throat.

The fame in Sheeps milk with Rubrick and soft Pitch, drunk every day or eaten to your meat, helpeth the Puflick and Obftructions. *Anatolius* approved Bean meat sifted and sod with Harts marrow to be given to a Horse which flatten bloud for three daies together. Also mingled with the powder of Oylter fheils, it cureth Kibes and Chiblaines. A woman perfumed with the hairs of this beast, is preferred from abortements; and the fame perfume helpeth the difficulty of urine, and little pieces cut off from the hide with a tammifie put in water, and rubbing the body, helpeth the holy-fire. The powder of the bones burned, is an antidote against the falling evil, and the dispersing of the milt; and the bones beaten to powder, layeth the Flux of the belly.

It were endless to describe all the virtues ascrib'd to the horn, and therefore I will content my self with the recital of few. *Pliny* and *Salinus* prefer the right horns, *Aristotle* the left, and the spires or tops are more medicinal than the hard and folide ftem, but the horns found in the Woods loot by the beales and grown light, are good for nothing. The other have their uses both raw and burned, which may be thole which follow.

Take the horn and cut it into smallest pieces, then put it into an earthen pot anointed within with durt, and fo let it in a furnace untill it become white, then waft it like a mineral and it will help the running and ulcers in the eyes; and the fame also keepeth the teeth white, and the gums found. The young horns while they be soft being eaten, are an antidote against Henbane and other poisonfull herbs. The right horn hid by the Hart in the earth is good against the poison of Toades. The Harts horn hath power to dry up all humors; and therefore it is sold in eye falver; and *Orphius* promiseth to a bald man hair on his head again, if he anoint it with oil and powder of this horn: likewise the fame with the seed of black mirtle, Butter and Oil, restraineth the falling away of the hair being anointed upon the head after it is newly shaven: with Vinegar it killeth Ringwormes. The fame burned in the Sun, and afterward the face being rubbed and washed therewith thrice together, taketh away pimple-spots out of the face: the powder drunk in wine or anointed on the head killeth lice and nits; the fame with Vinegar, Wine, or Oil of Rofes, anointed upon the forehead, eatheth the head-ach if it proceed of cold.

A perfume made of this horn with *Caffronum*; and Lime or Brimstone, caufeth a dead childe strangled in his mothers womb to come forth; if the horn be taken raw and rubbed upon the gums, keepeth the cheeks from all annoyance of the tooth-ach, and falteneth the loofe teeth, as *Serus*us said:

Quad vero assumpsit ,notus de dente fricando
Cervino ex cornu cina efc.

*Galen* preferibilith the powder of this horn for the Jaundife, and for him that spitteth bloudy matter, and to stay vomit being taken in a reere Egge. It comforteth also a rheumatick stomach, and it is tried to cure the Kings evil, it pacifieth the milt, dryeth the Spleen, driveth all kind of Wormes out of the belly, being drunk with hony, and eatheth the Colick, expelleth away mothers, helpeth the Strangury, and the pain in the bladder, layeth Fluxes in women both white and red: being mingled with Barly meal, water, and twigs of Cedar, benefite many other such properties.

The tears of this beast after the hath been hunted with a Serpent, are turned into a flone (called *Blechabad*, or *Beclab*) of which we have spoken before: and being thus transubstantiated do cure all manner of venom (as *Avenciot* and *Cardinal Paczetti* affirm) after many trials, and *Serus*us also expresseth in this Difficjon:

Seminae*is cervi lacrymama mistere liquori
Conservat, atque aequat illine mi fconere calcutes.

The liver of this beast helpeth all fores in the feet, being worn in the shoes, the fame dried to powder with the throat or wind-pipe of the beast, and mingled with Hony, and so eaten helpeth the Cough, Puflick, fishing and short breathing. *Pliny* and *Sextus* affirm, that when a Hinde perceiveth herfelf to be with young, the devouereth or eateth up a certain flone, which is afterward found either in her excrements or ventricile, and is profitable for all Women with childe and in travel, for by that only fact, the Hinde is most speedily delivered without great pain, and feldome or never suffering abortment; and there is also a little bone found in the heart of every one of these
thee beasts, which perfiormeth the fame qualities, in head whereof they have such a thing to sell at Venice, holding it at great price: but Bradfow affirneth, that he opened the hearts of two Harts, and found in them a little gristle not much unlike to a crottle, whereof the one being of a Beast new killed, was very soft, but the other was much harder, because the beast was slain about six days before.

This bone is in the left side of the heart, upon which the Spleen moveth and sendeth forth her excrements by vapors, which by reason of their drieenes are there turned into a bone, and being first of all the lubstance of the Harts bloud: and it is good against the trembling of the heart, and the Hemorrhoides, but this bone cannot be found in any, except he be killed betwixt the middle of August and the twelfth of September.

The skinny feed of the Hind-Calf, is above all other commended against poison; and the Plateriat bittings of Serpents and of mad Dogs; likewise it stayeth all Fluxes of bloud, and spitting of bloud, and ejection of bloud: and it being eaten with Beets and Lentils, is profitable against the pain of the belly. The genital part and ilones are wholesome (being taken in wine) against all bittings of Vipers, Adders, and Snakes, and the fame virtue hath the natural feed lipped up in a rare Egg.

The genital hath also a virtue to encrease lust in every creature, it being either dried and drunk; or else bound fast to their privie parts. Likewise being warmed in water, and afterward dried to powder and so drunk, helpeth the Colick, and the difficulty of making water, if you put it into a little Treira.

The dung of Harts cureth the Droptie, especially of a Sublon or young Hart: the urine easeth the pain in the Spleen, the wind in the ventericles and bowels, and influted into the ears, healeth their ulcers. In the tip of the tail lyeth poison, which being drunk, causeth extasie and death, if it be not helpt by a vomit made of Bitter, Annife, and oil of Jefamine, or as Cardinall Penetraius taff, that the Harts eye is an Antidote to this evil: it may be known by a yellowish-green colour, and therefore it is called the gall, for nature hath appointed that place to receive all the venom of the whole Body.

I should here end the discourse of this beast, after the method already observed in the precedents: but feeing the manner of the taking hereof (being a sport for Princes) hath yet been touched but very little, it shall not be tedious unto me, to abfain from the necessery relation of the subfquent stories, for the delightful narration of the hunting of the Hart: to the end that as the former creatife hath but taught how to know a Bird in a bush, that which inueret may declare the feveral ways of catching and bringing the fame to hand.

This is a beaft standing amazed at every strange sight, even at the hunters bow and arrow, coming behind a flaking Horfe (as is already declared:) and moreover, like as the Roses are deceived by the hiffing of a leaf in the mouth of the hunter, fo alfo is this beaft, for while the hearkneth to a strange noife, imitating the cry of a Hind-Calf, and proceeding from one man, the receiveth a deadly stroke by the other: fo alfo if they hear any musical pippings, they stand still to their own destruction: for which caufe the Egyptians decipher a man overthrown by flattery, by painting a Hart taken by mufick; and Varro relateth upon his owne knowledge, that when he flopped in his Lordship bought of M. Fis, the Paltour or Forreftier after supper, took but a Harp in his hand, and at the found hereof, an innumerable flock of Harts, Boars, and other four-footed beafts came about their Cabenet, being drawn thither only by the mufick; in fo much as he thought he had been in the Roman Circus or Theater, beholding the playing spectacles of all the African beafts, when the Eddition Officers have their huntings: the like is also reported by Elisanius, faying that he addeth, that no toil or engine is fo affured or unavoidable to draw these beafts within a labyrinth as is mufick, whereby the Hunter geteth as it were the Hart by the ear, for ifthrough attention he hold down his ears as he doth in mufick, he driuifteth no harm, but if once he prick up his ears as he commonly doth, being chased by men and dogs, an infinite labour will not be fufficient to overtake and compafs him. It is reported that they are much terrified with the sight of red feathers, which thing is affirmed by Animus in thefe Verfes:

**Of the Hunt and Hinde.**

An curr fratre uiger dum eaper ania cerros
Circundis oscule, & multa indagine penne.

And Ovid alfo faying,

**Nec formidatis cerros includite peninis.**

And Lucan alfo;

**Sic dum pavidos formidinum cerros**
**Claudae etate mucutens aera penne.**

Of which thing the Hunters make an advantage, for when they have found the beaft, they let their nets where they imagine the beaft will flie, and then one of them sheweth to the beaft on the other side, the red feathers hanging on a rope, which scareth them in haste into the Hunters nets,
as S. Jerome tells thee in one of his Dialogues, saying,  Et aliarum morum cerebrum, dum vos potestas evincias solutus fortis immissus tibi locum commimini. And you, faith he, (speaking to the Lucifelian heretics) run away from the vain shaking of feathers, like the fearfull Harts, while in the mean time you are incloped in unavoidable and inextricable nets. And this caused Seneca to write, that the babe feareth a shadow, and wilde beasts a red feather.

Many times the young Calf is the caufe of the taking of his Dam: for the Hunter early in the morning before day light, watcheth the Hinde where the layeth her young one, until she go and refresh her self with palture; when he hath seen this, then doth he let loose his Dogs, and maketh to the place where the Hind-Calfe was left by his mother.

The silly Calfe lyeth immovable as if he were fastened to the earth, and so never flirring, but bleating and braying luffereth himself to be taken, except there be rainy weather, for the impatience of cold and wet will cause him to shift for himself: which if it fall out, the Dogs are at hard to overtake him, and so being taken is committed to the keeper of the nets.

The Hinde both hearing and seeing the thraldom of her poor fon, cometh to relieve him, without dread of Hound or Hunter, but all in vain, for with his dart he also poiffeleth himself of her; but if the Calfe be greater, and so be able to run with the Dam among the herds, they are mow hard to be taken, for in that age they run very fast, and the fear of Dogs increaseth their agility, in so much as to take them among the herds is impossible, every one fighting for them.

But the only way is to single one out of them from the flock, and so follow him until he be weary, for although he be very nimble, yet by reason of his tender age, his limbs are not able to continue long. The elder Harts are taken in snares and gins laid in ditches and covered with leaves, whereby the feet of this beast is snared in wood; this kind is described by Xenophon and Pallas, and is called in Greek, Polldirade; in Latin, Pedias, of which also the Poets make mention, as Virgil:

_Tune gruibus pedicat & reaia ponerre cervis._

And this kind is better described by Gratius, with whose words I will passe it over as a thing out of use.

_Nam fuit & laequis aliquis curvatis uinae.  
Cervino isere magis contraere nerva,  
Quidque dentatus ilignum robere clausit;  
Sepe habet imprudens alieni lucra labiris,  
Fraus tegit infulum habuit mentita serino  
Venator pedius, cum dissimilantibus armis._

Their manner is when they are chaced with Dogs to run away with speed, yet oftentimes stand still and look back, not only to hearken to the hunter, but also to rett themselves, for in their chase they are ever troubled in their belly (as is before declared) and sometime they grow so weary, that they stand still, and are pierced with arrows, sometime they run till they fall down dead, sometime they take themselves to the water and so are refreshed, or else to avoid the teeth of Dogs, they forfake the dry land, and perish in the floods, or else by that means escape footfree: wherefore it must be regarded by every good hunter to keep him from the waters, either among the woods or other rough places.

But herein the subtility of this beast appeareth, that when he is hunted, he runneth for the most part to the high ways, that so the favour of his fleps may be put out by the tredings of men, and he avoid the prosecution of the Hound. Their swiftnesse is so great, that in the Champaigne and plain fields they regard not Dogs, for which cause in France they poison Arrows with an herb called Zerium or Toca, and it is a kinde of Assenitis or Wolf-bane, which hath power to corrupt and destroy agility of body, and to stay celerity, and for their hunting in France by Dogs, it is most excellently described by Budoes and Robertus Stephanus in his French Dictionary.

This wilde, deceitful and fubtile beast, (say they) by windings and turnings do often deceive their hunter, as the Harts of Meandroes flying from the terrible cry of Dianates hounds, wherefore the prudent hunter must frame his Dogs, as Pythagoras did his Scholars, (Lucrez qui ne partent point) with words of Art, to set them on, and take them off again at his pleasure, wherefore he must first of all compass the beast, (En fan gifte) in her own lodging, and so raise her up in the fight of the Dogs, that so they may never lose her footing.

Neither must they set upon one, either of the herd, or that wandereth solitary alone, nor yet a little one, but partly by aspect or fight, and partly by their footings in the fow earth, and also by their dung (Les fumet) they judge of their game, for a good Woodman must not flick to gather up the Deers excrement or soil, and keep them (La trempes) in his hunting horn: such things must the Kings hunteynen and foresters observe, as also the quantity of his bed or lodging when they finde it; being thus informed of their game, then (Disoppel les oitem) they take off their Dog couplings, and some on horseback, other on foot follow the cry with greatest art, observation,
Of the Hart and Hinde.

Of the Hart and Hinde.

the Hart, with all dexterity to leap hedge, pale, ditch, and rocks; neither fearing thorns, woods, down-hills, but providing a fresh horse in cave the first tire, (Chevaux de relais) and leaping on him with speed, until he see (un grand cerf l'ecoyer du grand cerf) the great Hart having ten spears on his horns, and his little squire-hart to attend him, which the Dogs once perceiving, only follow the great Hart, taking for a prohibition to follow any other.

The Dogs are animated by the winding of horns, and voices of the hunters, like Souldiers to a battle by the voice of a trumpet and other instrumens: but sometimes the crafty great beast fenteth forth his little squire to be sacrificed to the Dogs and Hunters in head of himself, lying close in the main time, then mult the retreat be founded, (Rumpre le cier) the Dogs be broken off and taken in (Le limier) that is, leave again until they be brought to the fairer game, who aritheth in fear and rage, betaking himself to his forefoot legs, being purfued with all the cries of Hunters, ringing and echoing betwixt heaven and earth, defpaying him with the continual noise in his ears, no leffe dreadful and fearful then the voice of a paffing bell to a fick man, or the fight of the executioner to a condemned caitife, yet till he shriveth untill wearied and breathlesse, he be forced to offer up his bloud and fteeth to the rage of all the obfervant pedifquants of the hunting Gods Diana.

The vulgar fort call an old Hart a sutil and cunning beast, but the Nobles call him (sift sages) a wise Hart, who to avoid all his enemies runneth into the greatest herds, and so bringeth a cloud of error upon the Dogs, to keep them from any further prosecution: sometime also beating of some of the herd into his own footsteps, that so he may more easily escape and procure a labyrinth to the Dogs, and then after a little while he betaketh himself to his heels again, running full with the wind, not only for refrigeration, but because he may the more easily hear the voice of his pursuers, whether they be far or nere.

At last, being (for all this) found out again by the observance of the hunters, and skill of the Dogs, he flyeth into the herds of Cattel, as Kie, Oxen, or Sheep, leaping upon an Ox, and laying his body or the fore-part thereof upon him, as a rider upon a Horse, that so touching the earth only with his hinder hoofs, to leave a very small or no fent at all behind for the Hounds to discern.

The chief huntsman or {fergeant of the hounds unto Lewis the twelfth, called (Le grand veneur) affirmeth that on a time they having a Hart in chase, suddenly the Hounds fell at a fault, so as the beast was out of sight, and not a Dog would once flir his foot; whereas all the Hunters were amazed, like as in some jugling Apollonian trick, as though the hart had clean forsaken the earth, and with the wings of some fowl had been flown away; or as if the earth had opened her mouth to receive him into her prosecution, and had closed again over her head, or else some Witchcraft had call a mist before the Dogs and Hunters eyes: At last by calling about (as it is usual in such cafes) they found the fraud of the horned beast, which is worth the memory.

There was a great white thorne which grew in a shadowie steep place as high as a tree, and was inworned with other small shrubs about it, into which the said Hart leapt, and there stood aloft the boughs spreading from one another, and there remained, whether because he could not get off again, or else for that he was hired in that place, but sure he was there thrilth through and so died, and so had they all rather perish any other way then by the teeth and tearing in pieces of angry and greedy beasts.

Yet their maner is, that when they see themselves every where intercepted, to make force at him with their horns that cometh first unto him, except he be prevented by some sword or spear; which being done, the Hunter with his horn foundeth the fall of the beast, and then every one approacheth, huring with triumph for such a conquest, of whom the skillfullest openeth the beast, giving unto the Hounds such parts as belongeth to them, for their encouragement against another time; and for that purpose the Hunters dip bread in the skin and bloud of the beast, to give unto the Hounds their full satisfaction: and many such other things may the reader discern of this knowledge found in the Authors aforesaid, to whom I will commend him rather, then spend more time in this busines, better manifested by experience, then by any written document, yet I would with men to be sparing in this exercife, seeing it hath been seldom found that a man given to hunting, but he perished in his pleasure, as Albion did by his own Dogs: and therefore Alleius doth fitly compare together hunters and receivers of Theives and Robbers, calling them new Albions; who after they had receivd horns, must be destroyed by their own Dogs which they have nourished. The best ufe of these beasts is to keep them tame, as in Helvetia, where they hunt seldom, and to make use of them for nourishment rather then for sport, as it is reported of a holy man, who kept a Hinde so familiar with him, that in the Wilderness he was lived upon her milk.

Concluding this discourse with the words of the Poet, for the instruction of Dogs to this palethe and prudence of the beasts.

Velox Sparte catalog, arremque mollissum,
Palcefero pingui, &c.

And
The History of Four-footed Beasts.

And again;

Monteque per altos
Ingenum clamore prenem ad retia cervum.
Confestoque agmine cervi
Torquent mala man, & summis vix curibus extant.
Hinc non immissis canibus, non caffibus ulul,
Punicaeve agitent pavidos formidine penne:
Sed frigifta oppositum trudentes pectora montem
Comminus obviamur ferro, graviterque rudentes
Cedunt, & magno laeti clamore repartim.

Of the DYCITIES.

Herodotus in his fourth book affirmeth, that among the African Shepherds toward the East there are bred in Baffaria Hystriches and Dyes, of which last there is not any mention among all other writers, except in Varinus and Hefychius, who affirm that among the Lacedemonians a Glead or Kite was called Dydu, but this spoken of Herodotus I conjecture to be some four-footed beast, being led with no other reason than that the other with whom he placed it, are generally known to be creatures of that kind and nature; wherefore I thought good to express the name of it in this place, desiring the Reader to accept so much thereof as is already known, and to search farther for the description of it, at the hands of them who are eye-witnesses of the wonders of Africa.

Of the DOG in general.

A Dog is called in Hebrew, Kebel; and Lemas according to Manster; in Chaldæ, Kalba; in Arabick, Kalbe; in Persia, Bag; the Saracens, Kip; or Keb; the Greeks, Kwin because of his love to man, and vulgarly at this day Skils and Skyle; the Malians, Spices; the Germans, Huns; the Italians, Canis; the French, Chien; the Spaniards, Perro or Cauvado, because his barking is as loud as an Artificial song, also Carthus, the Hyerns, Per or Pas; and the Latins, Canis.
Of Dogs.

There is no region or Countrey in the world, where these are not bred in some flore, as shall be manifested more at large, there are Dogs very great, some for hunting, some for War and defence, some for the Boar, Bull, or Bear, some for the Hare, Coney, or Hedge-hog: again some are smaller which are called Hounds, Bratches, Beagles, Shepherds Dogs, Hound-curs, Spannels both for the Water and Land; and some foiling Dogs for the pleasure of the rich.

In the first place there are to be handled the nature of Dogs in general, wherein they agree, and their common properties of nature, such as are not destroyed in the distinction of kinds, but remain like infaillible and invariable truths in every kind and Countrey of the world. To begin with that which is outward, it is to be observed that Dogs are generally rough, and their hair indifferently long (which in Winter they lose every year) is a signe of a good constitution; but if it grow over long, the mange-scar will follow: the outward proportion of the head altereth as the kind altereth, being sometime like a Lion, sometime like a Hedge-hog, some long with a broad snout, and sometime with a piked snout, but the brain decreaseth and increaseth with the Moon, there is no commissure or seam in his skull (like as is in a Mans) but it is a continued bone without separation inward or outward.

The best Dogs have flat nostrils, yet round, the mouth is long and slit, their teeth like faws, as it is in Fifthes and Serpents: those which are called Canine before, are only changed, as it also falleth out in a Lion, and thefe they lose or change, both males and females, in the fourth moneth of their age: about which time they have new ones come forth to thruff off their old. By their teeth is their age discerned, for while they are white and sharp, it affurreth the youth of a Dog, but when they grow blackish, or duskie, they betoken the elder age.

The breadth of a Dog is narrow and piked, his venticle small and narrow, for which cause he never esteth his bodiely excrements without pain, his bowels are like a Lions: he hath a long spleen like a Man, and a Hog: his yard and itones hang outward between his hinder-legs: a base natured cur striketh his tail betwixt his legs: his forelegs bend like the armes of a man, and he uteth them in head of Armes, having five distinct fingers, commonly called claws upon each foot before, and four upon each foot behind, which also have straight nails upon them, and that which hangeth higher upon the leg is crooked.

The females, because they bring forth many whelpes at a time, have underneath their bellies great paps, with many peans to suck at, in a double rank or row on both sides, and the generous Bitches have 12. other but 10. They bear their young within their belly next to the midrife, their fine is dry like a Wolves, and thereby his temperamen is known to be hot and dry, considered in it self, but compared with others it varyeth, for to a Mans, it is dry; to an Emmets, it is moist: again, in respect of a Man, it is hot; in respect of a Lion, it is cold.

The lower and thriller voice of a Dog, is called barking, the lower and fliller, is called whining, or fawning. It was a monitirous thing, that a Dog should speak, and a Serpent bark, as it is believed in antiquity both came to passe, when Iarquinius was driven out of his kingdom. It is not caufe-lefs that the barking of Dogs, hath attributed unto it divers qualities, as for a man to dream of the same, presage them some treafonable harm by enemies, so likewise if they fawn and claw upon a man.

Among the precedent tokens of Cæsars death, they set down in certain Verfes, the howling voices of Owls, the weeping drops of the Ivie tree, and the continual barks of Dogs, as followeth.

Trifia mille locis Stigias detis omnis labo,
Mille loci lacrymoaur erat—
Inque foro circumque domo & templorum
Nebulos ululatus canes, &c.

The Egyptians signify these things by a Dog, a Scribe, a Prophet, a Spleen, smeling, laughing, and weeping. A Scribe, because as the Dog is silent more then he barketh, so muft a perfect Scribe meditate more then he speaketh: for to bark at every one were to pleasure none, and to speak continually, were a signe of madnes. Again, a Prophet, because a Dog doth moit eagerly behold, and admire constantly at holy actions, and looth the eyes and ears of a Prophet be attendant upon heavenly things. The Spleen, because a Dog hath little or no spleen, and thereof cometh his madnes and death; whereof also it cometh that the fervants which have the charge of Dogs, being with them in their ficknefles and latter end, for the most part prove Splentick. Smelling, Neping, and Laughing, because the Splentick can do none of all thefe: but of this more afterward.

The voice of a Dog, is by the learned interpreted a raling and angry speech; whereof comach Canines facundia among Authors, for raling eloquence. It is the nature of a Dog when he maketh wanton to hold up his leg, if he be above fix moneths old, or have been at procreation; the females do it for the most part fitting; yet some of the generous spirits do also hold up the legs. They ever smell to the hinder parts of one another, peradventure thereby they difcern their kind and disposition of each other in their own natures. After they have run a course, they

The making of urine.

Of the countries and diversities of Dogs.
The History of Four-footed Beasts.

The Bitches of Dogs for their own use.

The Sow of Dogs.

Their copulation and nursing.

Arifoloe.

Tardius.

The time of Bitches whelping and bearing her young.

Arifoloe.

The first whelp is a male.

The blindness of Whelpes.

Elbanus, A secret in their food.

The Tachins of Dogs for their own use.

They fly as doth a man, and therein dream very often, as may appear by their often barking in their sleep: but it must be diligently regarded of them that love to keep Dogs, that they permit them not to sleep much, especially after their meat when they are young, for as they are very hot, so in their sleep doth their heat draw much pain into their stomach and ventricle. The time of their copulation is for the most part at a year old, yet the females will lust after it at eighteen months old, howsoever they are not to be suffered, because it weakeneth their bodies, and dulleth in them all generosiety; therefore after one year they may safely be suffered to come together, and not before. Neither is it material, whether in Summer or Winter, but it is best in the beginning of the Spring, but with this caution, that Whelpes of a litter or of one and the same Bitch, be never suffered to couple; for nature rejoyneth more in variety.

For then they grow fast and begin to be proud; yet in ancient time, for the more ennobling of their race of Dogs, they did not suffer them to engender till the Male were four year old, and the female three; for then would the Whelpes prove more strong and lively. By hunting, labour and travel, the males are made more fit for generation, and they prove best which have their fires of equal age. They are not suffered to engender all their life long, but until ten and twelve year old, or rather eight in the male, and six in the female. Yet there have been found which in one and other sex, have continued in procreation till they were twenty year old, but this exceeded all natural reason. When they begin to be proud, if you give them leaven mingled with milk and salt, they will not stray and range abroad. At the time of their copulation, they cleave together for a certain space, as if their hinder parts were glazed, and so they are filled at one time. They bear their young the fifth part of the year, that is, about two moneths and odd days; but this reckoning is not general, for some kinds bear their young three moneths, and some more. They bring forth many at a time, sometime five, seven, nine, or twelve, for so many cels hath the female in her womb.

Albertus relateth that he saw a Bitch of the Malvive kind, which brought forth at three litters fifty Whelpes, that is nineteen at the first, eighteen at the second, and thirteen at the third; but sometime the bringeth forth but one, which is a good argument to prove that the is filled at the first lying. They are purged of their menstruous fluxes seven or fourteen days before they grow proud, and again, at their time of littering; at other times they suffer none.

The first they call forth of their wombe is commonly a male, which resemblith the father, the other males and females as it happeneth, (but it is accounted a prodigious thing to litter all males or all females) wherein nature yeldeth an excellent argument of divine providence, for the first born of all kinds hath more resembliance of the father then of the mother. They are also whelped blind, and so remain for nine or ten days, because through their multitude they cannot be perfected in the dams belly, which doth not happen to beasts which bear single, as Sheep and Goats. They use to carry them up and down in their mouths till they be seven days old, but not afterward, they have milk about five days before their littering. It is not good to preserve the first or second litter, but the third; and after they have littered it is good to give the Bitch Whay and Barly bread, for that will comfort her and encreaseth her milk; and in some places they take Goats milk and feedeth in it broken bones of meat, whereby they conceive that the Dam and Whelpes are much bettered for that nutriment: there is not any great regard of the nourishment of Dogs, for they will eat much and that often and divers things, except Dogs flesh, for that cannot be so dreefed and prepared by the art of man, but they finde it out by their nose and avoid it. It is good to let the Whelpes fuck two moneths before they be weaned, and that of their own dam, for it is not so good for them to suck another, and in the mean time exercise them to meat, as Milk, Whay, Bread, and fleth; also from the Spring untill the Sun entreth Cancer, at which time it is good to let them grow lean according to the Verles of Nemean.

--- Conficiem minusse saginam
Prefuerit, tenuesque magis retinere cibatur,
Ne gravis articulis depravet pendere males.
Nam tib membraim nuxus nodosque relaxant.

And afterward when they are fixe moneths old amend their diet again that they may grow strong.

Tunc rarus misere fero Cerealia dona,
Convention, fortemque dari de frigibus ejus.

Tardius.

Abentaus.

They will not eat Buck-mall wherewithal Hogs grow fat, for that breedeth in them the pain of the head. By eating the excrements of men they incur many diseases: they are mad drunk by the herb Oenama, as Crows be; they cannot endure Wine, but bread stoped in wine they devour, dried fleth and bread in Milk is their fattest food; if Cummin be now and then mixed in their bread, they are not much troubled with windes in their bellies. If you put a little Oil in their Water to drink
Of Dogs.

Of Dogs.

Of Dogs.

Of Dogs.

Of Dogs.

Of Dogs.

Of Dogs.

Of Dogs.

Of Dogs.

Drink or lap, they will prove more able and swift to run. If the refuse and loath his meat, take a little hot bread and give it him before meat, or dip brown bread in Vinegar, and so presse and squeeze the liquor thereof into his nose, and it will eafe him.

There is much ado to chuse a Whelp under the Dam that will prove the belt in the litter. Some observe that which feeth last, and take that for the belt; other remove the Whelpes from the kennel and lay them severall and apart one from the other, then watch they which of them the Bitch first taketh and carruyth into her kennel again, and that they take for the belt; or else that which vomiteth laff of all. Some again give for a certain rule to know the belt, that the fame which wegheth laff while it sucketh will prove belte according to the Verfes of Nemesian.

Pendere nam canali poteris pripendre vires,
Carpe religiosio levem gravimum pertinere curas.

But this is certain that the lighter whelp will prove the swifter, and the heavier will be the stronger. Other make this experiment, first they confine in the Puppies in the abilence of the Dam with a little circle of small ficks apt to burn, and flaming rags, then fet they them on fire about the whelpes, and that Puppy which leapeth over firft they take for the belt, and that which cometh out last they condemn for the world. As soon as the Bitch hath littered, it is good to chuse them you mean to preferve, and to call away the refuse; keep them black, or brown, or of one colour; for the spotted are not to be accounted of. And thus much of the outward parts and the choice of Dogs. The manifold attributes of Dogs among all Writers, do decipher unto us their particular nature; as that they are called tharp, biter, fierce, subtil, founding, bold, eared for attention, affaile, fpeedy, clamorous, wilde, faithful, horrible, rough, falling, cruel, ungentle, unclean, hurtful, biting, filthy, smelting, fent-follower, watchful, mad, hoarke, and quick-nofled; befide many fuch other bodies among the Grecy and Latine. And likewise you shall read of many particular Dogs, and their names appelleative, both in Greek and Latine, which may be remembered also in this place, to fhew what reckoning all ages have made of this beast: for it is necessary, that as soon as he beginneth to feed he prefently receive a name: fuch are thefe, of two syllables or more, as Sylex, Spende, Alke, Rome, Eacon, Acobantrs, Agre, Labto, Hylador, Alex, Alex (one of the firit Dogs) Ablum, Auren, Aura, Bria, Polu, Bremion, Canace, Hippaurs, Charon, Chorus, Harpa, Lusias, Chiron, Lyncta, Acras, Dromus, Glyome, Ebra, Hybris, Hylus, Maira, Melampus, Ornus, Lebtoros, Pha, beides infinite among the antients; but among the latter writers, Turc, Nibus, Falco, Ragenus, Serpens, Iebias, Pilafer, Leo, Lupus, Stella, Fulgur, Bellus, Kubinum, Satinus, and Furiia: fo that every Nation, and almost every man hath a proper and peculier name for his Dog, as well as for his Ox.

There is not any creature without reafon, more loving to his Master, nor more ferviceable (as shall appear afterward) then a Dog, inducing many of them patiently at the hands of his Master, and using no other means to pacifie his displeasure, then humiliation, proffition, affentation, and after beating, turneth a revenge into a more fervent and hot love. In their rage they will fet upon all intrangers; yet herein appeareth their noble spirit, for if any fall or fit down on the ground and cast away his weapon, they bite him not; taking that declining for fubmiffive pacification. They meet their Master with reverence and joy, crouching or bending a little, (like fhamelf and modell perrons;) and although they know none but their Master and familiar, yet will they help any man against another Little beall. They remember voices, and obey their leaders hiffing or whiffing.

There was a Dog in Vnace which had been three years from his Master, yet knew him again in the Market place; difterning him from thousands of people preffent. He remembret any man which gave him meat: when he fought upon a man he wringeth his skin in the forehead. The Dog which is broad faced like a Lion, is most full of stomack and courage; yet the tongue or skin of an Hyena (by natural infinct) maketh him run away: sometimes they will agree with Wolves, for they have engendered together, and as the Lute strings made of a Wolf and a Lambe cannot agree in musick, but of ones them will break, so allo will a Dogs and a Lamb.

Adianus thinketh that Dogs have reason, and use Logick in their hunting, for they will call about for the game, as a difputant doth for the truth, as if they should fay either the Hare is gone on the left hand, or on the right hand, or straight forward, but not on the left or right hand, and therefore straight forward. Whereupon he runneth forth right after the true and infallible footstepes of the Hare. There was a Dog in Africa in a chip, which in the abilence of the Mariners came to a pitchier of oil to eat some of it, and the mouth of the pot being too narrow for his head to enter in (because the pot was not full) he devieth to call flint stones into the vefsel, whereby the Oile rofe to the top of the Pitcher, and fo he eat thereof his fill, giving evident testimonie thereby, that he difterned by nature, that heavy things will sink down, and light things will rise up and flie aloft.

There is a Nation of people in Ethiopia (called Nehe) which have a Dog in fuch admirable estimation, that they give unto him the honor of their King; for they have no other King but he. If he faunt, they take him for well pleafed; if he bark or flie upon them, they take him for angry: and by his

Solina, Adianus;
The History of Four-footed Beasts.

Of dogs and dog-like animals, Pliny and Giraldis, in their history of the world, relate many curious facts, not only about dogs, but also about other animals. Among the Egyptians, dogs were considered sacred, and were kept as sacred animals. The Greeks and Romans also kept dogs as sacred animals, and sacrificed them in temples. However, Pliny and Giraldis relate that the Romans sacrificed dogs in the temple of Aesculapius, because they were nourished by their milk, and Jupiter himself was considered a god of dogs. The Greeks and Romans believed that dogs were sacred because they were the protectors of the home, and because they were considered to be a symbol of loyalty and fidelity.

As among the Carins, whereupon came the proverb of Carinsum Sacrificium, for they sacrificed a dog in a field of a goat, and the young puppies or whelps were also accounted amongst the most available sacrifices, for the pacifying of their Idols gods.

The Romans and Greeks also had a custom to sacrifice a dog in their Lyceum and Lupercal seats, which were kept for the honour of Pan, who defended their flocks from the wolf, and this was performed in February yearly, either because the dogs were enemies to wolves, or else for that by their barking, they draw them away in the night time from their City; or else beacause they reckoned that a dog was a pleasing beast to Pan, who was the keeper of Goats; so also the Greeks did offer a dog to Hecate that fohath three heads, one of a Horse, another of a Dog, and the third head in the midst of a wide man: and the Romans to Genebla, for the sake of the cattle and welfare of all of their household affairs.

Their household Gods (called Larini) were pictured and declared to the people sitting in Dogshkins, and Dogs sitting beside them, either because they thereby signified their duty to defend the house and household; or else as Dogs are terrors to Thieves and evil beasts, so thefe by their affilience were the punishers of wicked and evil persons: or rather that these Larini were wicked spirits prying into the affairs of every private household, whom God used as executors of his wrathful displeasure upon godless men.

There were Gods sacrificed in the Temple of Aesculapius, because he was nourished by their milk; and Jupiter himself was considered a god of dogs; because he taught the Aesculapians first of all to hunt away noisome beasts by the help of Dogs: so also they sacrificed a Dog to Mars, because of the boldness of that creature. To conclude, such was the innumerable vanity of the Heathens in their gods and sacrifices, as it rather derogated perpetually oblivion then remembrance, for they joyed the shapes of men and beasts together (such Asiniius) to make gods, Omnipotentium deum modestos & iteratos Anthis, such were their Gymnosophi, Ophthrophi, Anthis, Hecest; that is as much to say, as half Men, half Dogs, half Serpents, but generally all Monsters: and for the many imaginary virtues the ancients have dreamt to be in Dogs, they also in many places have given unto them solemn funerals in their hallowed Cemeteries, and after they were dead they ceased not to magnifie them, as Alexander, which built a City for the honour of a Dog.

All this notwithstanding, many learned and wise men in all ages have reckoned a Dog but a safe and an impudent creature: for the Flamen Diael of Jupiter in Rome, was commanded to abstain from touching of Dogs, for the same reason that they were prohibited and not permitted to enter into the Caille of Alburn, and Isle of Delos, because of their publick and shameles copulation: and also that no man might be terrified by their presence from supplication in the Temples. The foolishnes of a Dog appeareth in this, that when a Ione or other thing is cast
at him, he followeth the itone and negligence the hand that threw it; according to the saying of the Poet:

ArrIxat a tepidicenaturus, marisque fatigat.
Nec persecutari mutua damnæ factis,
Sic plerique sunt exus ubiær bufus,
Et quis nulla grantus noxæ, dente petant.

Marcellus.

Likewise men of impudent wits, shameless behaviors in taking and eating meat, were called Cynick; for which cause Abins new spake unto Cynicks in this sort, You do not O Cynici lead abominable and frugal lives, but resemble Dogs: and whereas this four-footed beast differeth from other creatures in four things, you only follow him in his viler and baser qualities, that is, in barking and licene of railing, in voracity and nudity, without all commendation of men.

The impudence of a Dog is eminent in all cafes for it to be understood, for which cause that audacious Aristophan lion of Cidimæus was called a Dog, and the Furies of ancient time were pictured by black Dogs, and a Dog called Etinsys: Cerberus himself with his three heads signified the multiplicity of Devils; that is, a Lions, a Wolves, and a fawning Dogs; one for the Earth, another for the Water, and the third for the Air: which cause Hierocles in slaying Cerberus, is said to overcome all temptation, vice and wickedness. For so did his three heads signify. Other by the three heads understand the three times; by the Lion the time present; by the Wolf, the time past; and by the fawning Dog, the time to come.

It is delivered by Authors, that the root of Oliander, or else a Dogs tooth bound about the arme, do restrains the fiery and rage of a Dog: also there is a certain little bone in the left fide of a Toade (called Apoysn) for the virtue it hath in it against the violence of a Dog. It is reported by Pliny, that if a live Rat be put into the portage of Dogs, after they have eaten thereof, they will never bark any more; and Aelius affirmeth so much of the Weasils tail cut off from him alive, and carried about a man; also if one carry about him a Dogs heart or liver, or the skin wherein Puppies lie in their dams belly (called the Secundine) the like effect or operation is attributed to them against the violence of Dogs.

There is a little black stone in Nile about the bigenfs of a Bean, at first sight whereof a Dog will run away. Such as these I saw at Lyons in France, which they called Sea-beans, and they prescribed them to be hanged about a Nurse's neck to encrease her milk. But to conclude the difcourse of the bafeines of a Dog, those two proverbs of holy Scripture, one of our Saviour Mat. 7. Give not that which is holy to Dogs; and the other of St. Peter, 2 Epistle Chap. 2. The Dog is returned to the vomit; do sufficiently convince, that they are emblems of vile, cursed, railing, and filthy men; which elseem not holy things, but eat again their own vomits.

The skins of Dogs are drested for Gloves, and close Boots, the which are used by such as have Ulcers and swelling Legs or Limbs, for by them the afflicted place receiveth a double relief: first, it refiteth the infent humours; and secondly, it is not exasperated with Woolen. The Turks colour their Dogs tails with red, and it is a custom of Hunters to take Dogs and tie them in the Woods unto trees by their itones, for by crying they provoke the Panther to come unto them.

It is not to be doubted but that the flefh of Dogs is used for meat in many places, although the opinion of Kefis be true and confonant to reason, that all devouring creatures, as Dogs, Foxes, and Wolves, have no good flefh for meat, because they engender melancholy; and yet Kefis thinketh, that it is like to the flefh of a Hare, especially young Whelpe were held among the Romans a delicate meat, and were used by their Priests; and among Whelpe they attributed most virtue to their flefh which were eaten before they did see, for by them came no evil humor at all, as is often set down in Plutarch.

Peter Martyr and Staliger do affirm of Casanella and Lucatana, and other Islands of the new World, that the people there do eat a kind of Dog which cannot bark: These Dogs are vile to look upon like young kids. The inhabitants of Casio, which are fierce, angry, wide, cruel, audacious, diffamible, active and strong, do also feed upon Dogs, both wide and tame; and it is thought that their meat is a little furtherrance to their inclination, for such is the natural disposition of Dogs. And Seilbergewri in the Book of Peregrinations affirmeth also, that the Tartaros in Issibhar do after the same manner feed upon the flefh of Dogs: from hence it cometh, that men relishing a Dog in a plain forehead and narrow, are said to be foolish: in a smooth and stretched out flatterers; thole which have great voices like a Ban-dog, are strong; thole which have fiery eyes like Dogs, are impudent and shameless: thin lips with narrow folding corners, in Dogs is a token of generosity, and in men of magunanimity: whose teeth hang over their canine teeth, are also adjudged rakers, and virulent speakers: and as Carnarius observeth, vain glorious braggards: A wide mouth, betokeneth a cruel, mad, and wicked disposition: a harpe nose, an angry minde: a round, blunt, and solid Nose, signifieth a Lions tomach and worthines. A harpe chin, vain bishing and wantonnesse; they which are small in their girtting stead about their loins, do much love hunting.
The History of Four-footed Beasts.

Stobaeus in his wicked discourse or dispraise of Women affirmeth, that the curt, sharp, smart, curious, dainty, clamorous, implacable and wanton-rowling-eyed Women, were derived from Dogs: and Hesiod to amend the matter, when Jupiter had fashioned Man out of the earth, he commanded Mercury to infuse into him a Canine minde, and a clamorous inclination: but the Proverb of Solomon Chap. 3o. concludes the excellency of a Dog saying, There be three things which go pleasantly, and the fourth ordinarly hit pace aright: The Lion which is the strongest among beafts, and seareth not the sight of any body; a hunting Dog strong in his joints, a Goat, and a King against whom there is no rising up: by all which is deciphered a good King; for the Lion riseth not against beafts; except he be provoked; the Dog riseth not against his friends, but wilde beafts; and the He-goat goeth before his flock like a guide and keeper.

Of the GRAT-HOUND, with a narration of all strong and great hunting DOGS.

Among the divers kinds of hunting Dogs, the Gray-bound or Grecian Dog, called Thracius or Elatic (by reason of his swiftness, strength and sagacity to follow and devour wilde beafts of great stature) deserveth the first place; for such are the conditions of this Dog, as Plato hath observed, that he is reasonably fent unto to finde out, speedy and quick of foot to follow, and fierce and strong to take and overcome: and yet silent, coming upon his prey at unawares, according to the observation of Gratius;

Sic Canis illa suos tacitura superavit hostes.

Like the Dogs of Acaarnania, which set upon their game by stealth. Of these are the greatest Dogs of the world, which in this place are briefly to be remembered.

These have large bodies, little heads, beaked noses, but flat, broad faces above their eyes, long necks, but great next to their bodies, fiery eyes, broad backs, and most generous stomachs, both against all wilde beafts and men also. Their rage is so great against their prey, that sometimes for wrath they lose their eye-fight. They will not only set upon Bulls, Boars, and such like beafts, but also upon Lions, which Munsters note and in this verse;

Et trasculentus Helor cortex leonibus audens.

The greatest dogs of this kind are in India, Scythia, and Hircania, and among the Scythians they join them with Affes in yoke for ordinary labour. The Dogs of India are conceived by Tygres, for the Indians will take divers females or Bitches, and restore them to trees in woods where Tygres abide.
Of Dogs.

abode: whereunto the greedy ravening Tyger cometh, and infantly devoureth some one or two of them, if his lust do not restrain him, and then being so filled with meat (which thing Tygers seldom meet withal) presently he burneth in luft, and so lineth the living Bitches, who are apt to conceive by him: which being performed, he retires to some secret place, and in the mean time the Indians take away the Bitches, of whom come these valorous Dogs, which retain the stomachs and courage of their father, but the shape and proportion of their mother, yet do they not keep any of the first or second litter, for fear of their Tygrian stomachs, but make them away and re-serve the third litter.

Of this kind were the Dogs given to Alexander by the King of Albania, when he was going into India, and presented by an Indian, whom Alexander admired, and being devious to try what virtue was contained in so great a body, caused a Bore and a Hart to be turned out to him, and when he would not so much as pitch to them, he turned Bears unto him, which likewise he disdained, and so not from his kennel, wherewith the King being moved, commanded the heavy and dull Beast (for so he termed him) to be hanged up; his keeper the Indian informed the King, that the Dog respected not such Beasts, but if he would turn out unto him a Lyon, he should see what he would do.

Immediately a Lyon was put unto him, at the first flight whereof he rote with speed (as is never before he saw his match or adversary worthy his strength) and breathing at him, made force upon him, and the Lyon likewise at the Dog; but at the last, the Dog took the chaps or shote of the Lyon into his mouth, where he held him by main strength, until he stung him, do the Lyon what he could to the contrary: the King devious to save the Lyons life, willed the Dog should be pulled off, but the labour of men and all their strength was too little, to loosen those cruel and deep biting teeth which he had fastened. Then the Indian informed the King, that except some violence were done unto the Dog to put him to extremity, he would sooner dye then let go his hold; whereupon it was commanded to cut off a piece of the Dogs tail; but the Dog would not remove his teeth for that hurt: then one of his legs were likewise severed from his body, whereat the Dog seemed not appalled; after that another leg, and so consequently all four, whereby the trunk of his body fell to the ground, still holding the Lyons mouth within his mouth; and like the spirit of some malicious man, chuffing rather to dye then spare his enemy. At the last, it was commanded to cut his head from the body, all which the angry Beast endured, and so left his bodies head hanging fast to the Lyons jaws: whereas the King was wonderfully moved, and sorrowfully reproved his rathlessness in destroying a Beast of so noble a spirit, which could not be daunted with the presence of the King of Beasts: chuffing rather to leave his life, then depart from the true strength and magnanimity of minde. Which thing the Indian perceiving in the King, to mitigate the Kings sorrow, presented unto him four other Dogs of the same quantity and nature, by the gift whereof he put away his passion, and received reward with such a recompence, as well be pleased the dignity of such a King, and also the quality of such a present.

Pliny reporteth also, that one of these did fight with singular courage and policy with an Elephant, and having got hold on his side, never left till he overthrew the Beast, and perished underneath him. These Dogs grow to an exceeding great stature; and the next unto them are the Albanian Dogs. The Arcadian Dogs are said to be generated of Lyons. In Caucaia, one of the Fortunate Islands, their Dogs are of an exceeding stature.

The Dogs of Cret are called Disponis, and fight with wilde Boars: the Dogs of Epirus called Chianides, of a City Chion, are wonderfully great and fierce; they are likewise called Molossi, of the people of Epirus so termed, there are fained to be derived of the Dog of Cephalus, the first Grayhound whom stories mention: and the Poets say, that this Gray-hound of Cephalus, was first of all fashioned by Vulcan in Menocephal brais, and when he liked his proportion, he so quickened him with a foul, and gave him to Jupiter for a gift, who gave him away again to Europa, the also to Minos, Minas to Pocrias, and Pocrias gave it to Cephalus: his nature was so refitable, that he overtook all that he hunted, like the Trumesium Fox. Therefore Jupiter to avoid confusion, turned both the incomprehensible Beasts into Horses. This Molossus, or Molossi Dog, is also framed to attend the folds of Sheep, and doth defend them from Wolves and Theeves, whereof Virgil writeth thus:

\[ V\mathbf{e}l\mathbf{e}c\mathbf{t} o\mathbf{r} \mathbf{t} a c t o l u s \ a c r e m a q u e \ M o l l i s s u m \\
P u f f e f r e p r i n g i u m, \ u n q u a m \ c o t t o d i t u s \ t i l l s \\
N \dot{\mathbf{a}} m v e n m \ \mathbf{f} a b u l i a \ f u r e m \ i n c u r s u l i q u e \ l i p u r u m \\
A u t \ i m p a r a t u s \ a t e r g a h o r b i a l b e r o s. \]

These having hold, will hardly be taken off again, like the Indian and Persian Dogs, for which cause they are called incommodefit, that is, modi nefcius, such as know no mean, which caused Horace to give counsel to keep them tyed up, saying:

\[ T e n e m a t c c r e s \ l o r a m \ m o l l o s s e s. \]

The people of Epirus do use to buy these Dogs when they dye, and of this kind were the Dogs of Seylla, Nicoside, and Euplidet. The Hircanian Dogs are the same with the Indians. The Patsonian, Persisan, and Median, are called Synthese, that is companions, both of hunting, and fighting, as Pliny writeth:

\[ I n d o c l i s i o d a t p r o t i a M o l h u s. \]
The Dogs of *Lycia*, and *Lacus*, are also very great, and fight with *Bores*. There are also a kind
of people called *Cynoct*, near *India*, so called, because for one half of the year they live upon the
milk of great Dogs, which they keep to defend their Country from the great oppression of
wilde *Cardel*, which descend from the *Woods* and Mountains of *India* unto them yearly, from the Sum-
mer solstice to the middle of Winter, in great numbers or *Hyraxes*, lice *Bees* returning home to
their Hives and *Honey-combs*: Thee *Cattel* set upon the people, and destroy them with their
horns, except their Dogs be present with them, which are of great *Fur* and *Strength*, that they
easily tear the wilde *Cattel* in pieces, and then the people take such as be good for meat to them-
seves, and leave the other to their Dogs to feed upon: the residue of the year they not only hunt
with these *Dogs*, but also milk the females, drinking it up like the milk of *Sheep* or *Goats*. Thee
great *Dogs* have also devoted men, for when the servant of * duges* the *Cynick*, ran away from
his master, being taken again and brought to *Delphi*, for his punishment he was torn in pieces by
*Dogs*. *Euripides* also is laid to be slain by *Dogs*; whereupon came the proverb *Cudos diges*, a *Dogs*
revenge: for King *Achilles* had a certain Dog which ran away from him into *Thracia*, and the
*Thracians* (as their manner was) offered the same *Dog* in sacrifice, the King hearing thereof, laid
a punishment upon them for that offence, that by a certain day they shoul pay a talent; the people
breaking day, sull forned *Euripides* the Poet (who was a great favourite of the Kings) to mediate for
them, for the release of that fine: whereunto the King yielded: afterward as the said King
returned from hunting, his *Dogs* fragling abroad, met with *Euripides*, and tore him in pieces, as if
they fought revenge on him, for being bribed against their fellow which was slain by the *Thracians*.
But concerning the death of this man, it is more probable, that the *Dogs* which killed him, were
set on by *Aristarch* and *Cratinus*, two *Thefalonians* Poets, his emulators and corrvalls in *Poetry*,
which for the advancement of their own credit, cared not in most *Favage* and *Barbarous* manner, to
make away a better man than themselves. There were also other famous men which perished by *Dogs*:
as *Alcman*, *Thersites*, and *Lacus*; of *Thersites*, Ovid writeth thus:

\[dique sì illis quibus eft Laconis Deos\]
\[Ante diem rapto non autocum Thrase.\]

And of *Lacus* and *Alcman* in this manner;

\[Qua re creautem spectantes membra Diane,\]
\[Sunt creautae tarenti diripere Lacinum.\]

*Lucian* that scoffing *Apostate*, who was once a *Christian*, and afterward endeavoured all his wit to
rival at *Christian* Religion, even as he hated and rent his first profession, so was he rent in pieces
by *Dogs*; and *Stercodiius* the *Philosopher* of *Athens*, having been long sick, and under the hands of
*Physicians*, he often times anointed the body with *Bugilis* fewer, and on a day having so anointed
himself, lying abroad sleeping thereon, the *Dogs* came, and for the desire of the *fat* tore his body
in pieces. I cannot here forget the memorable story of two Christian *Martyrs*, *Gorgonia* and *Do-
ruces*, which were put to death under *Diocletian* in the ninth persecution, and when they were dead,
their carcases were cast unto hungry *Dogs* of this *kind*, kept for such purposes, yet would not the
*Dogs* once form such ill at them, or come neer to touch them; and because we may judge that
the raving nature of these *creatures* was restrained by divine power: We also read that when
*Benignus* the *Martyr*, by the commandment of *Aurelian*, was also thrown alive to be devoured of
these *Dogs*, he escaped as free from their teeth, as once *Daniel* did from the *Lions* den. I may
also add unto thee the *Dogs* of *Alani* and *Ilyris*, called *Moffini*, who have their upper lips hang
over their nether, and look fierce like *Lyons*, whom they resemble in neck, eyes, face, colour, and
nails: falling upon *Beares*, and *Boars*, like that which *Anthologius* speaketh of, that leaped into
the *Sea* after a *Dolphin*, and so perished; or that called *Lydia*, slain by a *Boar*; whose *Epitaph* *Mar-
tial* made as followeth:

\[Amphitheatralis inter mutritia magistris\]
\[Venatrix flubus afera blandu domi,\]
\[Lydia diebore, domino fulissima dextro,\]
\[Quin non Erigones malius habere Cantem,\]
\[Nec qui Dicteu Cephalum de gente scutis,\]
\[Luciferus pariter venit ad afera decem,\]
\[Non me longa dies, nec immutis absultiis aest,\]
\[Quallt Duluschis fata fiere canit,\]
\[Fulmineo sibiunctus apri fum duce premit,\]
\[Quantus erat Calydon, at Erymantheum,\]
\[Nec querer, in inara quemvis sito rapita per membrum,\]
\[Non putata, fatu nobilioris miri.\]

The French

*Dog*.

There be in *France* certain great *Dogs* (called *Auges*) which are brought out of *Great Britain*, to
kill their *Beares*, *Wolves*, and wilde *Boars*; these are singularly swift and strong, and their leaders,
the better to arm them against the teeth of other Beasts, cover some of their parts with thick clouts, and their necks with broad collars, or else made of Badgers skins. In Gallia Narbon., they call them Libanter, and the Pelasgians call all made Dogs for the Wolf, and such like Beasts, Veltri: and particularly for the Bear and Bore, Glarezi, for Hares and Wulf, Podonibusell, and Dogs of a middle scantling between the first and the second, 111.

Gray-hounds are the keen of these kinds, and yet swift and fierce as any of the residue, resuming no kind of Beast, if he be turned up thereunto, except the Porcupine, which calls her sharp pens into the mouth of all Dogs. The bilt Gray-hound hath a long body, strong and reasonable great, a neat sharp head, and pendent eyes, a long mouth, and sharp teeth, little ears and thin gristles in them; a straight neck, and a broad and strong break, his fore-legs strong and short, his hinder-legs long and straight, broad shoulders, round ribs, flethy buttsck, but nor fat, a long tail, strong and full of finew, which Nemesian describeth elegantly in these verses;

Sit cervibus altae,
Castrum sub finge deceter prana carinam:
Remibus empl psa validit diduque coras
Sit rigido, multanoque gerat sub pellere latu.
Quod fermin sursum ficta se eigo ab alto:
Curisque fumit molles fluent in curvis ormis.
Elegi tunc curse facltem, facileque recunf,
Dum superant vires, dona loft juvenis.

Of this kind, is that able to be chosen among the whelps, which weigheth lightest; for it will be foone at the game, and go hang upon the greater beasts hindering their swifniness, untill the stronger and heavier Dogs come to help: and therefore beides the marks, or necessary good parts in a Gray-hound already spoken of, it is requisite that he have large sides, and a broad mid-riff or film about his heart, that so he may take his breath in and out more easily: a small belly, but if he be great, it will hinder his speedy course; likewise that he have long legs; thin and soft hairs; and thefe mutt the Hunter lead on the left hand if he be a foot, and on the right hand if he be on Horleback.

The bilt time to try them, and train them to their game, is when they be twelve months old, however some hunt them att ten months, if they be males, and at eight, if they be female; yet is it better not to strain them, or permit them to run any long course till they be twenty months old, according to the old verfe;

Libera tunc primum conuesa
Caras ligari,
Iam cum biis denro Phare repente habito,
Sec parsus walles flatais sepulcri Thule.
Nec curas virtute parum, &c.

Keep them also in the lean or flip while they are abroad, untill they be able to pursue their course, I mean, the Hare or Deer, and loofen not a young Dog, till the game have been on foot a good tenon, lefl he be greedy of the prey he strain his limbs till they break. When the Hare is taken, divide some part thereof among your Dogs, that so they may be provoked to speed by the sweetnes of the fleth.

The Lacomedon Gray-hound was the bilt breed, they were first feed of a Fox and a Dog, and therefore they were called Alpecidet, these admite copulation in the eighth moneth of their age, and somettimes in the fixt, and fo continue bearing as long as they live, beaing their burthen the fixth part of a year, that is, about fixty days, one or two, more or lefs; and they better conceive, and are more apt to procreation while they are kept in labour, then when they lie idle without hunting. And these Lacomedon Dogs differ in one thing from all other Dogs whatsoever, for whereas the male out-liveth in vulgar Dogs of all Countries the female, in thefe the female out-liveth the male, yet the male performeth his labour with more alacrity, although the female have the sharper sense of finelling.

The noblest kind of Dogs for the Hare keep home, unless they be led abroad, and seldom bark: they are the bilt which have the longest necks, for which cause they use this artificial invention to stretch their necks; they dig a deep hole in the earth, wherein they set the Gray-hounds meat, who being hungry, thrulhet down his head to take it, and finding it but a small reach, stretcheth his neck above the measure of nature, by custom whereof, his neck is very much lengthened. Other place the Gray-hound in a ditch, and his meat above him, and so he reacheth upward, which is more probable, It is the property of these Dogs to be angry with the leffer barking Curs, and they will not run after every trifling Beast, by secret instinct of nature, differing what kind of Beast is worthy or unworthy of their labour, disdaining to meddle with a little or vile creature. They are nourished with the same that the smaller hunting Dogs are; and it is better to feed them with milk then whey. There are of this kind called Veltri, and in Italian, Veltra; which have been procressed by a Dog and Leopard, and they are accounted the swiftest of all other. The Gray-hounds which are most in request among the Germans, are called Windpills, alluding to compare their swifness with
The History of Four-footed Beasts.

with the winde, the fame are also called *turkeywind* and *Herzbrand*, and *Falco* a *Falcon*, is a common name whereby they call these Dogs. The French make most account of such as are bred in the Mountains of *Dalmatia*, or in any other Mountains, especially of *Turkey*; for such have hard feet, long ears, and brittle tails.

There are in England and Scotland, two kindes of hunting Dogs, and no where else in all the world; the first kinde they call in Scotland, *An Rache*, and this is a foot-smelling creature, both of wilde Beasts, Birds, and Fishes also, which lie hid among the Rocks; the female hereof in England, is called a *Brach*. The second kinde is called in Scotland, a *Slath-bound*, being a little greater then the hunting Hound; and in colour for the most part brown, or fandy-spotted. The sense of smelling is so quick in these, that they can follow the foot-steps of theves, and perfue them with violence until they overtake them; and if the theef take the water, they call in themselves also, and swim to the other side, where they finde out again aforeth their former labour, untill they finde the thing they seek for: for this is common in the Borders of England and Scotland, where the people were wont to live much upon theft; and if the Dog brought his leader unto any house, where they may not be suffered to come in, they take it for granted, that there is both the stolen goods, and the theef also hidden.

The Hunting Hound of Scotland called *RACHE*, and in English a *HOUND*.

The *SLYTH-HOUN D* of Scotland, called in Germany a *SCHLATT HVND*.
Of Dogs.

The English Blood-Hound.

We are to discourse of leffer hunting Dogs in particular, as we finde them remembered in any Histories & descriptions, Poets or other Authors, according to the several Countries of their breed and education; and first for the English Dogs, their nature and qualities hereafter you shall have in a several discourse by it self. The Blood-hound differeth nothing in quality from the Sceith Shuf-hound, saving they are greater in quantity, and not alway of one and the same colour; for amongst them they are sometime red, sanded, black, white, spotted; and of such colour as are other Hounds, but most commonly brown or red.

The virtue of smelling called in Latine, Sagacitas, is attributed to these as to the former hunting Hound, of whom we will first of all discourse, and for the qualities of this Hound, which maketh the Beast admirable, Plautus seemeth to be of opinion, that it received this title from some Magicians or Sage Wirds (called Sage) for this be faith, speaking of this Beast: Canem hanc effe quidem Mejis par suit: nesam edepol sagax babes: It is also attributed to Mice, not for smelling, but for the sene of their palace or stable; and also to Geese: In a Dog it is that sensation which searcheth out and defcreveth the roults, fourms, and lodgings of wilde Beasts, as appeareth in this verse of Livius Andronicus.

Cum primis fida Canum-vis
Dirige euripetos ad custa culobia canes.

And for this cause it hath his proper Epithets, as Olora canum vis, promissa canum vis, & maribus apes, & uides: Poets now called this kinda Hounds, for so did Persius before him, and the Grecians, Spurbund; and Leisihund, laghund, because their ears are long thin, and hanging down, and they differ not from vulgar Dogs in any other outward proportion, except only in their cry or barking voyce.

The nature of these is, being set on by the voyce and words of their leaders, to call about for the fitting of the Beast, and so having found it, with continual cry to follow after it till it be weared, without changing for any other; so that sometimes the Hunters themselves take up the Beast, as least wise the Hounds seldom fail to kill it. They seldom bark, except in their hunting chase; and they then follow their game through woods, thickets, thorns, and other difficult places, being alway obedient and attentive to their leaders voyce, so as they may not go forward when he forbideth, nor yet remain near to the Hunters, whereunto they are framed by Art and discipline, rather then by any natural instinct.

The White Hounds are said to be the quickest fent and surest nosed, and therefore best for the Hare; the black ones for the Boar, and the red ones for the Hart and Roe: but hereunto I cannot agree, because their colour, (especially of the two later) are too like the game they hunt; although there can be nothing certain collected of their colour, yet is the black Hound harder and better able to endure cold, than the other which is white. In Italy they make account of the spotted one, especially white and yellowish, for they are quicker nosed: they must be kept tyed up till they hunt, yet so as they be let loose now and then a little to ease their bellies, for it is necessary that their kennel be kept sweet and dry.

It is questionable how to discern a Hound of excellent sense, (yet as Blondus saith) the square and flat nose is the best sign and index thereof: likewise a small head, having all his legs of equal
equal length, his breath not deeper than his belly, and his back is plain to his tail, his eyes quick, his ears long hanging, but sometimes stand up; his tail nimble, and the beak of his nose alway to the earth, especially such as are most silent or bark least.

There are some of that nature, who when they have found the Beast they will stand still until their Hunter come, to whom in silence by their face, eye, and tail, they shew their game. Now you are to observe the divers and variable disposition of Hounds in their finding out of the Beast: some, when they have found the footsteps go forward without any voyage or other shew of ear or tail. Again, another sort, when they have found the footings of the Beast, prick up their ear a little, but either bark, or wag their tails; other will wag their tail, but not move their ears, other again wring their faces, and draw their skins through over much intention, (like sorrowful persons) and so follow the scent, holding the tail immovable.

There be some again, which do none of these, but wander up and down, barking about the surest marks, and confounding their own foot-steps with the Beasts they hunt, or else forfake the way, and so run back again to the first head; but when they see the Hare, they tremble and are afraid, not daring to come near her, except the run away first: thes with the other, which hinder the cunning labours of their colleagues, tripping to their feet, and running before their betteres, deface the beast mark, or else hunt counter, (as they term it) take up any false scent for the truth, or which is more reprehensible, never forfake the high ways, and yet have not learned to hold their peace: unto these also you may add those which cannot discern the footings or pricking of the Hare, yet will they run speedily when they see her, or else at the beginning set forth very hot, and afterward tyrne, and give over lazily; all these are not to be admitted into the kernel of good Hunds.

But the good and approved Hounds on the contrary, when they have found the Hare, make shew thereof to the Hunter, by running more speedily, and with gullure of head, eyes, ears, and tail, wind- ing to the Hares mule, never give over prosecution with a gallant noise, no not returning to their leaders, left they lose advantage: they have good and hard feet, and are of lately Romacks, not giving over for any hare, and fear not the rocks or other mountain places, as the Poet expresseth;
Of Dogs.

There are divers Countrey Dogs like unto thefe, as the Geloni and Gnosii, which caufed Ovid to reckon and call Lebolares one of Alcinous Dogs Gnosius; whom Oppianus compareth to the Polypterus fish, which swimming in the waters the leaves of Olives, by the fent is drawn to the land to eat them. The Spanifh Dogs whom the French call Epagnexs, have long ears, but not like Brachies, and by their noses hunt both Hares and Conies, they are not rough, but smooth haired. The Tufcan Dogs are commendèd by Nemesian; notwithstanding, they are not beautiful to look upon, having a deep shaggy hair, yet is their game not unpleafant.

Quin & Tuscurum ton et extrema volupias
Saepè Canum : formas e ilis loci obfina vile, &c.
Hand tamen injucunda dabunt tibi mures prædes, &c.
Aquæ etiam leporum secreta subliia manifest.

The Umbrian Dog is sharp nosed, but fearfull of his sport, as Gratius expreffeth.

Ant axit Umbro
Nare fagax et cale feris,--
At fugit adversus idem quos efferet bofies,
Tanit foret virtus; & tantum vellet in armis.

The Etolian Dogs have also excellent smelling noses, and are not flow or fearful, whom Gratius expreffeth as followeth:

At clangore citat, quos nondum confpixit apros,
Ardua quaenique Canis de flirpe (malignum
Officium) &c.
Qua fujtra nimius prosperat favor,--
Mitrum quem celere & quantum noire merentur.

The French Dogs are derived or propagated of the Dogs of Great Britain, and are swift and quick fentied, but not all, for they have of divers kindes, as Gratius expreffeth in thefe words;

Magnaque diversis exultit gloria Celsi.

They are very swift, and not sharp nosed, wherefore they are mingled in generation with the Umbrian Dogs, and therefore he celebrateth in many verfes, the praisè of the brift Hunter (as he taketh him.) Hayno Banius and his Dog Metegen, and afterward the Dog Petronius: but it may be, that by Metogen, he meaneth the Dogs of Lybia, because there is a City of that name: and by Petronius the Dogs of Italy, for Petronia is a river that falleth into Tiber.

The Grammarians call a Dog engendered of a Hound, and an ordinary French Dog, Vertigus, a Tumbler: because he jetteth himfelf to hunting, and bringeth his prey to his Muler, whereupon the Romans made this Difliption:

Non sibi, fed Domino venatur vertigus acer,
Illefum leporem qui tibi dente feret.

The Water Spagnel.

Such are also other smelling Dogs, called in the German tongue (Lochweide) that is, Terriers or Beagles: these will set upon Foxes and Badgers in the earth, and by biting expel them out of their dens; whereof Aeniose reporteth a wonder, that one of them followed a Fox under the ground in Exturia: and there made so great a noise by barking, that the Hunters went aloft into the Cave, where they saw many strange things which they related to the chief Magistrate.

Unto all these smelling Dogs, I may also add the water Spagnel, called in French, Parteil; and
and in Germany (Wolfeshound: thes) who is taught by his Master to seek for things that are lost, (by words and tokens) and if he meet any person that hath taken them up, he ceaseth not to bay at him, and follow him till he appear in his Maiters presence. Thes also will take water-fowl, and hunt Otters and Beavers, (although Hounds also will do the same) and watch the stroke of a Gun when the Fowler shooteth, and instantly run into the water for the dead fowl, which they bring to their Maiter. They use to shear their hinder parts, that so they may be the less annoyed in swimming; whose figure is in the bottom of the former page described.

I may here add the Land-Spagnel, attending a Hawk, who hath no proper name in English, except from the fowl he hunteth; for which cause the French call them Dogs of the Quails; and the Germans, Vulpes-hund; a fowl Hound; although all Birds little fear Dogs, except the Buitard, who hath a heavy body, and is not able to fly far; yet are these taught by Falconers to retrieve and raise Partridges, for they firft take them into the fields, and shew them Partridges, whom after they have favoured twice or thrice, by custom they remember, and being uncoupled, will better themselves into all corners to finde them, being after a while very proud of employment, and very understanding in their game: they are for the most part white or spotted, with red or black: the Polonians call them (Polonitzi) and a Poet describeth them thus:

Nare sagax alius, campisque undique volueres
Quart, & audacem luc indeffenis & illinc.
Disrurrit.

Of the mixtv kinde of Dogs calld in English MANGRELS or MONGRELS.

Thee we call Mangrels, which though they be on both fides propagated by Dogs, yet are they not of one kinde: for as once Dogs coupled with Afles, Leopards, Lyons, Tygers, Apes, or any fuch Bealls, according to the olde Verfe;

Canis congeneres Lupus, Vulpis, Hyana, Tygiris.

So now it is ordinary for the Gray-hound to couple with the Malatve, the Hound with the Gray-Hound, the Malatve with the Shepheards Dog, and the Shepheards Dog with any other Car or Beagle: of these kinde we will now speaken in order. And it is not to be omitted, that this commixtion of kindees have been invented by Hunters for the amendment of some natural fault, or defect they found in the Monophyll, that is, one fingle kinde, and fo hereby they added some qualities to their kinde which they wanted before either in strength of body, or craft of wit: for they derive both of thefis from their Sires, wherefore Oppianus declareth, that in the commixtion of Dogs, the Ancients coupled together thefe kinde, the Arcadian with the Kleian, the Cretofian with the Pountian, the Carian with the Thracian, the Lacedemonians with the Tyrrhenian, the Sarthian with the Iberian, and the Gallican Dogs with the Umbrian, because they want the quick fene of smelling: according to thefe verses:

Quandam inconfultis mater dabat Umbros Gallis
Senfum agilem, texere animos de parte Gelone
Hyrcanos vana tantum Galudonis lingue
Exhibit vtition patre emendata Malorsi.

These Dogs so generated are peculiarly teemed in Greek, Hybris, and Hybrida, as Paphyrius writeth. The French Wolves were wont to have a Dog for their Captain or Leader, and it is ordinary for Wolves and Dogs to couple together, as by experience it hath been oberved: And it is certain, that Malatve Dogs had their firft beginning from this copulation, wherefore Virgil calleth one of thefe Dogs Lyeisca.

---Referenceis Lupum torvo ore Lyeisca.

The Dogs which are bred of Tboes, are commended for their rare qualities and understanding parts in the time of Wars, by Hagonas Bovis in thefe verses;

Hic & semiferam ibson de sanguine prolem
Seu nonis voces, seu mult ad pigorga maris
Et subere asfus, & parvis dismure lateris
Vulpins specie.
The Dogs of Hircania do of themselves run into the Woods, (like adulterers) and seek out the Tygers to engender with them, which thing Gratian rememberth elegantly in many verses:

— Utque gravis sucedere Tigri
Aera canis, majore sill de juvenis fprum,
Excitat fuis magnus pugnae adopta.

In the rank of these Mangrels, I may add in the next place those Dogs, called by the Gratian, Symmaphai, and syntomophies, because they attended upon men in their travels and labors to defend them, and are taught to fight for them, both against men and other beasts; wherein they are as ready to take knowledge of violence offered to their Master, and also to revenge or hinder it, as a reasonable creature can be. These are called of the Latines, Canes socii defensores; foiable Dogs: of which there betwixt some, the first, is lefser, being of rough and long curled hair, his head covered with long hair, of a pleasant and tractable disposition, never going far from his Master, such was the Dog of Tibur, and the Dog of Cedrus the Poet, called Chiron, wherein heareth maketh mention: whose benevolence and ready minde toward their keepers and nourishers may appear by this story of Cololphonis.

Upon a feast, he with a Servant, and a Dog, went to a certain Mutt to buy Merchandise, and as they travelled, his Servant which carried the purse, diversed a little out of the way, to perform the work of nature, and the Dog followed him: which being done, he forgot to take up the Purse of mony that had fallen from him to the ground in that place, and so departed; the Dog seeing the purse, lay down beside it, and stood not a foot: afterward the Mutt and master went forward; missing their Dog, and not their money, until they came to Mutt or Fair, and then for want of mony were constrained to return back again without doing any farther thing: wherefore they resolved to go back again; the same way they came, to see if they could hear of their mony, and at last, when they came to the place where the servant had left the purse, there they found both Dog and mony together; the poor Cur scarce able to see or stand for hunger: when he saw his Master and the servant came unto him, he removed from the earth, but life not able to carry any longer in his body, at one and the same time in the presence of his friends and nourishers, he also dyed, and took of them both his last farewell, through the faithful custody of their forgotten goods; for which it is apparent, that one part of their faithful disposition is, to keep their nourishers goods committed unto them, as shalbe afterward more at large manifested.

Their watchful care over their Masters may appear also by these stories following, for the Dogs of Xanippus followed their Master to the Ship, as at what time he was forewarned by the Oracle to depart out of Albani, by reason of the Persians was in Greece, and so they failed with him to Salamine; and as they failed by the way he commanded one of them to be cast into the Sea, who continued swimming after the Ship until he dyed, for which cause his Master buried him.

When Gelson the Syracusan in his sleep had a fearful dream, that he was stricken with fire from Heaven, and with imprefition of fear, cried out very lamentably; his Dog lying beside him, and thinking that some peril or thef had been violence to his Master, he presently leaped up to the bed, and with shouting and barking awakened him, and so was he delivered from a horrible fear, by the barking of his Dog.

The Tyrians which have the black and the first purple in the world, are said in History to have it by the first occasion of Hercules Dog. Hercules falling in love with a Nymph called Tyra, and travelling toward her with his Dog, he saw the purple fish creeping upon a stone, the hungry Dog caught the fish to eat it and having devoured it, his lips were all dyed or coloured with the same: when the Virgin saw that colour upon the Dogs lips, she denied the love of Hercules, except he could bring her a garment of that colour, whereupon the valiant man knowing by what occasion the Dogs lips received such a tincture, went and gathered all the purple fishes and worms he could finde, and prelling their blood out of them, therewith coloured a garment, and gave it to the Nymph; for reward whereof, he poiffessed the Virgin, being by this means the first inventor of the Phidian tincture.

Among these are to be remembered those loving Dogs, who either have fought for their Masters and defend them, or else declared them that murdered their keepers, or that which is more admirable, leaped into the burning fires which confumed the dead bodies of their nourishers. Such an one was the Dog of Cedrus, who being slain in a certain civil War at Rome, and his enemies coming about him to cut off his head, his poor Dog interposed his body between the blows, and would not suffer any foe once to reach his Master, until by more then five hundred footsteps the Dog was cut in pieces, so living and dying a most faithful companion and thankful friend to him that fed him.

The like was a Dog of Darius the last King of the Persians, after he was slain by Beus and Nabuzarans in the battle against Alexander, & so did the Dog of Silanus fight for his Master against thieves, and when he was slain, he departed not from the body, but kept it warily from Dogs, Birds or wild Beasts, sitting upon his privy parts, and covering them until the Roman Captains came and buried it.

But most admirable was the love of a certain Dog to his Master punished with death, for the fact against Germanicus. Among other, this Dog would never go from the prison, and afterward when his Masters dead body was brought in the presence of many Romans, the Curruftered most lamentable and sorrowful cries; for which cause one of the company threw unto him some meat, to see
fee if that would stop his mouth, and procure silence: but the poor Dog took up the meat, and carried to his masters mouth, not without the singular parrion of the beholders: at last the body was taken up and cast into the river Tiber, the poor Dog leaped in after it, and endeavoured by all the means his weakness could afford, to keep it from sinking, in the presence of an innumerable multitude, which without tears could not look upon the loving care of this brute beast.

The Dogs of Gelon, Hieron, Lyctus, Pyrrhus King of Epirus, Palus the Tragedian, and Theodorus, leaped into the burning fires which consumed their masters dead bodies. 

As King Pyrrhus by chance travelled in his Country, he found a Dog keeping a dead corps, and he perceived that the Dog was almost pined, by tarrying about the body without all food, wherefore taking pity on the beast, he cauèd the body to be interred, and by giving the Dog his belly full of meat, he drew him to love him, and so led him away: afterward as Pyrrhus murthered his fouldiers, and every one appeared in his presence, the Dog also being beside him, he faw the murthers of his master, and fo not containing himself; with voyage, tooth, and nail, he fet upon them: the King fpiepecting that which followed, examined them if ever they had seen or known that Dog, they denied it, but the King not satisfied, charged them that fully they were the murthers of the Dogs (Matter, for the Dog all this while remained fierce against them) and never barked before their appearance, at the lait their guilty confequences brake forth at their mouths and tongues end, and fo confeced the whole matter.

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The like was of two French Merchants which travelled together, and when they came into a certain Wood, one of them rofe against the other for defire of his money, and so flew him and buried him. His Dog would not depart from the place, but filled the Wood with howlings and cries; the murthers went forward in his journeys, the people and inhabitants near the said Wood, came and found both the murder and the dogs, and the Dog, which was murthered till the Fain was done, and the Merchants returned, at which time they watched the high ways, having the Dog with them, who seeing the murthers, unally made force at him without all provocation, as a man would do at his mortal enemy; which thing caused the people to apprehend him, who being examined, confeced the fact, and received condign punishment for so foul a deed.

To conclude this discourse with one memorable story more out of Blondus, who relateth that there was a certain woman near Paris, who was beloved of two young men, one of them on a day took his taffe and his Dog, and went abroad (as it was thought, of purpose to go to his love) but it happened that by the way he was murthered and buried, and the Dog would not depart from the grave of his Master: at the lait, he being mislaid by his father and brethren, one of them went also to seek him, and see what was become of him, and so finding, found the Dog lying upon his grave, who bowled pitifully when he saw his Master's brother: the young man cauèd the ground to be opened, and so found the wounded corps of his brother, which he brought away, and cauèd to be buried till the murtherer could be describèd: afterward in process of time, the Dog in the presence of the dead mans brethren espied the murtherer, and presently made force upon him very eagerly; which the brethren suspecting, apprehended him, and brought him before the Governors of the City, who examining him with all the policies they could invent, what should be the occasion, why the Dog should so eagerly fly upon him at all times, whenever he was brought into his presence, could not get any confession of the fact from him: then the Magistrate adjudged, that the young Man and the Dog should combate together.

The Dog was covered with a dry fod skin in leaf of armour, and the murtherer with a spear, and on his body a little thin linnen cloath, both came forth to fight, and so the man presently made force at the Dog, who leaping up to the face of the murtherer, took him fell by the throat, and overthrew him, whereas the wretch amazed, cried out, saying, take pity on me you reverend Fathers, and pull off the Dog from my throat, and I will confess all; the which they performed, and he likewise deuoted the cauè and manner of the whole murther, for which thing he was deservedly put to death. And thus far of the leffer sociable Dogs, now followeth the second kinde of the greater.

The greater sociable Dogs of defence are such as fouldiers use in wars, or else are acclimated to keep house or cattell. This kinde ought to be horrible, fierce, strange and unacquainted with all, except his Master, so that he be always at daggers drawing, and ready to fight with all which shall but lay their hands upon him, for which cause he ought to be instruèd from his littering or infancy by art or continual discipline, to supply in him the defects of nature: let him be often provoked to wrath by bores, and afterward as his growth, let some strainger set upon him, with weapon, as taffe or sword, with whom let him combate till he be wearied, and then let him tear some piece of the provokers garment, that so he may depart with a conceit of victory; after the fight tye him up, and suffer him not to straggle loose abroad, but feed him thus tyed up, so shall he in
short time prove a strong defender, and eager combatant against all men and beasts which come to deal with him. Of this fort they nourish many in Spain, and in other places.

Such an one was the Dog of Præsens the Tyrant of Thrasybul, being a very great and fierce Beast, and hurtful to all, except them who fed him daily. He used to let this Dog at his chamber door to watch and guard him when he slept, that who so ever was afraid of the Dog, might not approach near without exquisite torments. Angus gave one of these to the Poet Eupoleus, who taught him by manysignes and gestures for the love of his meat, to observe his fervant Ephebus, if at any time he stole money from him. And at the last, the sly Dog observed the fervant so narrowly, that he found him robbing his Maiters cofferes: wherefore he instantly fell upon him and tore him in pieces. The which Dog afterward died for sorrow of his Maiters death; whereupon Elianus faith, that the place of his death in Ægina was called the place of mourning, to the day of his writing.

Nicomedes King of Byzantium, had one of these Molossian great Dogs, which he nourished very tenderly, and made it very familiar with himself: it fell out on a time, that this King being in dalliance with his wife Diotisale, in the presence of the Dog, and the again hanging about the Kings neck, kissing and provoking him to love with amorous gestures, the Dog thinking he had been offering some violence to his master the King, presently flew upon her, and with his teeth pulled her right shoulder from her body, and so left the amorous Queen to dye in the arms of her loving Husband: which thing caused the King to banish the Dog forever out of his sight, for sorrow whereof he soon after dyed; but the Queen was most nobly buried at Nicomedos in a golden Sepulcher: which was opened in the reign of the Emperour Michael, son of Theophilus, and there the womans body was found whole and not putrefied, being wrapped in a golden vellure, which taken off, and tried in a furnace, yeelded above an hundred and thirteen pounds of pure gold.

When a Dragon was sitting upon Orpheus, as he was occupied in hawking by his Dogs he was sav'd, and the Dragon devoured. And when Calus one of the Senators of Placentia being sick, was set upon by certain lewd fellows, he received no wound till his Dog was slain.

There was never any thing more strange in the nature of Dogs, then that which happened at Rhodes besieged by the Turk, for the Dogs did there defend betwixt Christians and Turkis; for towards the Turks they were most eager, furious, and unappeasable, but towards Christians, although unknown, most eafe, peaceable and placidious, which thing caused a certain Poet to write thus:

His enure sedem quis nostris serva sub are
Arus & Carpebii defendit littera ponti.

There were two hundred of these Dogs which brought the King of Carmania from battellm, refcuting him from all that reached. The Cypriotes and Cappadenion, or Cyprian Dogs fought in all their battells: so likewise the Cypriotes, Herriesian, and Magnesian Dogs: these also the Spaniards used in India, to hunt out the naked people, falling upon them as fiercely as ever they would upon Bores, or other wide Beasts, being pointted unto by their leaders finger. And for this cause was it, that Vespasian in his Capitol at Rome, on an Indian Lord, and three other his wicked companions to be cast unto Dogs for their unnatural lust: but the Inhabitants of Carmania and Carib, do drive away the Dogs, for through their admirable activity in eathing darts, they pierce the Dogs ere they come near them with pouioned arrows. And thus much for the great warlike defensive Dogs.

In the next place followeth the Shepheard Dogs called by Virgil, Perserius Canis: and this cannot properly be termed a dumb keeper: for there is no creature that will more stir, bark, and move noile, then one of these against thief or wilde beast. They are also used by Horsemen, Swine-heards, and Goat-Heards, to drive away all annoyancees from their Cattel, and also to guide & govern them, in executing their masters pleasure upon signs given them, to which of the stragling Beasts they ought to make force. Neither is it requisite that this Dog be so large or nimble as is the Grey-hound, which is appointed for Deer and Hares.

But yet that he be strong, quick, ready, and understanding, both for brauling and fighting, so as he may fear away and also follow (if need be) the ravinge Wolf, and take away the prey out of his mouth; wherefore a square proportion of body is requisite in these Beasts, and a tolerable lightnes of foot, such as is the Village Dog, used only to keep houses, and hereof also they are the best who have the greatest or loudest barking voyces, and are not apt to leap upon every stranger or beast they see, but reserve their strength till the juft time of employment.

They approve also in this kinde above all other, the white colour; because in the night time they are the more easilie discerned from the Wolve, or other noisome beast; for many times it falleth out, that the Shepheard in the sty-light, firketh his Dog instead of the Wolf: these ought to be well faced, black or dusky eyes, and correspondent nostrils of the fame colour with their eyes, black ruddy lips, a crooked cannoyle noile, a flat chap with two great broches,or long straight sharp teeth growing our thereof, covered with their lips, a great head, great ears, a broad breaf, a thick neck; broad and folid shoulders, straight legs, yet rather bending inward thenstanding outward; great and thick feet, hard crooked nails, a thick tail which groweth lower to the end thereof, then at

Of Dogs.

Blondus.

Of defending Dogs.

Blandus.

Of Perserius Canis.

Blondus.

Of Perserys Canis.

Bleedus.

Of Perserius Canis.

Bleedus.

Of Perserius Canis.

Bleedus.

Of Perserius Canis.

Bleedus.

Of Perserius Canis.

Bleedus.

Of Perserius Canis.

Bleedus.

Of Perserius Canis.

Bleedus.
The History of Four-footed Beasts.

Strabo.

Varr. & Fraulo.

The love of Dogs to the Cattle they attend.

A pretty fable of the Sheep and the Dog.

The colour of this Dog.

Of Mariners Dogs on shipboard.

Of the VILLAGE-DOG, or HOUSE-KEEPER.

His Village Dog ought to be fatter and bigger than the Shepherds Dog, of an elegant, square and strong body, being black coloured, and great mouhted, or barking bignly, that fo he may the more terrifie the Theef, both by day and night, for in the night the beaft may feize upon the robber before he defierne his black skin, and therefore a fotted, banded, party coloured Dog is not approved. His head ought to be the greatest part of his body, having great eyes hanging down, and black eyes in his head, a broad breath thick neck, large shoulders, ftrong legs, a rough hair, short tail, and great nails: his difpofition muft not be too fierce, nor yet too familiar, for fo he will laun upon the Theef as well as his Masters friend. Yet it is good that fome time he rate againft the household fervants, and alway againft ftrangers, and fuch they muft be as can wind a stranger afar off, and defcry him to his Mafter by barking as by a watch-word, and fetting upon him, when he approacheth near if he be provoked. Blondus commendeth in this kinde, fuch as sleep with one eye open and the other shut, as any fmall noife or firit wake and raife him. It is not good to keep many of these curfit Dogs together, and then few which he kept muft be tied up in the day time, that fo they may be more vigilant in the night when they are let loose. There are of this kind which Mariners take with them to Sea, to preferve their goods on Ship board, they chufe them of the greatefl bodies and lowdelt voice, like the Croatian Dog,efembling in hair and bignefs, and fuch as are very watchful,according to the faying of the Poet:

Exagianti & lar, & turba Diaies fures,
Pervigilantique lares, pervigilantique Canes.
Of Dogs.

And such also they nourish in Towers and Temples; in Towers, that so they may defcry the approaching enemy when the Souldiers are asleep; for which cause, Dogs seen in sleep, signify the careful and watchful wife, servants, or Souldiers, which foresee dangers and preserve publick and private good.

There was in Italy a Temple of Pallas, wherein were referred the axes, instruments, and armour of Diomedes and his Colleagues, the which Temple was kept by Dogs, whose nature was (as the Author faith) that when Greece came to that Temple, they would fawn upon them as if they knew them; but if any other Courteymen came, they thowed themselves wilde, fierce, and angry against them. The like thing is reported of a Temple of Vulcan in Rhea, wherein was preserved a perpetual and unquenchable fire, for the watching whereof, were Dogs designed; who would fawn and gently flatter upon all those which came softly and religiously to worship there, leading them into the Temple like the familiars of their God; but upon wicked and evil disposed lead persons, they barked and raged, if once they endeavoured so much as to enter either the Wood or Temple; but the true cause hereof was, the imputation of some impure and deceitful, unclean, diabolical spirits. And by the like infinuit, Sepio Africanus was wont to enter into the Capitol, and command the Chappel of Jupiter to be opened to him, at whom no one of the Keepers Dogs would ever stir, which caused the Men keepers of the Temple much to marvel, whereas they would rage fiercely against all other, whereupon Strabo made these Veres, fallly imputing this demonical illusion to divine revelation.

Quid tacitus linguam quos veri baud aetna Cretae
Nec temper mendax, sit aurora templae tuentes,
Partereque baud uti solites, (mirebile dictu)
Doxa Tyaneae Aratos seniis ad ora,
Non magico cane, sed quod divinitus illis
Infinit vis animo, virtutis gnara latentes.

The like strange thing is reported of a Temple or Church in Creosio, dedicated to the Virgin Mary, wherein every night are an assembly of Dogs, which unto this day (faith the Author) meet voluntarily at an appointed hour, for the custody of the Temple, and those ornaments which are preferred therein against Thieves and Robbers; and if it fortune any of the Dogs be negligent and slack at the hour aforesaid, then will he bark about the Church till he be let in, but his fellows take punishment of him, and fall on him, biting and rending his skin, yea sometime killing him; and these Dogs have a fer diet or allowance of dinner, from the Canons and Preachers of the Church, which they duly observe without breach of order; for to day two of them will go to one Canons house, and two to another, and so likewise all the residue in tourns successively visit the several houses within the Cloister yard, never going twice together to one house, nor preventing the refection of their fellows; and the story is reported by Antonius Schnebergen for certain truth, upon his own knowledge.

Of the MIMICK, or GETULIAN-Dog, and the little MELITEAN-DOGS of Gentlewomen.

Here is also in England two other sorts of Dogs, the figure of the first is here expressed, being apt to imitate all things it feeth, for which cause some have thought that it was conceived by an Ape; for in wit and disposition it resembeith an Ape, but in face sharpe and black like a Hedge-hog, having a short recurved body, very long legs, shaggy hair, and a short tail; this is called of some (Canis Lucernarius) these being brought up with Apes in their youth, learn very admirable and strange feats, whereof there were great plenty in Egypt in the time of King Psamemy, which were taught to leap and play, and dance, at the
The History of Four-footed Beasts.

The hearing of music, and in many poor men's houses they served in stead of servants for divers ules.

These are also used by Players and Puppet-Mimicks to work strange tricks, for the sight whereof they get much money: such one was the Mimicks dog, of which Plutarch writeth that he saw in a publick spectacle at Rome before the Emperor Vespasian. The Dog was taught to act a play, wherein were contained many person's parts, I mean the affections of many other Dogs: at last there was given him a piece of bread, wherein, as was said, was poison, having virtue to procure a dead sleep, which he received and swallowed: and presently after the eating thereof he began to reel and stagger to and fro like a drunken man, and fell down to the ground, as if he had been dead, and so lay a good space not stirring foot nor limb, being drawn up and down by divers persons, according as the gesture of the Play he acted did require, but when he perceived by the time and other signes that it was requisite to arise, he first opened his eyes, and lift up his head a little, then stretched forth himself like as one doth when he riseth from sleep; at the last he got up and runneth to him to whom that part belonged, not without the joy and good content of Caesar and all other the beholders.

To this may be added another story of a certain Italian about the year 1403, called Andrew, who had a red Dog with him of strange feats, and yet he was blind. For standing in the Market place, compassed about with a circle of many people, there were brought by the handers by many Rings, Jewels, Bracelets and pieces of gold and silver, and there within the circle were covered with earth, then the Dog was bid to seek them out, who with his nose and feet did presently find and discover them; then was he also commanded to give to every one his own Ring, Jewel, Bracelet, or money, which the blind Dog did perform directly without stay or doubt. Afterward the handers by, gave unto him divers pieces of coin, stamped with the images of sundry Princes, and then one called for a piece of English money, and the Dog delivered him a piece, another for the Emperors coin, and the Dog delivered him a piece thereof; and so consequently every Princes coin by name, till all was reeloled: and this story is recorded by Abubus Urperiensis, whereupon the common people said, the Dog was a Devil or else possessed with some Pythonical spirit: and so much for this Dog.

There is a Town in Sicily, called Melitae, from whence are transported many fine little Dogs called, Melitei Canes, they were accounted the Jewels of Women, but now the said Town is possessed by Fifer-men, and there is no such reckoning made of these tender little Dogs, for these are not bigger then common Ferrets, or Weasills, yet are they not small in understanding, nor mutable in their love to men: for which cause they are also nourished tendrily for pleasure, whereupon came the proverb, Melitae Castris, for one nourished for pleasure, and Canis digna throno, because Princes hold them in their hands fittting upon their etate.

Theodosius the tumbler and dancer had one of these, which loved him so well, that at his death he leaped into the fire after his body. Now a dayses, they have found another breed of little Dogs in all Nations, beside the Melitean Dogs, either made fo by art, as inclowing their bodies in the earth when they are Whelps, so as they cannot grow great, by reason of the place, or else, leftring and impairyng their growth, by some kind of meat or nourishment. These are called in Germany, Bracken Schaffhund and Guttenhund; the Italians, Battali; other Nations have no common name for this kind that I know. Martial made this Dithicon of a little French Dog; for about Lions in France there are flore of this kinde, and are fold very dear; sometimes for ten Crowns, and sometimes for more.

Deliciarum pasus vis, et aliis cattel," Nartani brevi est, pagina tota mibi.

They are not above a foot; or half a foot long, and alway the leffer the more delicate and precious. Their head like the head of a Mouse but greater, their nose sharp, their ears like the ears of a Cony, short legs, little feet, long tail, and white colour, and the hairs about the shoulders longer then ordinary, is not commended. They are of pleasant disposition, and will leap and bite without pinching, and bark prettily, and some of them are taught to climb uprigh hold up their fore legs like hands; other to fetch and carry in their mouths, which is caft unto them. There be some wanton women which admit them to their beds, and bring up their young ones in their own boomes, for they are so tender, that they seldom bring above one at a time, but they lose their life. It was reported that when Grego in Syracusae was to go from home among other Gofts, the gave her maid charge of two things, one that she should look to her childe when it cryed, the other that she should keep the little Dog within doors.

Publius had a little Dog (called Ifa) having about the neck two silver bells, upon a silken Collar, which for the neatness thereof, seemed rather to be a picture then a creature; whereof Martial made this elegant Epigram, comprehending the rare voice and other gestures in it.

Ifsa
Marcellius Empiricus reciteth a certain charm, made of the rinde of a wilte Eightree, held to the Spleen or Liver of a little Dog, and afterward hunged up in the smoeak to dry, and pray that as the rind or bark dryeth, so the Liver or Spleen of the Dog may never grow: and thereupon the Dog (faith that foolish Empirick) shall never grow greater, then it was at the time that the bark was hanged up to drying. To let this trifle go, I will end the discourse of these little Dogs with one story of their love and understanding.

There was a certain noble Woman in Sicily, which understanding her husband was gone a long journey from home, sent to a lover (I thould say an Adulterer) the had, who came, and by bribery and money given to her servants, she admitted him to her bed, but yet privately, more for fear of punishment, then care of modesty: and yet for all her craft, she mislurtrued not her little Dog, which did see every day where she locked up this Adulterer: at last, her husband came home, before her lover was avoided, and in the night the little Dog seeing his true Mafter returned home, ran barking to the door and leaped up thereupon (within which the Whoremonger was hidden) and this he did omtimes together, fauning and scraping his Lord and Mafter also: in so much as he mislurtrued (and that unjustly) some strange event: at last, he brake open the door, and found the Adulterer ready armed with his sword, wherewithal he flew the good man of the house unawares: and so enjoyed the Adulterate woman for his wife: for Mutther followeth if it go not before Adultery. This story is related by Elianus to let forth a virtue of these little Dogs, how they observ the actions of them that nourish them, and also some decription betwixt good and evil.

The Dogs of Egypt are most fearful of all other, and their estome is to run and drink; or drink of the River Nile running, for fear of the Crocodiles: whereupon came the Proverb, of a man that did any thing flightly or hastily, Ut canis et nilo bibit. Aleibiades had a Dog which he would not fell under 28 thousand Sesterces, that is, seven hundred French Crowns; it was a goodly and beautiful Dog, yet he cut off his tail, whereof he gave no other reason, being demanded why he so blemished his beast, but only that by that fact he might occasion to the Athenians to takle of him.

The Dogs of Caramania can never be tamed, for their men also are wilde and live without all Law and Civility: and thus much of Dogs in special. In the next place I thought good to inhere into this story the Treatise of English Dogs, first of all written in Latin by that famous Doctor in Physick John Cury, and since translated by A. F. and directed to that noble Gesner, which is this that followeth, that so the Reader may chufe whether of both to affect bet.

The Preamble or Entrance into the Treatise Following.

Wrote unto you (well beloved friend Gesner) not many years past, a manifold history containing the divers forms and figures of Beasts, Birds, and Fishes, the sundry shapes of Plants, and the fashions of Herbs, 

I wrote moreover unto you severaly, a certain abridgement of Dogs, which in your discourse upon the forms of Beasts in the second order of noble and tamable beasts, where you make mention of Scottish Dogs, and in the winding up of your Letter written and directed to Doctor Turner, comprehending a Catalogue or rehearsal of your Books not yet extant, you promised to set forth in print, and openly to publish in the face of the world among luch your works as are not yet come abroad to light and sight. But becaus certain circumstances were wanting in my brevity of English Dogs (as seemed unto me) I stayed the publication of the same, making promise to send another abroad, which might be committed to the hands, the eyes, the ears, the minds, and the judgements of the Readers.

Wherefore that I might perform that precisely, which I promised solemnly, accomplish my determination, and satisfy your expectation: which are a man defires and capable of all kind of knowledge, and very extant to be acquainted with all experiments: I will express and declare in due order, the grand and general kind of English Dogs, the difference of them, the use, the properties, and the divers nature of the same, making a tripartite division in this fort and manner. All English Dogs be either of a gentle kind serving the game, a homely kind apt for sundry necessary uses, or a curtilk kind, meet for many toies.
The History of Four-footed Beasts.

Of these three sorts or kinds to mean I to entreat, that the first in the first place, the last in the last room, and the middle fort in the middle fear be handled. I call them universally all by the name of English Dogs, as well because England only, as it hath in it English Dogs, so it is not with the Scots, as also for that we are inclined and delighted with the noble game of hunting, for we Englishmen are addicted and given to that exercise and painful patience of pleasure, as well for the plenty of flesh which our Parks and Forests do offer, as also for the opportunity and convenient leisure which we obtain; both which the Scots want. Wherefore seeing that the whole estate of kindly hunting consists principally in these two points, in chasing the beast that is in hunting, or in taking the bird that is in bowline. It is necessary and requisite to understand that there are two sorts of Dogs by whose mean the feats within specified are wrought, and these practices of activity cunningly and curiously composed, but two kinds of Dogs, one which rouzeth the beast and continueth the chase, another which springeth the bird, and bewarreth the flight by pursu. Both which kinds are termed of the Latin by one common name, that is, Canes Venatici, hunting Dogs. But because we Englishmen make a difference between hunting and bowline, for they are called by these several words; Venatio, & Autopium, so they term the Dogs whom they use in these fundry games by dives names, as those which serve for the beast, are called Venatici, the other which are used for the fowl are called Autopium.

The first kinde called Venatici I divide into five forts, the first in perfect smellding, the second in quick syping, the third in swifness and quickness, the fourth in smellding and nimblenes, the fift in subtilty and deceitfulness, herein these five forts excell.

Of the DOG called a HARIER; in Latin, Leverarius.

That kinde of Dog whom nature hath endued with the virtue of smellding, whose property it is to use a luftiness, a readiness, and a courteousnesse in hunting, and draweth into his nostrils the air or sent of the beast purfied and followed, we call by this word Sagax, the Greacious by this word Insemen of tracing or chaising by the foot, or Rinelatin, of the nostrils, which be the instruments of smellding. We may know these kines of Dogs by their long, large and bigging lips, by their hanging ears, reaching down both sides of their chaps; and by the indifferent and meaurable proportion of their making. This sort of Dogs we call Leverarius, Hariers, that I may comprise the whole number of them in certain specialties, and apply to them their proper and peculiar names, for so much as they cannot all be reduced and brought under one fort, considering both the fundry uses of them, and the difference of their service whereto they be appointed. Some for the Hare, the Fox, the Wolf, the Hart, the Buck, the Badger, the Otter, the Polecat, the Lobfter, the Weafile, the Cony, &c. Some for one thing and fomne for another.

As for the Cony, whom we have lastly yet dunit, we use not to hunt, but rather to take it, sometime with the net, sometime with a Ferret, and thus every several fort is notable and excellent in his natural quality and appointed practice. Among those fundry sorts, there be some which are apt to hunt two different beasts, as the Fox other whiles, and other whiles the Hare, but they hunt not with such outward and good luck after them, as they do that whereas nature hath formed and framed them, not only in external composition and making, but also in inward faculties and conditions, for they swave oftentimes, and do otherwise then they should.

Of the DOG called a TERRAR; in Latin, Terrarius.

Another fort there is which hunteth the Fox, and the Badger, or Gray only, whom we call Terrar, because they (after the manner and custom of Ferreets in searching for Conies) creep into the ground, and by that means make afraid, nip, and bite the Fox and the Badger in such sort, that either they tear them in pieces with their teeth, being in the bofom of the earth, or else hate and pull them perforce out of their lurking Angles, darke dungeons, and close caves, or at the least through conceived fear, drive them out of their hollow harbors, so much that they are compelled to prepare speedy flight, and being desirous of the next (albeit not the safest) refuge, are otherwise taken and intrapped with snares and nets laid over holes to the same purpose. But these be the least in that kinde called Sagax.

Of the DOG called a BLOOD-HOUND; in Latin, Sanguinarius.

The greater sort which serve to hunt, having lips of a large size, and eares of no small length, do not only chafe the beast whilsts it liveth (as the other do of whom mention above is made) but being dead also by any manner of cautiousness, make recourse to the place where it lyeth, having in this point an allowed and influable guide; namely, the scent and favour of the blood sprinkled here and there upon the ground. For whether the beast being wounded, doth notwithstanding enjoy life, and escapeth the hands of the huntman, or whether the said beast being slain is conveyed cleanly out of the Park (so that there be some signification of blood shed) these Dogs with no
Of Dogs.

...lefe facility and cainlines, then avidity and greedines can dicloie and bewray the same by smeling, applying to their purfuite, agility and nimblenes, without reductufles; for which considera-
tion, or a singular specialty they delvered to be called Sanguinaries Blood-hounds. And albeit per-
adventure, it may chance, (as whether it chanceth seldom or sometime I am ignorant) that a piece of thefeth be dubitably foine, and cunningly conveyed away with fuch provifoes and preca-
ventures, as thereby all appearance of bloud is either prevented, excluded, or concealed, yet thefe kinde of Dogs by certain direction of an inward affured notice and privity mark, perfue the deed-
doors, through long lanes, crooked reaches, and wary ways, without wandering away out of
the limits of the land whereon thefe desperate purloiners prepared their speedy paffage. Yea,
the natures of thefe Dogs is fuch, and fo effectual is their foregift, that they can bewray, separate,
and pick them out from among an infinite multitude and an innumerable company, creep they
never so far into the thickeft throng, they will finde him out notwithstanding he lie hidden in
wilde Woods, in clofe and overgrown Groves, and lurk in hollow holes apt to harbour fuch un-
gracious guests.

Moreover, although they fhould paffe over the water, thinking thereby to avoid the purfuite of
the Hounds, yet will not thefe Dogs give over their attempt, but preuming to swim through the
stream, perferue in their purfuite, and when they are arrived and gotten the further bancke, they
hunt up and down, and in and out they, from place to place fluft they, until they have attainted
to that plot of ground where they paffed over. And this is their pratife, if perdy they cannot at
the firft time smeling, finde out the way which the deed-doers took to escape. So at length get
they that by art, cunning, and diligent endeavours, which by fortune and luck they cannot otherwise
Chapter, To contemptuion bei delegation, to be as it were naturally infilled into thefe kind of Dogs.
For they will not paffe or breathe forth from their purfuite until fuch time as they are apprehended
and taken which committed the fact.

The owners of fuch Hounds use to keep them in clofe and dark kennels in the day, and let
them loose at liberty in the night feafon, to the intent that they might with more courage and
boldnes pratife to follow the felon in the evening and solitary hours of darknes, when fuch ill
dispofed varlets are principally purpofed to play their impudent pranks. Thefe Hounds (upon
whom this present portion of our treatife runneth) when they are to follow fuch fellows as we have
before rehearfed, ufe not that liberty to range at will, which they have otherwise when they are
in game, (except upon necessery occafion whereon dependeth an urgent and effectual perforvi-
ation) when fuch purloiners make fpeedy way in flight, but being restrained and drawn back from
running at random with the leame, the end whereof the owner holding in his hand is led, gui-
ded and directed with fuch swifness and howynes (whether he go on foot, or whether he ride on
horeback) as he himfelf in heart would with for the more eallie apprehension of their ventu-
rous varlets.

In the borders of England and Scotlant, (the often and accubomed fealing of Cattel fo procuring)
thefe kind of Dogs are very much ufed, and they are taught and trained up firft of all to hunt Catt-
el, as well as the fmallier as of the greater growth: and afterwards (that quality relinquifhed and left)
they are learned to purfue fuch perfons as plant their pleaflure in fuch pratifes of
purloining as we have already declared. Of thefe kind there is none that taketh the Water natur-
ally except it pleafe you to fuppos of themwhoffollow the Otter, which inimes hauing the
land, and sometime ufe the water. And yet neverthelbels all the kinde of them boyling and broyling
with greedy defire of the prey which by swimming paffeth through river and flood, plunge amids
the water and paffe the stream with their paws.

But this property proceedeth from an earnest defire wherewith they be inflamed, rather then
from any inclination, illuing from the ordainance and appointment of nature. And albeit some
of this both in English be called Brache, in Scotifh, Raucke, the caufe thereof refleth in the the-fes,
and not in the general kinde. For we Englifhmen call Bitches belonging to the hunting kind of
Dogs, by the term above mentioned. To be short, it is proper to the nature of Hounds, none
to keep filience in hunting until fuch time as there is game offered. Other fome foon as they
smell out the place where the beafe lurketh, to bewray it immediately by their imporitate barking,
notwithstanding it be far and many furlongs off, cowching clofe in his cabin. And thefe Dogs
the younger they be, the more wantenonly bark they, and the more liberally; yet oftentimes with-
out neceffity, fo that in that, by reafon of their young years and want of pratifice, small certainty is
not to be repofed. For continuation of time, and experience in game, minifreth to thefe Hounds, not only
running in running, but also (as in the refl) an assured foresight what is to be done princip-
ally, being acquainted with their Mafteres watchwords, either in revoking or imbouldening them
to ferve the game.
The History of Four-footed Beasts.

Of the Dog called the G A S E - H O U N D, in Latin, Agaeum.

This kind of Dog which pursueth by the eye, prevailseth little, or never a whit, by any benefit of the nose, that is by smelling, but excelleth in periscopie and sharpness of sight altogether, by the virtue whereof, being singular and notable, it hunteth the Fox and the Hare. This Dog will chase and separate any beast from among a great flock or herd, and such a one will it take by election as is not lanck, lean and hollow, but well spred, smooth, full, fat, and round, it followes by direction of the eyesight, which indeed is clear, conflant, and not uncertain; if a beast be wounded and go astray, the Dog keepteth after it by the redferenes of the eye, if it chance peradventure to return and be mingled with the residue of the flock, this Dog ppeth it out by virtue of his eye, leaving the rest of the Cattell untouched, and after he hath set fire upon it, he separateth it from among the company, and having so done, never ceaseth untill he have wearied the Beast to death.

Our Countrymen call this Dog Agaeum, a Gase-hound, because the beams of his sight are so fleetfully fetted and unmoveably fastned. These Dogs are much and usually occupied in the Northern parts of England more then in the Southern parts, and in fieldy lands rather then in bushie and woody places, horsemens use them more then footmen, to the intent that they might provoke their horses to a swift gallop (wherewith they are more delighted then with the prey itself) and that they might accoumone their Horse to leap over hedges and ditches, without fup or stumble, without harme or hazard, without doubt or danger, and to escape with safety of life. And to the end that the riders themselves, when necessitie so confraineth, and the fear of further mischief incourset, might save themselves undamified, and prevent each perilous tempt by preparing speedy flight, or else by swift pursuite made upon their enemies, might both overtake them, encounter with them, and make a slaughter of them accordingly. But if it fortune so at any time that this Dog take a wrong way, the Master making some usual figne and faimiliar token, he returneth forthwith, and taketh the right and ready race, beginning his chase aiffreth, and with a clear voice, and a swift foot followeth the game with as much courage and nimblenesse as he did at the first.

Of the Dog called the GRAY-HOUND, in Latin, Leporarius.

We have another kind of Dog; which for his incredibl swiftnes is called Leporarius, a Grayhound, because the principal service of them dependeth and confisteth in harling and hunting the Hare, which Dogs likewise are indued with no leffe strength then lightnes in maintenance of the game, in foring the chase, in taking the Buck, the Hart, the Doe, the Fox, and other beafts of semblable kinde ordained for the game of hunting. But more or leffe, each one according to the measure and proportion of their diuerse, and as might and ability of their bodies will permit and suffer.

For it is a spare and bare kind of Dog, (of flesh but not of bone) some are of a greater fort, and some of a leffer, some are smooth shamed, and some ereuned, the bigger therefore are appointed to hunt the bigger beafts, and the smaller serveth to hunt the smaller accordingly. The nature of the Dogs I finde to be wonderful by the testimonies of all Histories. For, as John Strach the Historiographer in his 4th. reporteth, A Gray-hound of King Richard the second that wore the Crown, and bare the Scepter of the Realm of England, never knowing any man, besides the Kings person, when Henry Duke of Lancaster came to the Caille of Flint to take King Richard, the Dog Vorfaking, his former Lord and Master came to Duke Henry, proued upon him with such reemblances of good will and conceiued affection, as hefavoured King Richard before: he followed the Duke, and utterly left the King. So that by these manifold circumstances a man might judge his Dog to have been lightened with the lamp of foreknowledge and understanding, touching his old Masters miferies to come, and unhappinesse night at hand, which King Richard himself evidently perceived, accounting this deed of his Dog a Prophecy of his overthrow.

Of the Dog called the LEVINER, or LYEMMER; in Latin, Lovarius.

Another sort of Dogs be there, in smelling singular, and in swiftnesse incomparable. This is (as it were) a middle kinde betwixt the Harrier and the Gray-hound, as well for his kind, as for the frame of his body. And it is called in Latin, Lovarius, a Leviate, of lightnesse, and therefore may well be called a Light-hound; it is also called by this word Lovarius, a Lure, wherewith it is led. This Dog for the excellency of his conditions, namely smelling and swifft running, doth follow the game with more esgerenes, and taketh the prey with a jolly quicknes.
Of the DOG called a TUMBLER, in Latin, Vertagus.

His sort of Dogs, which compasseth all by crafts, fraudes, and subtilities and deceits, we Englishmen call Tumblers, because in hunting they turn and tumble, winding their bodies about in a circle, and then fiercely and violently venturing upon the beast, doth suddenly gripe it, at the very entrance and mouth of their receptacles, or cloysters before they can recover means, to save and succour themselves. This Dog with another craft and subtility, namely, when he runneth into a Warren, or fetcheth a course about a Conyburrough, he hunts not after them, he frays them not by barking, he makes no counteract or shadow of hatred against them, but dissembling friendship, and pretending favour, paffeth by with silence and quietness, marking and noting their holes diligently, wherein (I warrant you) he will not be overhot nor deceived. When he cometh to the place where Conies be of a certainty, he cowetheth down close with his belly to the ground, provided always by his skill and policy, that the wind be never with him but against him in such an enterprise; and that the Conies spy him not where he lurketh. By which means he obtaineth the fcent and favour of the Conies, carried towards him with the wind and the air, either going to their holes or coming out, either passing this way, or running that way, and so provideth by his circumvention, that the silly simple Cony is debarred quite from his hole (which is the haven of their hope, and the harbour of their health) and fraudulently circumvent and takea, before they can get the advantage of their hole. Thus having caught his prey, he carrieth it speedily to his Master, returning his Dogs return in some convenient lurking corner.

These Dogs are somewhat lighter then the Hounds, and they be lacquer and leaner, beseide that they be somewhat prick eared. A man that hath mark the form and fashion of their bodies, may well call them mugger Gray-hounds if they were somewhat bigger. But notwithstanding they countervail not the Grey-hound in greatness, yet will he take in one dayes space as many Conies as shall strife to as big a burthen, and as heavi a load as a horse can carry for deceit and guile is the instrument whereby he maketh this spoil, which pernicious properties supply the places of more commendable qualities.

Of the DOG called the THEEVISH DOG, in Latin, Canis furax.

He like to that whom we have rehearsed, is the Theevish Dog, which at the mandate and bidding of his Master seereeth and seetheth abroad in the night, hunting Conies by the air, which is levened with the favour and conveyed to the sense of smelling by the means of the wind blowing towards him. During all which space of his hunting, he will not bark, lest he should be prejudicial to his own advantage. And thus watcheth and snatcheth up in course as many Conies as his Master will suffer him, and beareth them to his Masters standing. The Farmers of the Countrey and uplandish dwellers, call this kind of Dog a Night-Car, because he hunteth in the dark. But let us much seem sufficient for Dogs which serve the game and disport of hunting.

Of Gentle DOGS serving the Hawk, and first of the SPANIEL, called in Latin, Hispaniolus.

Such Dogs as serve for fowling, I think convenient and requisite to place in the second Section of this treatise. These are able to be reckoned and accounted in the number of the Dogs which come of a gentle kind: and of those which serve for fowling, there be two sorts, the first fowling game on the land, the other fowling game on the water. Such as delight on the land, play their parts, either by swiftnes of foot, or by often quefting, to search out and to bring the bird for further hope of advantage, or else by some secret sign and privy token bewray the place where they fall. The first kind of such serve the Hawk, the second the net or train. The first kind have no peculiar names assigned unto them, fave only that they be denominated after the bird which by natural appointment he is allotted to take; for the which consideration, some be called Dogs for the Falcon, the Phefian, the Partridge, and fuch like. The common sort of people call them by one general word, namely Spaniels; as though these kind of Dogs came originally and first of all out of Spain. The most part of their skins are white, and if they be marked with any spots they are commonly red, and somewhat great therewithal, the hairs not growing in such thicknes but that the mixture of them may easily be perceived. Oterofome of them be reddish and blackish, but of that sort there be but a very few. There is also at this day among us a new kind of Dog brought out of France (for we Englishmen are marvellous greedy gaping gluttons after novelties, and covetous cormorants of things that be seldom, rare, strange, and hard to get) and they be speckled all over with white and black, which mingled colours incline to a marble bloom, which beautifieth their skins, and affordeth a feemly show of comelines. These are called French Dogs, as is above declared already.
The **DOG** called the **SETTER**; in Latin, *Index*.

Another sort of Dogs be there, servicable for fowling, making no noise either with foot or with tongue, while they follow the game. These attend diligently upon their Master and frame their conditions to such becks, motions, and gestures, as it shall please him to exhibit and make, either going forward, drawing backward, inclining to the right hand, or yeelding toward the left, (in making mention of fowles, my meaning is of the Patridge and the Quail:) when he hath found the bird, he keepeth sure and silent silence, he layeth his fleps, and will proceed no further; and with a close, covert, watching eye, layeth his belly to the ground and doth creepeth forward like a worm. When he approacheth neer to the place where the bird is, he lies him down, and with a mark of his paws, betrayeth the place of the birds last abode, whereby it is supposeth that this kind of Dog is called *Index*, Setter, being indeed a name most consonant and agreeable to his quality. The place being known by the means of the Dog, the fowler, immediately openeth and spreadeth his net, intending to take them; which being done, the Dog at the customed beck or usual sign of his Master riseth up by and by, and draweth neerer to the fowle, that by his presence they might be the authors of their own infringing, and be ready intangled in the prepared net, which cunning and artificial devise in a Dog (being a creature domesitical or housefowl servant, brought up at home with offals of the trencher, and fragments of victuals) is not so much to be marvilled at, seeing that a Hare (being a wilde and skippish beast) was seen in England to the astonishment of the beholders, in the year of our Lord 1564, not only dancing in measure, but playing with his former feet upon a tabaret, and observing just number of strokes (as a practitioner in that art) besides that nipping and pinching a Dog with his teeth and claws, and cruelly thumping him with the force of his feet; this is no trumpery tale, nor tripe toy (as I imagine) and therefore not unworthy to be reported, for I reckon it a requital of my travell, not to drown in the seas of silence any special thing, wherein the providence and effectual working of nature is to be pondered.

Of the **DOG** called the **WATER SPANIEL**, or **FINDER**; in Latin, *Aquaticus seu Inquisitor*.

That kind of Dog whose service is required in fowling upon the water, partly through a natural towardness, and partly by diligent teaching, is indued with that property. This sort is somewhat big, and of a measurable greatness, having long, rough, and curled hair, not obtained by extraordinary trades, but given by nature's appointment; yet nevertheless (friend Gefier) I have described and set him out in this manner, namely powdred and notted from the shoulders to the hindermost legs, and to the end of his tail, which I did for use and custom sake, that being as it were made somewhat bare and naked, by shearing off such superfluity of hair. They might achievable the more lightsheen, and swiftness, and be lesse hindered in swimming, so troublesome and neerless a burden being shaken off. This kind of Dog is properly called *Aquaticus*, a Water Spaniel, because he frequenteth and hath usual recourse to the water where all his game lyeth, namely water fowls, which are taken by the help and service of them, in their kind. And principally Ducks and Drakes, whereupon he is likewise named a Dog for the Duck, because in that quality he is excellent. With these Dogs also we fetch out of the water such fowl as being true to death by any venemous Worm, we use them also to bring us our bolts and arrows out of the water (filling our mark) whereat we directed our levell, which otherwise we should hardly recover, and oftentimes they retire to us our shafts which we thought never to see, touch, or handle again, after they were lost: for which circumstances they are called *Inquisitores*, searchers and finders. Although the Duck otherwise notably deceiveth both the Dog and the Master, by diving under the water, and also by natural subtility, for if any man shall approach to the place where they build, breed and sit, the Hens go out of their nests, offering themselves voluntarily to the hands, as it were, of such as draw near their nests. And a certain weaknes of their wings pretended, and infirmity of their feet distembered, they go slowly and so leafearily, that to a man thinking it were no matter to take them. By which deceitful trick they do as it were entice and allure men to follow them, till they be drawn a long distance from their nests, which being compassed by their provident cunning, or cunning providence, they cut off all inconveniences which might grow of their return, by using many careful and curious caveats, leaving their often hunting bewray the place where the young duckings be hatched. Great therefore is their desire, and earnest is their study to take heed, not only to their brood, but also to themselves. For when they have an inking that they are espied, they hide themselves under turves or fedges, whereas with they cover and shroud themselves so closely and socraftily, that (notwithstanding the place where they lurk be found and perfectly perceived) there they will harbour without harm, except the Water Spaniel by quick finelling discover their decepts.
Of the **DOG** called the **FISHER** in Latin, *Canis Piscator*.

The Dog called the Fisher, whereof *Hætor Borium* writeth, which seeketh for Fith by fineling among rocks and stones, assuredly I know none of that kind in England, neither have I received by report that there is any such, albeit I have been diligent and busied in demanding the question as well of Fishermen as also hunters in that behalf, being careful and earnest to learn and understand of them if any such were, except you hold opinion that the Beaver or Otter is a Fith (as many have believed) and according to their belief affirmed, as the bird *Papine*; is thought to be a fish, and so accounted. But that kind of Dog which followeth the fish to apprehend and take it (if there be any of that disposition and property) whether they do this thing for the game of hunting, or for the heat of hunger, as other Dogs do which rather then they will be famished for want of food, covet the carcasses of carrion and purifled fishes. When I am fully resolved and disburthened of this doubt, I will send you certificat in writing. In the mean season I am not ignorant of that both *Elianus* and *Actius*, call the Beaver *Rus occupatior* a water Dog, or a Dog-fish, I know likewise thus much more, that the Beaver doth participate this property with the Dog, namely, that when fishes be scarce they leave the water and range up and down the land, making an infigitable slaughter of young Lambs until their pangs be replenished, and when they have fed themselves full of Fiefh, then return they to the water from whence they came. But albeit so much be granted that this Bever is a Dog, yet it is to be noted that we reckon it not in the beadrow of English Dogs as we have done the rest. The ser Calife, in like manner, which our Countrymen for brevity sake call a Seel, other more largely name a *Sea-Veale*, maketh a spoil of fishes between rocks and banks, but it is not accounted in the Catalogue or number of our English Dogs, notwithstanding we call it by the name of a Sea-Dog, or a Sea-Calf. And thus much for our Dogs of the second sort, called in Latin, *Aescapatus*, serving to take fowl either by land or water.

Of the delicate, neat, and pretty kind of Dogs called the **SPANIEL GENTLE**, or the **COMFORTER** in Latin, *Milisius*, or *Fotor*.

Here is besides those which we have already delivered, another sort of Gentle Dogs in this our English foil, but exempted from the order of the residue, the Dogs of this kind doth *Callimaclus* call *Milisius* of the Island *Milia* in the sea of *Sicily* (which at this day is named *Milia*) an Island indeed, famous and renowned with courageous and pious Soul'diers, valiantly fighting under the banner of Christ their unconquerable Captain) where this kind of Dogs had their principal beginning.

These Dogs are little, pretty, proper, and fine, and sought for to satisfie the delicatenes of dainty dames and wanton womans wis, instrumens of folly for them to play and daily withall, to trifle away the treasure of time, to withdraw their minds from more commendable exercices, and to content their corrupted concupiscences with vain disport (a silly thrift to flunck irksome idlenes.)

These puppies the smaller they be, the more pleasure they provoke, as more meet playfellows for mincing midtreffes to bear in their bofomes, to keep company withal in their Chambers, to succour with sleep in bed, and nourish with meat at bord, to lay in their laps, and lick their lips as they ride in their Wagons: and good reason it should be so, for courteous with finesnes hath no fellowship, but featnes with neatnes hath neighbourhood enough. That plausible proverb verify'd upon a Tyrant, namely, that he loved his Sow better then his Son, may well be applied to these kind of people, who delight more in Dogs that are deprived of all possibility of reason, then they do in children that be capable of wisdom and judgement. But this abufe peradventurereigneth where there hath been long lack of ifue, or else where barrennes is the belt blosson of beauty.

The virtue which remaineth in the **SPANIEL GENTLE**, otherwise called the **COMFORTER**.

Notwithstanding many make much of those pretty puppies called Spaniels Gentle, yet if the question were demanded what property in them they sipe, which should make them so acceptable and precious in their sight, I doubt their answer would be long a coming. But seeing it was our intent to travell in this treatise, so that the Reader might reap some benefit by this reading, we will communicate unto such conjectures as are grounded upon reason. And though some suppose that such Dogs are fit for no service, I dare say, by their leaves, they be in a wrong box. Among all other qualities therefore of nature, which be known, (for some conditions are covered with continual and thick clouds, that the eye of our capacities cannot pierce through them) we finde that these little Dogs are good to asswage the sicknes of the stomache, being oftentimes thereunto applied as a plaister preventative, or born in the bome of the diseased and weak person;
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which effect is performed by their moderate heat. Moreover the disease and fickness changeth his place and entrench (though it be not precisely marked) into the Dog, which to be truth, experience can testify, for these kinde of Dogs sometimes fall sick, and sometimes die, without any harme outwardly inforced, which is an argument that the disease of the Gentleman, or Gentlewoman or owner whatsoever, entrench into the Dog by the operation of heat intermingled and infected. And thus have I hitherto handled Dogs of a gentle kind whome I have comprehended in a triple division. Now it remaineth that I annex in due order, such Dogs as be of a more homely kinde.

Dogs of a course kinde serving many necessarie uses, called in Latin Canes rusticci, and first of the Shepherds Dog, called in Latin, Canis Pastoralis.

The first kinde, namely the Shepherds bound, is very necessarie and profittable for the avoiding of harnes, and inconveniences which may come to men by the means of beafts. The second fort serve for succour against the snares and attempts of mischievous men. Our Shepherds Dog is not huge, vait and big, but of an indifferent stature and growth, because it hath not to deal with the bloudthirsti Wolfe, sithence there be none in England, which happy and fortunate benefit is to be ascribed to the puissant Prince Edgar, who to the intent that the whole Countrey might be evacuated and quite cleared from Wolves, charged and commanded the Welfmen (who were pelted with these butcherly beafts above measure) to pay him yearly tribute (note the wisdom of the King) three hundred Wolves. Some there be which write that Ludward Prince of Wales paid yearly to King Edgar three hundred Wolves in the name of an exaction (as we have said before.) And that by the means hereof, within the compass and term of four years, none of those noisom and pestilential beafts were left in the coasts of England and Wales. This Edgar wore the Crown royal, and bare the Scepter imperial of this Kingdom, about the year of our Lord Nine hundred fifty nine. Since which time we read that no Wolf hath been seen in England, bred within the bounds and borders of this Countrey, marry there have been divers brought over from beyond the Seas, for greedines of gain and to make money, for gazong and gazing, flaring and flanding to fee them, being a strange beast, rare, and seldom seen in England. But to return to our Shepherds Dog. This Dog either at the hearing of his Masters voice, or at the wagging and whilting in his hift, or at his thrill and hoarse hifling bringeth the wandering weathers and straying Sheep into the self same place where his Masters will and wish is to have them, whereby the Shepherd repareth this benefit, namely that with little labour and no toil or moving of his feet he may rule and guide his flock, according to his own desire, either to have them go forward, or to stand still, or to draw backward, or to turn this way, or take that way. For it is not in England, as it is in France, as it is in Flanders, as it is in Syria, as it is in Tartaria, where the Sheep follow the Shepherd, for here in our Countrey the Shepherd followeth the Sheep. And sometimes the straying Sheep when no Dog runneth before them, nor goeth about and byde them, gather themselves together in a flock, when they hear the Shepherd whistle in his hift, for fear of the Dog (as I imagine) remembering this (if unreasonable creatures may be reported to have memory) that the Dog commonly runneth out at his Masters warrant which is his whilte. This have we oftentimes diligently marked in taking our journey from Town to Town, when we have heard a Shepherd whistle we have rained in our horse and stood still a space, to see the proof and tryall of this matter. Furthermore, with this Dog doth the Shepherd take Sheep for the slaughter, and to be healed if they be sick, no hurt or harm in the world done to the simple creature.

Of the MASTIVE, or BANDOG, called in Latin, VILLAINUS, or CAPTENARUS.

His kind of Dog called a Mavtive or Bandog is vait, huge, stubborn, ugly, and eager of a heave and bountious body, and therefore but of little swiftnes, terrible, and frightful to behold, and more fierce and fell then any Arcadian cur (notwithstanding they are said to have their generation of the violent Lion.) They are called Villaités, because they be appointed to watch and keep farm-places and Countrey Cottages fequeftrd from common recours, and not abutting upon other houles by reaon of distanc, when there is any fear conceived of Theeves, Robbers, Spoilers, and Night-wanderers. They are serviceable against the Fox and Badger, to drive wilde and tame Swine out of Medowes, Palfures, Glebelands, and places planted with fruit, to bait and take the Bull by the ear, when occasion doth requireth. One Dog or two at the utmost is sufficient for that purpose, be the Bull never fo monstrosus, never fo fierce, never fo furious, never fo Itern, never fo untamable. For it is a kind of Dog capabale of courage, violent and valiant, striking cold fear into the hearts of men, but standing in fare of no man, in so much that no weapons will make him frinck, nor abridge his boldnes. Our Englishmen (to the intent that their Dogs might be more fell and fierce) affilfe nature with art, use and customs, for they teach their Dogs to bait the Bear, to bait the Bull and other fuch like cruel and bloody Beasts (appointing an over-feer of the game) without any Collar to defend their throats; and oftentimes they train them
Of Dogs.

them up in fighting and wresting, with any man having for the safeguard of his life, either a Pikestaffe, a Club, or a sword, and by using them to such exercises as these, their Dogs become more furious and strong. The force which is in them surmounteth all belief, the falt hold which they take with their teeth exceedeth all credit, three of them against a Bear, four against a Lion are sufficient, both totrie mastered with them, and utterly to overmatch them. Which thing Henry the seventh of that name, King of England (a Prince both politick and warlike) perceiving on a certain time (as the report runneth) commanded all such Dogs (how many so ever were in number) should be hanged, being deeply displeased, and conceiving great disdain, that an ill favoured rafcal Cur should with such violent villany, assault the valiant Lion King of all beats. An example for all subjects worthy remembrance, to admonish them, that it is no advantage to them to rebell against the regiment of their Ruler, but to keep them within the limits of loyalty. I read an History answerable to this of the selfs fame Henry, who having a notable and an excellent fair Falcon, it fortuned that the Kings Falconers, in the presence and hearing of his grace, highly commended his Majefties Faucon, faying, that it feared not to intermeddle with an Eagle, it was so venturous a Bird and so mighty; which when the King heard, he charged that the Falcon should be killed without delay, for the felt fame reason (as it may seem) which was rehearsed in the conclusion of the former history concerning the fame king. This Dog is called in like manner, Catena, a Caena, of the chain wherewith he is tied at the gates in the day time, left being lofe he should do much mischief, and yet might give occasion of fear and terror by his big barking. And albeit Cicero in his Oration had pro S. Ræx, be of this opinion, that such Dogs as bark in the broad day light should have their legs broken, yet our Countrymen on this side the Seas, for their carelesness of life letting all at cinque and fice are of a contrary judgement. For Theeves rogue up and down in every corner, no place is free from them, no not the Princes palace, nor the Countrymans cottage.

In the day time they practice piltering, picking, open robbing, and privie healing, and what legerdemain lack they? not fearing the shameful and horrible death of hanging.

The caufe of which inconvenience doth not only issue from nipping need and wringing want, for all that fleat are not pinch’d with poverty, some fleat to maintain their excessive and prodigal expenses in apparel, their lewdness of life, their wantonnes of manners, their wilful idlenes, their ambitious bravery, and the pride of the sawy Saloones me galatroton, vain glorious and arrogant in behaviour, whose delight dependeth wholly to mount nimbly on horse-back, to make them leap lustily, springing and prance, gallop and amble, to run a race, to winde in compass, and so forth, living altogether upon the fatten of the spoil. Other fome there be which fleat, being thereto provok’d by penury and need, like matterles men applying themselves to no honest trade, but ranging up and down, impudently begging and complaining of bodily weaknes where is no want of ability. But valiant Valentine the Emperor, by wholesome lawes provided that such as having no corporall tickness, fold themselves to begging, pleased poverty with pretended infirmity, and cloaked their idle and slothful life with colourable shifts and cloudy cozening, should be a perpetuall flave and drudge to him, by whom their impudent idlenes was betray’d, and laid against them in publick place, left the inufferable slothfulness of such vagabonds should be hurteous to the people, or being fo hateful and odious, shou’d grow into an example.

Alfred likewise in the Government of his Common-wealth, procured such encreafe of credit to justice and upright dealing by his prudent Acts & Statutes, that if a man travelling by the high way of the Countrey under his dominion, chanced to loft a budget full of Gold, or his capcase faried with things of great value, late in the evening, he shou’d finde it where he loft it, safe, found, and untouched the next morning, yet (which is a wonder) at any time for a whole moneth space if he sought for it, as Inopus Crepledanes in his history recorded. But in this our unhappy age, in thefe (I lay,) our devilish days, nothing can escape the claws of the spoiler, though it be kept never so sure within the house, albeite the doors be lockt and bounted round about. This Dog in like manner of the Cretians is called Oikures.

Of the Latinists, Canis Cattus; in English, the Dog-keeper.

Borrowing his name of his service, for he doth not onely keep Farmers houes, but also Merchants manifions, wherein great wealth, riches, substance and costly flute is repoded. And therefore were certain Dogs found and maintained at the common cofts and charges of the Citizens of Rome in the place called Capitolium, to give warning of Theeves coming. This kind of Dog is called,

In Latin, Canis Lanarius, in English, the Butchers Dog.

So called for the necelity of his use, for his service affordeth great benefit to the Butcher as well in following as in taking his Cattel, when need constraineth, urgeyth, and requireth. This kinde of Dog is likewise called,

In Latin, Molossius, or Molossus,

after the name of a Country in Epirus called Molossia, which harboureth many stout strong and sturdy Dogs of this sort, for the Dogs of that Country are good indeed, or else there is no trueth to be had in the testimony of writers. This Dog is also called,

In Latin, Canis Mandatorius, a Dog messenger, or Carrier,

upon subflanciall consideration, because at his Mafter's voice and commandement, he carry-
eth letters from place to place, wrapped up cunningly in his leather collar, fastned thereto, or fowed close therein, who left he should be hindered in his passage, ufeth these helps very skilfully, namely reliance in fighting that he be not overmatched, or else swiftness and readiness in running away, if he be unable to bucklie with the Dog that would fain have a snatch at his skin. This kinge of Dog is likewise called,

In Latin, Canis Lunarius; in English, the Mooner.

Because he doth nothing else but watch and ward at an inch, waiting the wearesome night season without slumbering or sleeping, bawing and wawing at the Moon (that I may use the word of Nonius) a quality in mine own opinion strange to consider. This kind of Dog is also called,

In Latin, Aquarius; in English, a Water-drawer.

And these be of the greater and the weightier fort, drawing water out of wells and deep pits, by a wheel which they turn round about by the moving of their burchentous bodies. This Dog is called in like manner,

Canis Coroanarius in Latin, and may aptly be Englished, a Tinkers Cur.

Because with marvellous patience they bear big budgets fraught with Tinkers tools, and metal meet to mend kettles, porrage-pots, skillets, and chafters, and other such like trumpery requisite for their occupation and loytering trade, eating him of a great burthen, which otherwise he himself should carry upon his shoulders; which condition hath challenged unto them the foremost name. Besides the qualities which we have already recounted, this kind of Dogs hath this principal property ingrained in them, that they love their Masters liberally, and hate strangers disputfully; whereupon it followeth that they are to their Masters in travelling a singular safeguard, defending them forcibly from the invasion of villains and Thieves, preferring their lives from loife, and their health from hazzard, their fleth from hacking and bewing, with fuch like desperate dangers. For which consideration they are meritoriously termed,

In Latin, Canes defensoris; Defending Dogs in our mother tongue.

If it chance that the Master be oppressed, either by a multitude, or by the greater violence, and so be beaten down that he lie groveling on the ground, (it is proved true by experience) that this Dog forfaketh not his Master, no not when he is stark dead: But inducing the force of amification and the outrageous temptles of the weather, most vigilantly watcheth and carefully keepeth the dead carcasse many days, indevouring furthermore, to kill the murtherer of his Master, if he may get any advantage. Or else by barking, by howling, by furious jarring, snarring, and such like means betrayeth the malefactor or as defirous to have the death of his aforeaid Master rigorously revenged.

An example hereof fortune within the compass of my memory. The Dog of a certain wayfaring man travelling from the City of London directly to the Town of Kingsme (most famous and renowned by reason of the triumphant coronation of eight several Kings) passing over a good portion of his journey, was assaulted and set upon by certain confedrate Thieves lying in wait for the spoile in Come-packe, a perillous bottom, compassed about with Woods too well known for the manifold murders and midnight robberies there committed Into whole hands this paffenger chance to fall, so that his ill luck colt him the price of his life.

And that Dog whose fire was English, (which Blondius regretteth to have been within the banks of his remembrance) manifeftly perceiving that his Master was murthered (this chanced not far from Paris) by the hands of one which was a fiuter to the fame woman, whom he was a woorer unto, did both bawry the bloody Butcher, and attempteth to tear out the villains throat, if he had not fought means to avoid the revenging rage of the Dog. In fires also which fortune in the silence and dead time of the night, or in stormy weather of the said seafon, the older Dogs bark, baul, howl, and yell, (yea notwithstanding they be roughly rated) neither will they stay their tongues till the houhofd servants awake, rise, search, and see the burning of the fire, which being perceived they une voluntary silence, and cease from yelping. This hath been, and is found true by trial, in sundry parts of England.

There was no fainting faith in that Dog, which when his Master by a mischance in hunting stumbled and fell, toppling down a deep ditch being unable to recover of himself, the Dog signifying his Masters mischapp, rescue came, and he was haled up by a rope, whom the Dog seeing almost drawn up to the edge of the ditch, cheerfully saluted, leaping and skipping up upon his Master as though he would have embraced him, being glad of his presence, whose longer absence he was loath to lack. Some Dogs there be, which will not suffer fiery coles to lie scattered about the hearth, but with their paws will rake up the burning coles, muffing and fying with theirselves how it might conveniently be done. And if so be that the coles call too great a heat, then will they bury them in ashes and so remove them forward to a fit place with their noles. Other Dogs be there which execute the office of a Farmer in the night time. For when his Master goeth to bed to take his natural sleep; And when,

A hundred bars of brasse and iron bolt,  
Make all things safe from stears and from revolt;  
When Janae keepes the gate with Argus eye,  
That dangers none approach, no mischief rise,  

As VirgIL vaunteth in his Verses: Then if his Master biddeth him goe abroad, he singereeth not, but rangeth
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rangeth over all his lands thereabout, more diligently, I wvs, then any Farmer himself. And if he finde any thing there that is strange and pertaining to other persons besides his Master, whether it be man, woman, or beast, he driveth them out of the ground, not medling with any thing that do belong to the possession and use of his Master. But how much faithfulness, so much diversity there is in their natures.

For there be some, which bark only with free and open throat, but will not bite, some which do both bark and bite, and some which bite bitterly before they bark.

The first are not greatly to be feared, because they themselves are fearful, and fearful Dogs (as the Proverb importeth) bark most vehemently.

The second are dangerous, it is wisdom to take heed of them, because they found as it were, an Altarum or an afterclap, and these Dogs must not be over much moved or provoked, for then they take on outrageously, as if they were mad, watching to set the print of their teeth in the flesh. And these kinde of Dogs are fierce and eager by nature.

The third are deadly, for they fly upon a man without utterance of voice, snatch at him, and catch him by the throat, and most cruelly bite out collops of flesh. Fear these kinde of Curs, (if thou be wise and circumspect about thine own safety) for they be stout and Rubborn Dogs, and set upon a man at a sudden unawares. By these signs and tokens, by these notes and arguments our men discern the towards Curs from the courageous Dog, the bold from the fearful, the butcherly from the gentle and tractable. Moreover they conjecture, that a Whelp of an ill kinde is not worth keeping and that no Dog can serve the fundry ues of men to aptly and conveniently as this sort, of whom we have so largely written already. For if any be disposed to draw the above named services into a Table, what man more clearly, and with more vehemency of voice giveth warning either of a wailful Beast, or of a spoiling thief then this, who by his barking (as good a a Barking Beacon) forewarneth hazards at hand. What manner of Beast stronger? What servant to his Master more loving? What companion more truly? What Watchman more vigilant? What venger more confant? What Messenger more speedy? What Water-bearer more painful? Finally, what Pack-horse more patient? And thus much concerning English Dogs, first of the gentle kinde, secondly of the courser kinde. Now it remaineth that we deliver unto you the Dogs of a Mungrel or Curritsh kinde, and then will we perform our task.

Containing CVRS of the Mungrel and Rascal sort, and first of all the DOG called in Latine, Admonitor, and of us in English, Watcher, or Warner.

Of such Dogs as keep not their kinde, of such as are mingled out of fundry sorts, not imitating the conditions of some one certain spice, because they resemble no notable shape, nor excels any worthy property of the true, perfect and gentable kinde, it is not necessary, that I write any more of them, but to banish them as unprofitable implements, out of the bounds of my Book; unprofitable I say, for any use that is commendable, except to entertain strangers with barking in the day time, giving warning to them of the House, that such and such be newly come, whereupon we call them admonishing Dogs, because in that point they perform their Office.

Of the DOG called TURNESPI T, in Latine, Veruorsator.

Here is comprehended, under the Curs of the courser kinde, a certain Dog in Kitchin-service excellent. For when any meat is to be roasted, they go into a wheel; which they turning round about with the weight of their bodies, so diligently look to their business, that no drudge nor scullion can do the feat more cunningly. Whom the popular fort hereupon call Turn-spits, being the laft of all those which we have first mentioned.

Of the DOG called the DANCER, in Latine, Saluator or Tympa nista.

Here be also Dogs among us of a Mungrel kinde, which are taught and exercised to dance in measure at the Musical sound of an instrument, as at the just stroke of the Drum; at the sweet accent of the Cittern, and tuned strings of the harmonious Harp, showing many pretty tricks by the gelligence of their bodies; as to stand bolt upright, to lye flat upon the ground, to turn round as a ring, holding their tails in their teeth, to beg for their meat, and sundry such properties, which they learn of their Vagabundical Masters, whose instrument they are to gather gain withall in the City, Countrey, Town, and Village. As some which cary old Apes on their shoulders in coloured jackets to move men to laughter for a little lucre.
Of other D O G S, a short conclusion, wonderfully ingendred within the coast of this Country.

Of these there be three sorts; the first bred of a Bitch and a Wolf, called in Latin, Lyofoes; the second of a Bitch and a Fox, in Latin, Lactens; the third of a Bear and a Bandog, Vicanus.

Of the first we have none naturally bred within the borders of England. The reason is for the want of Wolves, without whom no such Dog can be ingendred. Again, it is delivered unto thee in this discourse; how and by what means, by whose benefit, and within what circuit of time, this Country was clearly discharged of ravening Wolves, and none at all left, no, not the least number, or to the beginning of a number, which is an Unutie.

Of the second sort we are not utterly void of some, because this our English soil is not free from Foxes, for indeed we are not without a multitude of them, insomuch as divers keep, foster and feed them in their houles among their Hounds and Dogs, either for some malady of minde, or for some sickness of body) which peradventure the favour of that subtil Beall would either mitigate or expell.

The third which is bred of a Bear and a Bandog, we want not here in England, (A strange and wonderful effect, that cruel enemies should enter into the work of copulation, and bring forth so savage a Cur.) Undoubtedly it is even so as we have reported, for the fiery heat of their fleth, or rather the pricking thorn; or most of all, the tickling luft of lecherie, beareth such fwing and fway in them, that there is no contrary to the time, but of contraint they must joy to engender. And why should not this be confonant to truth? Why should not these Beals breed in this land, as well as in other forien Nations? For we read that Tygers and Dogs in Arcadia, that Lyons and Dogs in Francia, and that Wolves and Dogs in Cumanum, and that Wolves and Dogs in Francia couple and procreate. In men and women also lightned with the Lantern of reaflon (but utterly void of vertue) that foolish, frantic, and fiellly actioa (yet naturally feated in us) worketh so effectually, that many times it doth reconcile enemies, fet foes at frindship, unanimity, and atonement, as Moria mentioneth. The Ae Dane which is bred of a Bear and a Dog,

Is fierce, is fell, is stout and strong,
And bites free to flesh and bone.
His furious force indureth larg,
In rage he will be vul’d of none.

That I may use the words of the Poet Gratius. This Dog exceedeth all other in cruel conditions, his leering and steering looks, his stern and savage vifage, maketh him in fight fearful and terrible. He is violent in fighting, and wherefoever he fet his tenderhook teeth, he taketh such fure and fast hold, that a man may sooner tear and rend him asunder, then loose him and separate his chaps. He paffeth not for the Wolf, the Bear, the Lyon, nor the Bull, and may worthily (as I think) be companion with Alexanders Dog which came out of India. But of thefe, thus much, and thus far may seem sufficient.

A fart to Out-landifh D O G S in this conclusion, not impertinent to the Authors purpoife.

Us and cuftome hath entertained others Dogs of an Out-landifh kinde, but a few and the fame being of a pretty bigness, I mean Iland Dogs, curled and rough all over, which by reafon of the length of their hair make shew neither of face nor of body: And yet these Curs, for tooth, because they are so strange, are greatly fet by, esteemed, taken up, and many times in the room of the Spanish gentle or comforter. The nature of men is so moved, nay, rather maried to novelties without all reaflon, wit, judgement or perseverance, Eromen allatias, parornen jugennis.

Out-landifh toys we take with delight,
Things of our own Nation we have in despight.

Which fault remaineth not in us concerning Dogs only, but for Artificers also. And why? it is manifest that we disdain and content our own Work-men, be they never fo skilful, be they never fo cunning, be they never fo excellent. A beggerly Beall brought out of barbarous borders, from the uttermost Countreys Northward, &c. we flare at, we gaze at, we muse, we marvel at, like an Ais of Cumana, like Tules with the brazen thanks, like the man in the Moon.

The which default Hiperates marked when he was alive, as evidently appeareth in the beginning of his Book Pari Agmen, fo entituled and named:

And we in our work entitled De Ephemeris Britannicae, to the people of England have more plentifully expreffed. In this kinde which is most blockifh, and yet most wafhip, the fame is most esteemed, and not among Citizens only and jolly Gentlemen, but among luffy Lords also, and Noble-
Noblemen. Further I am not to wade in the flood of this discourse, because it was my purpose to satis-
fy your expectation with a short treatise (most learned Comrade) not wearisome for me to write, nor tedious for you to peruse. Among other things which you have received at my hands hereto-
fore, I remember that I wrote a several description of the Cretian Dog, because there are but a few of them, and therefore very seldom seen. As touching Dogs of other kinds you your self have taken earnest pain in writing of them both lively, learnedly, and largely. But because we have drawn this libel more at length then the former which I sent you (and yet briefer then the nature of the thing might well bear) regarding your most earnest and necessary studies; I will conclude, making a rehearsal notwithstanding (for memory fake) of certaine specialties contained in the whole body of this my brevity. And because you participate principal pleasure in the knowledge of the common and usal names of Dogs (as I gather by the course of your letters) I suppose it not amiss to deliver unto you a short table containing as well the Latin as the English names, and to render a reason of every particular appellation, to the intent that no scruple may remain in this point, but that every thing may be fitted to the bare bottom.

A Supplement or Addition, containing a demonstration of Dogs Names how they had their Original.

The names contained in the general Table, forso much as they signifie nothing to you being a stranger, and ignorant of the English tongue, except they be interpreted: as we have given a reason before of the Latin words, so mean we to do no les of the English, that every thing may be manifest unto your understanding. Wherein I intend to observe the same order which I have fol-
lowed before.

Sagex, in English, Hund, is derived of our English word hunt. One letter changed in another, namely T into D, as Hunt, Hund, whom if you conjecture to be named of your Country word Hund, which signifieth the general name (Dog) because of the similitude and likeness of the words. I will not stand in contradiction (Friend Geiner) for so much as we retain among us at this day many Dutch words, which the Saxoni left at such time as they enjoyed this Country of Britain. Thus much also understand, that as in your language Hund is the common word, so in our natural tongue (Dog) is the universal, but Hund is particular and a special, for it signifieth such a Dog only as fervet to hunt, and therefore it is called a Hund.

Of the Cafe-bound.

The Cafe-bound called Latine, Agaeus, hath his name of the sharpness and seldemness of his eye-sight. By which vertue he compasseth that which otherwise he cannot by smelling attain. As we have made former relation, for to gaze is earnestly to view and behold, from whence floweth the derivation of this Dogs name.

Of the Gray-bound.

The Gray-bound called Leporarius, hath his name of this word Gre, which word foundeth, Grac-
dus in Latin, in English, Degree. Because among all Dogs there are the most principal, having the chiefest place, and being simply and absolutely the best of the gentle kindes of Hounds.

Of the Lymmer or the Lyemmer.

This Dog is called a Lymner, for his lightnefs, which in Latin foundeth Levitas. Or a Lymmer, which word is borrowed of Lyemme, which the Latinis name Lutos: and wherefore we call him a Lymner of this word Levitas: (as we do many things besides) why we derive and draw a thousand of our terms out of the Greek, the Latine, the Italian, the Dutch, the French, and the Spanish tongue: (Out of which Fountains indeed, they had their Original issue.) How many words are buried in the grave of forgetfulness; grown out of use; wretted away; and perverly corrupted by divers defaults; we will declare at large in our Book entituled, Symphonias vocum Britannicarum.

Of the Tumbler.

Among Hounds the Tumbler called in Latine, Verterae: which cometh of this word Tumbler, flowing first from the French Fountain. For as we lay Tumble, so they Tumbler, referring our ferne and signification, which the Latinis comprehend under this word Vertere. So that we see this much, that Tumber cometh of Tumbler, the Vowel I, changed into the Liquid L, after the manner of our speech. Contrary to the French and the Italian tongue: In which two Languages a Liquid before a Vowel for the most part is turned into another Vowel; as may be perceived in the example of these these two words, Impire & piano, for Impire & piano, I before E, changed into I, and L, before A, turned into T. Also I thought convenient for a tale.

After such as serve for hunting, orderly do follow such as serve for hawking and fowling, among which the principal and chiefest is the Spaniel, called in Latin, Hispainius, borrowing his name of Hifpania, wherein we English men not pronouncing the Aspiration H, nor the Vowel I, for quickness and readiness of speech, lay roundly a Spageln.
The History of Four-footed Beasts.

Of the Setter.

The second fort is called a Setter, in Latin, Index. Of the word (Set) which significeth in English that which the Lattains mean by this word Locum designare, the reason is rehearsed before more largely, it shall not therefore need to make a new repetition.

Of the Water Spaniel or Finder.

The Water Spaniel consequently followeth, called in Latin, Aquaticus; in English a Water Spaniel, which name is compound of two simple words, namely Water, which in Latin loundeth Aqua, wherein he swimmeth, and Spain, Hispania, the Countrey from whence they came; not that England wanteth such kinds of Dogs, (for they are naturally bred and ingendered in this Countrey) but because they bear the general and common name of these Dogs since the time they were first brought over out of Spain. And we make a certain difference in this fort of Dogs, either for something which, in other qualities is to be preferred, as, for an example in this kind called the Spaniel, by the apposition and putting to of the word Water, which two coupled together found Water Spaniel. He is called a Finder, in Latin, Inquisitor: because that by serious and secure seeking, he findest such things as be lost, which word Finde in English is that which the Lattines mean by this Verb Invenire. This Dog hath this name of his property, because the principal point of his service consisteth in the premisses.

Now leaving the view of hunting and hawking Dogs, it remaineth that we run over the residue, whereof some be called fine Dogs, some courie, otherfrom Mungrels or Rascals. The first is Spaniel gentle called Canis Melitus, because it is a kind of Dog accepted among Gentils, Nobles, Lords, Ladies, &c. who make much of them, vouchsafing to admit them fo far into their company, that they will not only lull them in their laps, but kiss them with their lips, and make them their pretty play-fellows. Such a one was Corgari little puppy mentioned by Teoscris in Syracusis, who taking his journey, straitly charged and commanded his Maid to fee to his Dog as charily and wary as to his childe: To call him in always that he warded not abroad, as well as to rock the babe a sleep, crying in the Cradle.

This Puppety and pleasant Cur, (which some frumpingly term Ftyng Hound) serves in a manner to no good use, except (as we have made former relation) to succour and strengthen quailing and quailing stomachs, to bewray badwery, and filthy abominable lewdness (which a little Dog of this kinde did in Sicilia) as Melinus in his 7. Book of Beasts, and 27. chapter recordeth.

Of Dogs under the courier kinde, we will deal first with the Shepheard Dogs, whom we call the Bandog, the Tydog, or the Martive, the first name is imputed to him for service, Quamum patior familiaris, because he is at the Shepheard his Masters commandment. The second a Ligamento of the band or chain wherewith he is tyed. The third a Segnos, of the fattnes of his body.

For this kinde of Dog which is utually tyed, is mighty, grofs, and fat fed. I know this that Augstinius Niphus calleth this Mofinius, (which we call Mafiorus) and that Albertus writeth how the Lycenis is ingendred by a Bear and a Wolf. Notwithstanding the self same Author taketh it for the most part pra Medias, of a Dog of such a Countrey.

Of Mungrels and Rascals somwhat is to be spoken: and among these, of the Wappe of Turnspit, which name is made of two simple words; that is, of Turn, which in Latin loundeth Vertere, and of Spit which is Versa or speoe, for the English word adhereth closer to the Italian imitation Verso a covert, Turnspit. He is called also Waupe, of the natural noise of his voyage Wau, which he maketh in barking. But for the better and reader found, the vowel U, is changed into the consonant P, so that for Waupe we say Wappe. And yet I wot not well that Natus Borroweth his Bashari of the natural voyage Bash as the Grecoins do ther Bauen of Wau.

Now you when understand this, that Safure in Latine signifies Dayfare in English. And that our Dog is thereupon called a Dancer, and in the Latine, Salutator; you are so far taught as you were defirous to learn: and now I suppose, there remaineth nothing, but that your request is fully accomplished.

Thus (Friend Geofier) you have, not only the kinds of our Country Dogs, but their names also, as well in Latine as in English, their Offices, Services, Diverities, Natures, and Properties, that you can demand no more of me in this matter. And albeit I have not satisfieth your mind peradventure (who supposeth all speed in the performance of your request employed, to be meer delays) because I laid the setting forth of that unperfect pamphlet, which five years ago I lent to you as a private friend for your own reading, and not to be printed and fo made common, yet I hope (having like the Bear lickt over my money) I have waded over in this work to your contentation, which delay hath made somewhat better, and Deuterai prontitudes, after wit more meet to be purfed.

Now it is convenient to shut up this treatise of Dogs, with a recital of their several diseases and cures thereof; for as all other creatures, so this beast is annoyed with many infirmities. First, therefore if you give unto a Dog every seventh day, or twice in seven days bathro or potage, where-in Iu b is sod, it will preserve him found without any other medicine, for this herb hath the same operation in Dogs to make wholesome their meat, that it hath in Sheep to cleanse their paste. The small fruits of Ellebor which are like to Onions, have power in them to purge the belly of Dogs: Other give them Goats-milk, or Salt betacm small, or Sea crabs beaten small and put into water, or

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Staves-ace, and immediately after his purgation, sweet Milk. If your Dog be obstrued and stopped in the belly, which may be discerned by his trembling, sighing, and removing from place to place, give unto him Oaten meal and water to eat, mingled together and made as thick as a Pulsel, or leavened Oaten bread, and sometime a little Whay to drink.

The Ancients have observed that Dogs are most annoyed with three diseases, the swelling of the throat, the Gout, and madness; but the later Writers have observed many noyme infirmities in them. First, they are oftentimes wounded by the teeth of each other, and also of wilde Beasts: for cure whereof, _Blenda_ ou of _Maximum_ writeth these remedies following: First, let the finew, _fibra_, or gristles of the wound be laid together, then sow up the lips or upper skin of the wound with a needle and thread, and take off the hairs of the Dog which made the wound, and lay thereupon, until the bleeding be franched, and fo leave it to the Dog to be licked; for nature hath so framed the Dogs tongue, that thereby in short space he cureth deep wounds.

And if he cannot touch the fore with his tongue, then doth he wet his foot in his mouth, and so oftentimes put it upon the main: or if neither of these can be performed by the Beast himself, then cure it by cauting upon it the ashes of a Dogs head, or burned salt, mingled with liquid pitch poured thereupon. When a Dog returning from hunting is hurt about the snows, by the venomous teeth of some wilde Beast, I have seen it cured by making incision about the wound, whereby the poynoned blood is evacuated, and afterward the sore was anointed with Oyl of Saint Johns-wort. Wood-worms cure a Dog bitten by Serpents. When he is troubled with Ulcers or rindes in his skin, pieces of Pot-fhears beaten to powder and mingled with Vinegar and Turpentine, with the fat of a Goose; or else Water-wort with new Lard, applied to the fore, easeth the same: and if it swell, annoy it with Butter.

For the drawing forth of a thorn or splinter out of a Dogs foot, take Colts-foot and Lard, or the powder thereof burned in a new earthen pot; and either of these applied to the foot, draweth forth the Thorn, and cureth the sore: for by _Disforider_ it is said, to have force to extract any point of a Spear out of the body of a man. For the Worms which breed in the Ulcers of their heels, take _Unguentum Egiptiacum_, and the jucye of peach leaves: There are some very skilful Hunters which affirm, that if you hang about the Dogs neck flocks of Citrine, as the wood dryeth, so will the Worms come forth and dy. Again, for this evil they waie the wounds with water, then rub it with Pitch, Thyme, and the dunc of an Oxe in Vinegar, afterward they apply unto it the powder of Elebof. When a Dog is troubled with the Mango, itch or Ring-worms, first let him blood in his forlegs in the greatest ven: afterward make an Ointment of Quick-filver, Brimtone, Nettle-seed, and twice so much old Sowet or Butter, and therewithall anoint him, putting thereunto if you please the decoction of Hops and Salt-water.

Some do wash Many Dogs in the Sea-water; and there is a Cave in Sicily (faith _Gratianus_) that hath this force against the scabs of Dogs, if they be brought thither, and bathe in the running water which seemeth to be as thick as Oyl. Fleegn or melancholy doth often engender these evils, and so after one Dog is infected, all the residue that accompany or lodge with him, are likewise poynoned: for the avoind thereof, you must give them Fumitory, Sorrel, and Whay sod together; it is good also to waie them in the Sea, or in Smiths-water, or in the decoction aforesaid.

For the taking away of Warts from the feet of Dogs, or other members, first rub and criacafe the Wart violently, and afterward anoint it with Salt, Oyl, Vinegar, and the powder of the rinde of a Gourd; or else lay unto it Aloeos beaten with Multard-feed, to eat it off, and afterward lay unto it the little stories or iron chips, which fly off from the Smiths hot iron while he beateth it, mingled with Vinegar, and it shall perfectly remove them.

Against Ticks, Lyece, and Fleas anoint the Dogs with bitter Almonds, Staves-ace, or roots of Maple, or Cipers, or frotth of Oyl, if it be old; and anoint also their ears with Salt-water, and bitter Almonds, than shall not the flies in the Summer time enter into them. If Bees or Wasps, or such Beasts flying a Dog, lay to the fore burned Rue, with Water; and if a greater Fly, as the Hornet, let the Water be warmed. A Dog shall be never infected with the Plague, if you put into his mouth in the time of any common Pehilence, the powder of a Storks claw, or Ventricle, or any part thereof with Water: which thing ought to be regarded, (for no creature is so soon infected with the Plague as is a Dog and a Mule) and therefore they must either at the beginning receive medicine, or else be removed out of the air, according to the advice of _Gratianus_:

_Sed variis vitis, nec in omnibus una polles_,
_Dice victor, & quae tutela est proxima, tenta._

_Wolf-wort, and _Aposmon_, whose leaves are like the leaves of Ivy, and smell strongly, will kill all Beasts which are littered blinde; as Wolves, Foxes, Bears, and Dogs, if they eat thereof: So likewise will the root of _Chameleum_ and _Meseron_, in Water and Oyl, it killeth Mice, Swine, and Dogs. _Ellebus_ and _Squilla_, and _Eupa Lupina_, have the same operation. There is a Gourd (called _Zingiber_ of the Water) because the taste thereof is like to Ginger, the Flower, Fruit, and Leaf thereof killeth Affes, Moles, Dogs, and many other four-footed Beasts. The Nuts _Vomica_, are poynon to Dogs, except their ear be cut prettily and made to bleed. It will caufe them to leap strangely up and down, and kill him within two hours after the tayling, if it be not prevented by the former remedie. _Thephraflus Chryfipus_ affirmeth, that the water wherein _Sperage_ hath been
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Concerning Venus Blondus. If a Dog grow lean, and not through want of meat, it is good to fill him twice or thrice with Butter, and if that do not recover him, then it is a sign that the worm under his tongue annoymeth him, {which} must be presently pulled out by some Nautl or Needle} and if that satisifie not, he cannot live, but will in short time perish. And it is to be noted, that Oaten bread leavened, will make a flaggish Dog to become lusty, agile, and full of spirit. Dogs are also many times bewitched, by the only light of Inchanters, even as Infants, Lambs, and other creatures, according to Virgil's: 

\[Nec sit teveos ocula misi fatima agnos.\]

For the bewitching spirit entereth by the eye into the heart of the party bewitched: for remedy whereof, they hang about the neck a chain of Corral, as for holy Herbs I hold them unprofitable.

To cure the watry eyes of Dogs, take warm water, and first wash them therewith, and then make a plaister of meal and the white of an Egge, and so lay it thereunto. By reason of that saying, Eccl. 20. cap. Eribis et giftis blindis the eye of Idus, even as a dumb Dog turneth away Correlitum. Some have delivered, that green Crow-foot forced into the mouth of a Dog, maketh him dumb, and not able to bark: When a Dog becometh deaf, the Oyl of Roses with new pressed Wine infused into his ears, cureth him: and for the Worms in the ears, make a plaister of a beaten Spunge and the white of an Egge, and that shall cure it.

The third kinde of Quinancie (called Synanche) killeth Dogs, because it bloweth upon their chips, and incluseth their breath. The Cough is very noyome to Dogs, wherefore their keepers must infite in to their Nefkris two cups of Wine, with bruified sweet Almonds: but Tardinus for this diseafe, prescribed great Parfley sod with Oyl, Honey, and Wine, and so given to the Dog. For the shortness of the breath, bore him through the ear, and if there be any help, that will prevail.

If a bone thick in the mouth of a Dog, hold up his head backward, and pour Ale into his mouth until he cough, and so shall he be eafed. When a Dog hath furieous, and falleth to loath his meat, he eateth the herb Canaria, and is relieved (both against his turrier, and also the bitings of Serpents.) For the Worms in the belly, he eateth Wheat in the flake. The Gowt maketh the Dogs legg grow crooked, and it is never so cured; but that after a course or too they grow lame again. When his skin fleyeth from his nails, take meal and water, and binde them thereunto for a remedy: and these are for the most part, those diseases wherewithall Dogs are infected, and the other are either cured by heat, or by eating of grais: and so for this part, I conclude both the sickness and cure of Dogs, with the laying of Gratius:

\[Mille tenent pestes, curaque potentia major.\]

Of the bitings of mad Dogs and their cure. Concerning the madness of Dogs, and their venemous bitings, we are now to speak: and first of all, no reasonable man ought to doubt, why the teeth of a mad Dog should do more harm then of a sound and healthy one: because in rage and anger, the teeth of every Beast and creature, receive venom and poyson from the head (as it is well observed by Augustus) and so at that time finathing their teeth, they do more harm then at other times. Against the simple biting of a Dog, it is sufficient but to use the urine or a Dog, for there is not much venom in those wounds; and the urine also will draw out the prickles of a Hedge-hog, because such wounds have in them but little poyson. Also (as Actius prescribeth) it is very loveraign in such wounds, first of all to cover and rub the sore with the palm of ones hand, and then pour into it Vinegar and Nitre, so as it may descend to the bottom of the wound, and afterward lay unto it a new spunge wetted in the same Vinegar and Nitre, and let it be continued for the space of three days, and by the working thereof it shall be whole.

Also it is generally to be observed in all the bitings of men by Dogs, that first of all it is requisite, that the wound be well rubbed over by the palm of the hand with Vinegar, then pour into the wounds Vinegar mixed with water or with Nitre, laying also a spunge thereupon, and so binde it up on the place, having first wetted the cloaths wherewithall you binde it with the said Vinegar mixed, so let it remain bound up three days together, and afterward follow the common course of curing, as in every vulgar wounds, or else, lay thereunto Pellitory of the Wall, mingled and beaten with Salt, changing it every day, until the crust or upper skin fall away.

It is also good sometines, the holes being small, to wet Lint in Vinegar, and to purge the wound with powder of Anise-feed, or Cumin; laying the Lint upon the Anise for two or three days. The same being thus purged, take a medicine of the equal parts of Hony, Turpentine, Butter, Goose-grease Marrow of a Hart, or Calf, melted betwixt the teeth of a man, and lay it thereunto, for it also cuezeth the bitings of men: but if the fore be inflamed, then lay unto it Lentils sod with the parings of Apples, and dryed, or the crumbs of bread with the juyc of Beets, and a little Oyl of Roses, made like a plaister.

Divers Authors have also prescribed these outward medicines against the bitings of Dogs in general, namely Vinegar spunged, the Leone of Vinegar, with Nigella Roman,a Vino Hair, Alabatter, Brine with Lint, Garlick mixed with Hony, and taken into the body, Leone of Wine, Almonds
Almonds both sweet and bitter mingled with Honey, dryed Anise-seeds burned, the leaves of black Hore-hound, or Archangel beate with Salt, Scallions with Honey and Pepper of the cafe, the juice of Onions with Rue and Honey, or raw Onions with Honey and Vinegar, but sod ones with Honey and Wine, (if they be green) let them ly to the wound three days: the ashes of Vine-trees with Oyl, ashes of a Fig-tree with a Sear-cloth, befide infinite other elaborate medicines, drawn from Trees, Fruits, Fields, and Gardens, and all other creatures; as if Nature had only frowen to provide flundy ready curers for this evil above all other.

Leaving therefore the simple bitings of Dogs, let us proceed to the madness of Dogs and their bitings, wherein the greater danger must be considered, with greater circumjpection of remedies. First therefore, the Ancients have derived Rabies, or Ravies, madness, of the hoarfares of voyage, (because a Dog at that time hath no perfect vocy.) But it is more probable, that Rabies cometh of Rapiendo, because when a Dog beginneth to be oppressed herewith, he biteth, fnaicetheth, runneth to and fro, and is carried from home and Mafter, to his own perdition: this by the Græcians is called Lytra, and Cynolofias.

By this evill, not only Dogs perih, but all other creatures (except a Goole) bitten by them: and a man doth not escape without great perill. For Albertus relatereth a story, of a man whose arm was bitten by a mad Dog, and after twelve years the fore brake forth again, and he dyed within two days; and the reafon hereof was (as in all likelihood that of Cælus) that when one and the fame nature infecteth each other, as Dogs do Dogs, and men do men, then by reafon of their fimilitude and natural sympatry, they receive the consuming poifen with all speed; but if another nature infect that, wherewith in inclination and passion, there is a diffimilitude and antipathy, (as is betwixt a Dog and a Man) then will the poifen receive greater opposition, and be fo much the longer before it receive predoimnate operation, because the firft overcometh Nature by treafon, againit which there is no refilience; and the second by open force and proclamation of War,againit which all the strength and force of nature is combined and oppofed.

Hereof alfo it came to pafs, that the Noble Lawyer Baitius, playing with his Dog at Trent, was bitten by him in his lip, and negleeting the matter (because he never lufpected the Dogs madness) after four moneths the poifen wrought upon him, and he perifhed miserably. Thoue Beasts which have teeth like faws, (as Dogs, Wolves, and Foxes) go mad by nature, without the bitings of others, but thoue which have no fuch teeth (as Affes and Mules,) fall not mad at any time until they be bitten by other.

Also it hath been obferved, that sometimes a mad Dog hath bitten, and there hath followed no harm at all, whereas the reafon, because poifen is not equally in all his teeth; and therefore biting with the inner and holefomer, the wound became not perilous.

A man bitten with a mad Dog, fellath prefently when he cometh under the shadow of a Corne-tree; as it is affirmed by moft Phyficians, for that Shadow feteth the poifen on fire: but a man falling mad, of all creatures avoideth a Dog, and a Dog moft of all fellath upon men. There are many things which ingender madness in Dogs, as hot wheaten bread dipped in Bean-water, melancholy breed within them, and not purged by Canaria or other herbs, the menilurif polls of Women, and the pain of their teeth. Their madness is moft dangerous in the Dog-days, for then they both kill and perifh mortally; for at that time their fpitte or fome, falling upon mans body, breeds great danger; and that if a man tread upon the Urine of a mad Dog, he fhall feel pain by it if he have a fore about him: from whence it came to pafs, that a lone bitten by fuch a Dog, was a common proverb of difcord. Also it is obferved, that if a wound be drefsed in the prefence of man or woman, which hath been bitten by a mad Dog, that the pain thereof will be encreafe: and which is more, that abfmortion will follow upon Beasts with young, or Egges covered by the Hen, by their prefence: But for remedy, they wasf their hands and Princkle themfelves, or the Beasts with that wafer, whereby the evill is to be cured.

If the gall of a mad Dog, about the bignefs of a Lentill seed be eaten, it killeth within feven days, or else doth no harm at all, if it pafs feven days without operation. When a mad Dog had suddenly tore in pieces a garment about ones body, the Taylor or Botcher took the fame to mend, and forgetting himself, put one fide of the bread into his mouth to ftretch it out to the other, and fell mad immediately. Men thus affected, fear all wafters, their virile member continually flandeth, they fuffer many Convulfions, and oftentimes bark like Dogs.

There was a certain Mafon at Zurch, who had his finge grievously bitten with a mad Dog about the prouche, wherein he laid Garlick, Rue, and Oyl of Scorpion, and fo it seemed to be healed, wherefore he took no counsel of any Phyfician. About August following, he was taken with a Fever, being first very cold, then very hot, and fo continued sweating for a day or two, and could not endure the cold air. He fïrft hungered, yet when water or drink was brought him, he was fo afraid thereof that he could not drink: his sweat was cold, and when he fçelt any cold air, he cryed out for fear it had been water: thus he remained trembling, and offering to vomit at the fit of water, many times howling, and so perfified after two days ended.

When a Dog is mad it may be known by thefe fignes, for he will neither eat nor drink; he looks awry and more fadly then ordinary; his body is lean, he calleth forth thick leem out of his noftrels or mouth; He breatheth gaping, and his tongue hangeth out of his mouth. His ears is limber and weak, his tail hangeth downward: his pace is heavy and flagging until he run, and then it is more raffy, intemperate and uncertain. Sometimes running, and prefently after flanding till
again: he is very thirsty, but yet abstineth from drink, he barketh not, and knoweth no man, biting both strangers and friends. His head hangeth downward; he is fearful, and runneth into secret places from his whelps or fellows, who often bark at him, and will not eat of bread upon which his blood hath fallen. His eyes grow very red; he many times dyeth for fear of water: some dieteth by laying Nuts or grains of Corn to the bitten place, and afterward take them away and call them to Hens or Poultry, who for hunger will eat them, and if after the eating the foul live, the Dog will not be mad; but if it dye, then for certainty the Dog will fall mad. The which passions do also agree with them that are bitten by him; and it is not to be forgotten, that the bites of the female bring more danger then the males.

The bodies of them that are thus wounded grow very dry, and are prelled with inward burning Feavers, if by Musick and delightful sports they be not kept waking; many times they dye suddenly, or else recover for a small time, and then fall into a relapsed malady.

Some give this to be the cause of their fear of water, because their body growing dry, feemeth to forget all participation with humidity: but Rufus affirmeth, this cometh from melancholy, where-withall these persons are most commonly affected: which agreeeth with an imagination they have, that they see Dogs in the water, and indeed it cannot be but their own countenance, which in these passions is very red, doth wonderfully afflicth them, both in the water, and in all looking glaffes.

When a certain Philosopher (being bitten by a mad Dog) entred into a Bath, and a strong apparition of a Dog presented itself unto him therein, he strove against this imagination with a singular confidence courageous to the contrary, saying within himself, "Quid Cani commune est cum Balneis? what hath a Dog to do in a Bath? and I went in and overcame his disease: which thing had seduced, that a man hath recovered this malady after he fell into fear and trembling, except Eudemus and Theisme, who observing the requifite of a friend of his, entred likewise into the water, and after many torments was recovered.

To conclude, some men in this extremity suffer most fearful dreams, profusion of feed, hoarneſses of voyage, shortnes of breath, retention of urine, which also changeth colour, being sometimes black, sometime like milk, sometime thick, sometime thin as water, rumbling in the belly, by reason of crudity, redneſses of the whole body, ditention of nerves, heavines of mindes, love of darkenes, and fuch like. Yet doth not this operation appear presently upon the hurt, but sometimes at nine days, sometimes at forty days, sometimes at half a year, or a year, or even, or twelve years as hath been already said.

For the cure of these Dogs, and first of all for the preventing of madness, there are sundry inventd observations. First, it is good to put them up, and make them to fast for one day, then purge them with Helleboris, and being purged, nourith them with bread of Barley-meal. Other take them when they are young whelps, and take out of their tongue a certain little worm, which the Grecians call Lytta; after which time they never grow mad, or fall to vomiting, as Gratius noted in these verses:

Namque sibi nodis qua lingua tenacibus bere
Vernicium dicecre, maiaque immedia pestis, &c.

Iam teneris elementa mali, caufasque residunt.

But immediately it being taken forth, they rub the tongue with Salt and Oyl. Columella teacheth that Shepheards of his time, took their Dogs tails, and pulled out a certain nerve or finew, which cometh from the Articles of the Back-bone into their tails, whereby they not only keep the tail from growing deformed and over-long, but also contently believed, that their Dogs could never afterward fall mad; whereunto Pliny agreeeth, calling it a ca twitch or gelding of the tail, adding, that it must be done before the Dog be forty days old. Some again lay, that if a Dog taste of a Womans milk which the giveth by the birth of a Boy, he will never fall mad. Nemeian aperfeth the cure hereof to Cafforum dryed and put into milk, but this is to be understood of them that are already mad, whose elegant veres of the caufe, beginning, and cure of a mad Dog, I have thought good here to express:

Exhalaris seu terra sinus, seu maxis aer
Caula mali; seu cum gelidis non effucl humors;
Torrida per venom concorsint feminam fumma.

Whatsoever it be, he thus warranteth the cure.

Tunc virosa tibi fomes, multumque domabis
Caftores, adritu folidis lenterecer cognes.
Ex hore luc troto pulbis bellae feratur
Admirantis, diu facies concorsint urumque.
Max lobitis liquides fenfim fuperadd fluores,
Ut non cunctantes banius infundere comae
Inferto paffis, furiaflaque repeller triferes.

Arnetia
Of Dogs.

Ame Vitae p. lizae
Ore quaterns Appalam,
Littuj-fc Polygamum
Qui morfas rabidas levas,
I praol binc rakeb, procu binc farar omnis abeles.

But to come to the cure of such as have been bitten by mad Dogs: First I will let down some compound medicines to be outwardly applied to the body: Secondly, some simple or un compounded medicines: In the third place such compounded and un compounded potions, as are to be taken inwardly against this poiyon.

For the outward compound remedies, a plainer made of Opponax and Pitch, is much commended, which Menippus used, taking a pound of Pitch of Isautis, and four ounces of Opponax (as Amatus do prescribe) adding withall, that the Opponax must be dissolved in Vinegar, and afterward the Pitch and that Vinegar must be boiled together, and when the Vinegar is conformed, then put in the Opponax, and of both together make like syrups or plasters, and strew them into the wound, to let them remain many days together, and in the mean time drink an Amidote of Sea-crabs and Vinegar, (for Vinegar is always presious in this confection.) Other use Papiloa, Onyons, Rue, Salt, ruff of Iron, White bread, fees of Horehound, and Triacle: but the other plainer is most forcible to be applied outwardly, above all medicines in the world.

For the simple and un compounded medicines to be taken against this sore, are many: As Goose-geafe, Garlike, the root of wilde Roses drunk; bitter Almonds, leaves of Chwickseed, or Pumpernel, the old skin of a Snake pounded with a male Sea-crab, Betony. Cabbage leaves, or flats, with Parncps and Vinegar, Lime and Sewet, powder of Sea-crabs with Hony; powder of the shells of Sea-crabs, the hairs of a Dog laid upon the wound, the head of the Dog which did bite, mixed with a little Euphorbium; the hair of a Man with Vinegar, dung of Goats with Wine, Walnuts with Hony and Salt, powder of Fig-tree in a Sea-cloth, Fitches in Wine, Euphorbium; warm Horfe-dung, raw Beasts chewed in the mouth, Fig-tree-leaves, green Figs with Vinegar, fennel flats, Gentiana, dung of Pulled, the liver of a Buck-Goat, young Swallows burned to powder, also their dung; the urine of a Man, an Hyna, skin, Flower-deluce, a Sea-hearb called Kukjile, Spilium with Salt, the flesh and shels of Snails, Leek-feeds with Salt, Mints, the tail of a Field-mouse cut off from her alive, and the suffered to live, roots of Burs, with Salt of the Sea-Plantain, the tongue of a Ram with Salt, the flesh of all Sea-fishes, the fat of a Sea-call and Vervine, beside many other superfluous Amulets which are used to be bound to the arms, necks, and breasts, as the Canine-tooth bound up in a leaf and tied to the arm; a Worm bred in the dung of Dogs hanged about the neck; the root of Gentiana in an Hyna, skin, or young Wolfs skin, and such like; whereof I know no reason beside the opinion of men.

The inward compound potions or remedies against the bitings of Dogs may be such as these. Take Sea-crabs, and burn them with twigs of white Vine, and fave their ashes, then put to them the poxyder of Gentian root well cleaned, and small beaten, and as oft as need requirith take two spoonfuls of the first, and one of the second, and put them into a cup of pure and unmixed Wine, and do drink it for four days together, being well beaten and stirred, as the Wine be as thick as a Caudle; and there is nothing more forcible then Sea-crabs, Hiera, Digestion, powder of Walnuts in warm rain Water, Triacle, Carbomin, Pills, Spurge-feeds, and a decoction of Indian thorn with Vervine given in water. These may be use for several compound inward remedies against these poiyons, and now follow the simple.

First eating of Garlike in our meet, drinking of Wormwood, Rams flesh burned and put into Wine: fo drunk. There is an Herb called Aspho, by reason of the power it hath against this evil, which being bruished and drunk, cureth it. The liver of a Boar dried and drunk in Wine, hath the same operation. Jews lime drunk in water, Leeks and Onyons in meet, Dogs blood, the head, the ven
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under the tongue (commonly supposed to be a worm) and the liver of the Dog which hath done the hurt, are also precribed for a remedy of this evil: but especially the liver or rennet of a young Puppy, the rind of a wilde Fig-tree, a dram of Celastrum, with Oyl of Rofes, Centuary, or Chamomile; the root of a wilde Rofe; (called Gymnobotron and Gymnobotron) Eullor; the brain of a Hen drunk in some liquor, Sorrel, Honey, Mints, and Plantaine: but Pimpinella Germanica is given to all Cattell which are bitten by a mad Dog. Besides many other such like, which for brevity sake I omit, concluding against all superstitious curing by Incantaments or suppos'd Miracles, such as is in a certain Church of S. Lambert, in a City of Picardy, where the Mafs Preists, when a man is brought unto them having this evil, they cut a crofs in his forehead, and lay upon the wound a piece of S. Lamberts foile burning, (which they say (though falsely) is referred to this day without diminution) then do they row up the wound again, and lay another plaister upon it, precribing him a dyet; which is to drink water, and to eat hard Egs, but if the party amend not within forty days, they bide him hand and foot in his bed, and laying another bed upon him, there strangle him, as they think without all fin) and for preventing of much harm that may come by his life, if he should bite another. This story is related by Alphius, and it is worth the noting, how mutuer accompanyeth superstitious humane inventions, and the vain presumptuous confidence of Crofs-worshippers: and thus much of the madnes of Dogs, and the cure thereof in men and cattell.

In the next place, the conclusion of this tedious discourse followeth, which is, the natural medicines arising out of the bodies of Dogs, and so we will vye them up for this time.

Whereas the inward parts of men are troubled with many evils, it is deliver'd for truth, that if little Melitaen Dogs, or young fucking Puppies, be laid to the breath of a child or man that hath infectious passions or pains in his entrails, the pain will depart from the man into the beast; for which cause they burned them when they were dead. Serenus doth express this very elegantly, saying:

Quin etiam catulum laborant apportare membri
Conserve, omne malum transurrente fertur in illum.
Cui tamen essentia mundus debetur humendi,
Humani quis contiuit melia tanta sequuntur.
Et iunctum vitium ducit de conjuge conjus.

Amatus, Hippocrates.

If a Whelp be cut asunder alive, and laid upon the head of a mad melancholick woman, it shall cure her, and it hath the same power against the Spleen. If a woman grow barren after the birth born children, let her eat young Whelp flesh, and Polypus fish fed in Wine and drink the broth, and she shall have ease of all infirmities in her stomack and womb. Water distill'd out of Whelps, caufeth that pieted or shaven places shall never have more hair grow upon them.

With the fat of whelps, bellowed and fed till the flesh come from the bones, and then taken and put into another Veffel, and the weak, refulcute, or paralytike members being therewith anointed, they are much eafed if not recovered. Alphius saith, he made experience of Puppies fed alive in Oyl, whereby he cured his Gowy legd Horfes, and therefore it cannot chuse but be much more profita-ble for a man.

The skin of a Dog held with the five fengers, flyeth Diftillations; it hath the same operation in gloves and stockins, and it will also eafe both Ach in the belly, head, and feet, and therefore it is used to be worn in the shoes against the Goyt.

The fleth of mad Dogs is falted, and given in meat to them which are bitten by mad Dogs for a fingular remedy. The bloud is commended against all intoxicating powfons and pains in the small guts, and it cures thiefs. The fat is used against deafness of the ears, the Goyt, Nits in the head, and incontinency of urine, given with Alum. A plaister made of the Marrow of a Dog and old Wine, is good against the falling of the fundament. The hair of a black Dog eatheth the Falling sickness, the Brains of a Dog in Lint and Wool laid to a mans broken bones for fourteen days together, doth confolatate and joyn them together again, which thing caused Serenus to make thefe excellent verses:

Infandum diuìa cunctis procul abit amicia,
Sed fortuna potens omne convertit in hofter,
Vis indupta novi fi parerit offa fragore,
Compendet cerebrum blandis Canis addere fratellis,
Linea deinde superfusque inducunt melius lanis,
Sapius & saevus confugerent pinguis aeteri,
Sue sestem creantem revoluerent cum felibus.

The brain-pan or skull of a Dog close asunder, is applie'd to heal the pain in the eyes; that is, if the right eye be grieved, thereunto apply the right side of the skull; if the left eye, the left side.

The vertices of a Dogs head made into powder are both many and unspakeable, by it is the biting of mad Dogs cured; it cureth spots and bunches in the head; and a plaister thereof made with Oyl of Rofes, hasteth the running in the head; it cureth also all tumors in privy parts, and in the fea, the chippings in the fengers, and many other diseases.
Of the Elephant.

The powder of the teeth of Dogs, maketh Childrens teeth to come forth with speed and ease, and if their gums be rubbed with a Dogs tooth, it maketh them to have the sharper teeth, and the powder of these Dogs teeth rubbed upon the gums of young or old, eateh Tooth-ach, and abateth swelling in the gums. The tongue of a Dog is most wholesome both for the curing of his own wounds by licking, as also of all others. The Remedy of a Puppsey drunk with Wine, dissolveth the Colick in the same hour wherein it is drunk: and the Vomit of a Dog laid upon the belly of a Hydropick man, caueth water to come forth at his stool. The gall healeth all wheels and blisters after they be pricked with a Needle, and mingled with Mincemeit it caueth pain in the eyes, and taketh away white spots from them: likewise infused into the ears, openeth all stoppings, and cureth all inward pains in them.

The Spleen drunk in Urine, cureth the Spleenrick; the milk being taken from the Dog alive, hath the same vertue to help the milte of man. The skin of Bitches wherein they conceive their Puppies (which never touched the earth) is precious against difficulty in Child-birth, and it draweth the Infant out of the womb. The milk of a Bitches first whealing, is an antidote against poyson, and the same caueth hair never to come again, if it be rubbed upon the place where hairs are newly pulled off: Alfo infused into the eyes, driveth away the whiteness of them. Likewise there is no better thing to anoint the gums of young children withall, before they have teeth, for it maketh them to come forth with ease: it eateh likewise the pain of the ears, and with all speed healeth burnt mouths by any hot meat: Ora ambisba tibi fanba b elle Canino.

The urine of a Dog taketh away spots from the eye, and being mingled with Salt of Nitre, wonderfully eateh the Kings Evil. The dung of Dogs (called by the Apothecaries Album Gramum) because the white is belt, being ingendiend by eating of bones, and therefore hath no ill favour; Gulen affirmeth, that his Matters in Physick, used it against old forces, Bloody fluxes, and the Quaistes; and it is very profitable to blanch the blood of Dogs; and also against the inflammations in the breast of Women mingled with Turpentine. It was well prefcrib'd by Aseum, to expell congealed blood out of the stomach and bladder, being taken thereof fo much in powder as will lye upon a Golden Noble.

Of the Ethiopian EAL.

There is bred in Ethiopia a certain strange Beast about the bignefs of a Sea-horse, being of colour black or brownish: it hath the cheeks of a Bear, the tail of an Elephant, and horns above a cubit long, which are moveable upon his head at his own pleasure like ears; now flanding one way, and anon moving another way, as he needeth in fighting with other Beasts, for they stand not fifte, but bend flexibly; and when he sighteth, he alway stretcheth out the one, and holdeth in the other, of purpose as it may seem, that if one of them be blunted and broken, then he may defend himself with the other. It may well be compared to a Sea-horse, for above all other places it loveth the waters.

Of the ELEPHANT.

Here is no creature among all the Beasts of the world, which hath so great and ample demonstration of the power and wisdom of Almighty God as the Elephant: both for proportion of body and disposition of spirit; and it is admirable to behold the industry of our ancient fore-fathers, and noble desire to benefit us their posterity, by searching into the qualities of every Beasts to discover what benefits or harms may come by them to mankind: having never been afraid either of the wilder, but they tamed them; the fiercest, but they ruled them; and the greatest, but they also fet them upon. Witnesses for this part the Elephant, being like a living Mountain in quantity and outward appearance, yet by them so handled, as no little Dog became more服eable and tractable.

Among all the Europeans the first poffeffor of Elephants, was Alexander Magnus, and after him Antigonus, and before the Macedonians came into Asia, no people of the world, except the Africans and the Indians, had ever seen Elephants. When Fabrinius was sent by the Romans to King Pyrrhus in Ambaffage, Pyrrhus offered to him a great sum of money, to prevent the War, but he refused private gain; and preferred the service of his Country: the next day he brought him into his presence, and thinking to terrifie him, placed behind him a great Elephant, shadowed with cloth of Arms, the cloth was drawn, and the huge Beaf infantly laid his trunk upon the head of Fabrinius, sending forth a terrible and direful voice: whereas Fabrinius laughing, perceiving the policy of the King, gently made this speech:

Nego beri aumum, nego bude b sita me terribil.

I was neither tempted by Gold yesterday, nor terrifieè by the sight of this Beaff to day: and so af. Eutropius.

Farr.

Of the ELEPHANT, the great use of the consideration of an Elephant.

The full man in Egypt sold all of Elephants.

Phil.

Pausanias.

Fabrinius.

The elephants.

Fonteb.

Necut beri aumum, nego bude b sita me terribil.

I was neither tempted by Gold yesterday, nor terrifieè by the sight of this Beaff to day: and so af. Eutropius.

terward Pyrrhus was overcome in War by the Romans, and Mutilus Caius Demetrius did first of all bring Elephants in Triumph to Rome, calling them Licorne Bover, Oxen of the Wood, about O 3
The History of Four-footed Beasts.

Julius Capit.

Of the several names in divers languages.

The original of the Cafer.

The 472. year of the City; and afterward in the year of Rater building 502. when Metellus was high Priest, and overthrew the Carthaginians in Sicily, there were 142 Elephants brought in Ships to Rome and led in triumph, which Lucius Pius afterward, to take away from the people opinions of the fear of them, cau'ed them to be brought to the stage to open view and handling, and so flain; which thing Pompey did also by the slaughter of five hundred Lions and Elephants together; so that in the time of Cordianus, it was no wonder to see thirty and two of them at one time.

An Elephant is by the Hebrews called Behemah, by way of excellency, as the Latins for the same caufe call him Belona, the Caledonians for the same word, Deut. 14, translate Biura; the Arabians, Khiniz; the Persians, Birdad; and the Sepugnati, Kente; but the Greeks vulgarly Elephant, not Quafi Elephan, because they joyn copulation in the water, but rather from the Hebrew word Dephiā, signifying the Ivory tooth of an Elephant (as Munster well observeth.) The Hebrews also use the word Schön for an Elephants tooth. Moreover Hesychius call an Elephant in the Greek tongue Perisfai; the Latins do indifferently use Elephas and Elephantus; and it is said that Elephantus in the Punic tongue, signifieth Cajar: whereupon when the Grandfather of Julius Caesar had slain an Elephant, he had the name of Caesar put upon him.

The Italians call this beast Loffante, or Lionfante; the French, Elefante; the Germans, Helfant; the Bytians, Sloan. We read but of three appellative names of Elephants; that is of one, called by Alexander the great Ajax, because he had read that the buckler of great Ajax was covered with an Elephants skin, about whose neck he put a Golden collar, and fo fent him away with liberty. Attis- clus one of Alexanders succeffors had two Elephants, one of them he likewise called Ajax, in imitation of Alexander, and the other Partholos, of which two this story is reported by Antipater. That when Attisclus came to a certain forod or deep water, Ajax which was always the Captain of the flue, having found the depth thereof, refus'd to paffe over, and turn'd back again, then the King fpake to the Elephants and pronounced, that he which would paffe over should have principality over the flue: whereupon Partholos gave the adventure, and paffed over safely, and received from the King the fliver trappings and all other prærogatives of principality; the other feeing it (which had alway been chief till that time) preferred death before ignorney and difgrace, and fo would never after eat meat but famish'd for sorrow.

They are bred in the hot Eastern Countries, for by reason they can endure no cold, they keep only in the East and South. Among all, the Indian Elephants are greatest, strongest, and talleft, and there are among them of two forts, one greater (which are called Profi) the other smaller (called Texile.) They be also bred in Africa, in Lybia, much greater then a Nijean Horfe, and yet every way inferior to the Indian; for which caufe, if an African Elephant do but fee an Indian, he trembleth, and laboureth by all means to get out of his light, as being guilty of their own weaknes.

There are Elephants also in the Ille Taprobane, and in Sumatra in Africa. They are bred in Lybia, in Ethiopia, among the Troglodytes, and in the Mountain Atlas, Syrtes, Zamas, and Sala, the seven Mountains of Tyrantias, and in the Country of Basman, subject to the great Cham. Some Authors affirm, that the African Elephants are much greater then the Indian; but with no greater reafon then Columela writeth, that there be as great beasts found in Italy as Elephants are; whereunto no found Author ever yeelded.

Of all earthly creatures an Elephant is the greatest; for in India they are nine cubits high, and five cubits broad; in Africa fourteen or fifteen full spans, which is about eleven foot high and proportionable in breadth, which caus'd Belonas to write, that one Elephant is as big as three Flings; and among thefe the Males are ever greater then the Females. In the Kingdom of Melinda in Africa, there were two young ones not above fix months old, whereof the leaff was as great as the greatest Ox, but his flieath as much as you shall finde in two Oxen; the other was much greater.

Their colour is for the molt part mouse-colour, or black; and there was one all white in E보hipias. The skin looketh pieded and fcarby; it is molt hard on the back, but fofter underneath the belly, having no covering of hair or grifilles, nor yet help by his tail to drive away the flies, for that eftill doth this beaft feel in his great body, but alway hath crevices in his skin, which by their favour do invite the little flies to a continual leaff, but when by stretching forth they have received the swarines, by thinking together again, they incline the flies, and fo kill them: fo that thefe crevices in his skin, are unto him in leaft of a main, tail, and hair: yet there are fome few hairs which grow fatterning upon his hide, whereas fome have been brought out of America into Germany, which were two palmes long, but not fo flieath as Swines.

Their skin is fo hard and flieath, that a hard sword or iron cannot pierce it. Their head is very great, and the head of a man may easily enter into their mouth, as a finger into the mouth of a Dog; but yet their ears and eyes are not equivalent to the residue of their proportion: for they are fmal like the wings of a Bat or a Dragon, tho'ef of the E 보hipias Sumbr wants eare altogether. Their eyes are like the eyes of Swine, but very red; they have teehs of either fide four, wherewith they grind their meat like meal, and they have alfo two other which hang forth beyond the reft of the teeth, in the males downward, and these are the greater and crooked; but in the females upward, and they are the smaller and straight: the one of them they keep always sharp, to revenge injuries, and with the other they root up plants and trees, for their meat; fo that nature hath armed both sexes with
with these for their chiefest defence; and with these the females are calved at the first, and induced from the mothers' belly, and appear so soon as they come forth; the males not so quickly, but rather after the manner of Bores and Sea-horses, they hang out of their mouths, and grow to be ten foot long, whereof they make pools of fows in some Countreys, and call them Ebora, that is, young Ivory; which caused Martial to write thus;

Grandia tenuitum partem qui corpora queares
An Lybicis primitis justus tui usque tristes.

There is a certain Book extant, without the name of the Author, written of Judea or the Holy land, wherein the Author affirmeth that he saw an Elephant's tooth sold to a Venetian Merchant for fix and thirty Ducats, it being fourteen span long, and four spans broad, and it weighed so heavy, that he could not move it from the ground.

Vartomarus also faith, that he saw in the Isle of Sumatra, two Elephants' teeth, which weighed three hundred fix and thirty pounds. This is certain, that the teeth of those Elephants which live in the Marshes and watry places, are so smooth and hard, as they seem intricable, and in some places they have holes in them, and again certain bunches as big as hazel-bones, which are so hard, as no art or instrument can work upon them.

The Elephants of the Mountains have leffer and whiter teeth, fit to be applied to any work, but the belft of all, are the teeth of the Compositel and field Elephants, which are whited and footted, and may well be handled without all pain. The teeth of the females are moreRewelved for the male, and thence they lose every tenth year; which fallimg off, they bury and cover in the earth, reeling them down by sitting upon them, and then heal them over with earth by their fee, and so in short time the grasse growth upon them: for, as when they are hunted they know it is no other caufe then their teeth; fo also when they lose their teeth, they desire to keep them from men, let the virtues of them being discovered, they which bear them should enjoy the leffe peace and securitie.

It is admirable what devies the people of India and Asia have invented by natural observation, to finde out these buried teeth, which unto us living in the remote parts of the world, we would judge impossible by any ordinary or lawful course, except we should turn up the earth of a whole Countrey, or go to work by diabolical conjunction; yet have they found out this facile and ready course. In the woods or fields where they suspect these teeth to be buried, they bring forth pots or bottles of water, and dis perse them, here one, there another, and so let them stand, and tardy to watch them, fo one sleepeoth, another fingeth, or belloweth his time as he pleaseth; after a little time, they go and look in their pots, and if the teeth lie near their bottles, by an unpeable and secret attractive power in nature, they draw all the water out of them that are neer them, which the watchman taketh for a sure fign, and so diggeth about his bottle, till he finde the tooth: but if their bottles be not emptied, they remove to seek in another place.

These Ivory teeth have been alway of great estimation among all the Nations that ever knew them, the Ethiopians payed for a tribute unto the King of Persia every third year twenty of these teeth hung about with gold and Jet-wood. These are fold by weight, and there be many which deceive the world with the bones of Fifies in stead hereof, but the true Ivory is paler and heavier, and falling upon the ground will easily break, whereas the bones of Fifies are more tenacious, light and strong. It is like to the Cheruit wherein Darius was entombed, and the Marble called Lapin Corallium, Coral stone: like unto this is the Alagi Bone, and the Padun Jewell. With this Ivory they make images and statues for their Idol gods, as one for Peres in Athens, for Eulpipus in Epi dupolis, for Verus under the name of Urania by Plutarch, whereupon he calleth Elephantine, for Apollo at Rome: and therefore Pausanius wondereth at the Greeks that spared no cost for the vain worship of their gods, for they brought of the Indians and Ethiopians Ivory to make their Images with more pomp and ostentation: besides of Ivory they make the hafts of knives, and also the steel combes, and Solomon as appeareth 3 Reg. 10. had a throne of Ivory covered all over with gold, for the costs and charge whereof he could not expend lesse then thirty thousand talents.

The greatness of these appeareth by their use, for Pelibius reporteth by the relation of Galby, a Noble man and a great traveller in Africa, that with them they made pots for houses, and racks to lay their Cattels meat upon, and likewise bowls to enclose them. Apelles made an Ink of Ivory, which was called Elephants inke, and he painted therewith. It hath been affirmed by Albinus and some writers following Pliny, that these teeth are horns, and that Elephants are horned beasts, which errror rofe upon the occasion of these words of Pliny: Elephas et erutes carere tantum cornibus affirmatur, in Santorum litorum reciprocitos delinit Octavus; where Albinus finding a resemblance between Rams and Elephants in their white horns, was contented to apply that name to them both, which appertaineth only to one; for Pliny himself lib. 18. treweh his meaning by another speech, of their whetting their horns upon trees, and Rhincoceros upon stones: for except he had named horns in the first place it might have been questioned whether Rhincoceros had any horns, but rather teeth in the second place.

But whatsoever were the words or opinion of Pliny, it is most certain, that after Herodotus and other ancient writers, it is furer to call these teeth then horns, and I will briefly set down the reasons.
reactions of Phthisiarus, that will have them to be teeth; and afterward of Grapaldus, Aluinus, and
Pantanius, that would make them horns, and so leave the Reader to consider whether opinion he
thinketh most agreeable to truth. First, that they are not horns, it is allowed that horns fall off
and grow every year again, especially of Harts, and grow forth of their heads; but teeth which
are called Fanne or Gang-teeth, standing out of the mouth, fall off together, and are given for weapon
and defence to beasts, and such are the Elephants. Again, a horn hath a certain line or circle near the
root, which is covered every year, but this cometh up like a flabby substance, without all circle or
cover, and therefore it cannot be a horn. Moreover, those creatures are said to have horns that
have cloven hoofs, this hath no cloven hoof, but only five distinct fingers upon a foot. Lastly, all
homed beasts have an empty hollowness in their horns (except Harts) but this is found and full
throughout, except a little paffage in the middle like a hole into a tooth: and thus say they which
have them called teeth.

Now on the contrary, those which will have them horns, make these arguments. First, as the
Elephants have their horns grow out of their eye-licks, the Rhinocerotes or Ethiopian Bulls out of
their nose, so as it is not unnatural for the Elephant to have his horns grow out of his mouth. Again,
horns fall off and come again in old beasts, but teeth do not so, and therefore these are horns and
not teeth; the power of fire cannot alter teeth, but these teeth break if you go about to change
their proportion or figure, but horns of OXen and Elephants may be stretched, bended, altered,
straightened, and applied to what fashion you ever will. Again, teeth grow out of the gums and
cheek-bone, as it is apparent, but horns grow out of the scull and temples, and so do the Elephants,
as by observation every man may discern. Lastly, as nature hath given another shape and greater
proportion of body to Elephants then to any other beasts, so also it is not unreasonable that it
vary in the placing of his horns, for they grow downward, and the very mole and quantity of
his body is sufficient to arm him against the fear of death. Thus they argument for the horns
of Elephants.

The Poets have a pretty resemblance of dreams, comparing true dreams to horns, and false
dreams to Ivory, because falsehood is ever more burnished, then naked and ragged truth. And
besides the eye of man is transluuent, and containeth in it a hornie substance, and by the eye we
always receive the best assurance, but by the mouth (signified by teeth) are many falsehoods ven-
ted; and for that horns turn upward to heaven, the fountain of truth, but the teeth of an Elephant
grow downward towards the earth the mother of error. And for this saufe Aeneas by Virgil
and Homer, is said to come in at the hornie gate of Sommvs, and to go forth at the Ivory: Virgis
Veres are these:

Sunt gemina Somni porta, qu'am altera suntur
Cornua, quae erit faciili datir exitum umbrit.
Altera candentis perfetis nitentis Elephanto,
Sed falsa ad calum mittunt insomnia moneis.
His abi dim nutum Aenei,ique Styliam
Propeque ditis, portasque emittit omnes.

And here we will leave, and prosecute no further this discourse of their horns and teeth, but pro-
tected to the other outward parts of this beast.

The tongue is very small though broad, his trumpet called Probofis and Primaly, is a large hollow
thing hanging from his nose like skin to the groundward; and when he feedeth it lyeth open, like
the skin upon the bill of a Turkey-cock, to draw in both his meat and drink, using it for a hand,
and therefore improperly it is called a hand. For by it he receiveth of his keeper whatsoever he
giveth him, with it he overholloweth trees, and wherefoever he swimmeth, through it he draweth
breath. It is crooked, griply, and inflexible at the root next to the nose: within it hath two
passages, one into the head and body by which he breatheth, and the other into his mouth: where-
by he receiveth his meat: and herein is the work of God most wonderful, not only in giving unto it
such a divers proportion and anatomy, but also giving him reason to know this benefit of it, that so
long as he is in the water and holdeth up that trunk, he cannot perish.

With this he fighteth in war, and is able to take up a small piece of money from the earth: with
it he hath been seen to pull down the top of a tree, which twenty four men with a rope could not
make to bend. With it he driveth away his Hunters when he is chased, for he can draw up therein
a great quantity of water, and shoot it forth again, to the amazement and overthrow of them that
persecute him. The Morii say that he hath two hearts, one wherewithal he is intenched, and another
whereby he is pacified.

But the truth is, as Aristote in the dissection of the heart observed, there is a double ventricle and
bone in the heart of an Elephant. He hath a Liver without any apparent gall, but that side of the
Liver being cut, whereon the gall shoul d lie, a certain humour cometh forth like a gall. Wherefore
Aelianus faith, he hath his gall in his Dawg-gut, which is so full of finnes, that one would think he
had four bellies; in this receiveth he his meat, having no other receptacle for it. His intrails are
like unto a Swines, but much greater.

His Liver four times to greare as an Oxes, and so all the retidine except the Mit. He hath two
pappes a little beside his brest under his shoulders, and not between his hinder legs or loins, they
Aristote,
are very small and cannot be seen on the side. The reasons hereof are given, first that he hath but two pappes, because he bringeth forth but one at a time, and they stand under his shoulders like an Ape, because he hath no hoots but distinct feel like a man, and also because from the breast floweth more abundance of milk.

The genital part is like a Horsef, but lesser then the proportion of his body affordeth: the flones are not outwardly seen, because they cleave to his reins. But the female hath her genital between her thighs: the forelegs are much longer then the hinder legs, and the feet be greater. His legs are of equal quantity, both above and beneath the knees, and it hath angle bones very low. The articles do not ascend so high as in other creatures, but kept low near the earth. He bendeth his hinder legs like a man when he stretch, but by reason of his great weight he is not able to bend on both sides together, but either leaning to the right hand or to the left, and fo leapeth: It is falsely that they have no joints or articles in their legs, for when they please they can use, bend, and move them, but after they grow old, they use not to lie down or strain them, by reason of their great weight, but take their rest leaning to a tree: and if they did not bend their legs, they could never go any ordinary and slayed pace. Their feet are round like a Horsef, but so as they reach from the middle every way two fpanes length, and are as broad as a bushel, having five distinct toes upon each foot, the which toes are very hitte claven, to the intent that the foot may be stronger, and yet parted, that when he treadeth upon soft ground, the weight of his body preffe not down the leg too deep. He hath no nails upon his toes, his tail is like an Oxes tail, having a little hair at the end, and the residue thereof peeled and without hair: He hath not any brilley hairs to cover his back. And thus much for their several parts and their ues.

There is not any creature so capable of underhanding as an Elephant, and therefore it is requisite to terary somewhat the longer in expressing the several properties, and natural qualities thereof, which sundry and variable inclinations, cannot choose but bring great delight to the Reader. They have a wonderful love to their own Country, so as although they be never so well delighted with divers meats and joyes in other places, yet in memory thereof they fend forth tears, and they love also the waters, rivers, and marishes, so as they are not unfithly called Bipartit, such as live by the rivers sides: although they cannot swim by reason of their great and heavy bodies, until they be taught. Also they never live solitary, but in great flocks, except they be sick or watch their young ones, and for either of these they remain adventurous unto death, the elder leadeth the herd, and the second driveth them forward, if they meet any man they give him way, and go out of his sight.

Their voice is called by the word Batire, that is, to bray, and thereupon the Elephants themselves are called Barri; for his voice cometh out of his mouth and nothirs together, like as when a man speakesh breathing, wherefore Aishale calleth it Kaucity, or hoarâfins, like the low found of a Trumpet, this found is very terrible in battails as shall be afterward declared.

They live upon the fruits of Plants and roots, and with their trunks and heads, overthrow the tops of trees, and eat the boughs and bodies of them, and many times upon the leaves of trees he devoureth Chamaeleons, whereby he is poisoned and dyeth, if he eat not immediately a wilde Olive. They eat earth often without harm, but if they eat seldorn, it is hurtful and procureth pain in their bellies: so also they eat flones. They are so loving to their fellows, that they will not eat without one another, but having found a prey, they go and invite the residue to their feates and cheer, more like to reasoneable civil men, then unreasonable brute beate. There are certain noble Melons in Ethiopia, which the Elephants being sharp smelling beasts, do winde a great way off, and by the conduct of their noses come to thole Gardens of Melons, and there eat and devour them. When they are tamed they will eat Barlie either whole or ground: of whole at one time is given them certain Macedonian Bulhuels, but of Mens six, and of drunk either wine or water, thirty Macedonian pints at a time, that is, fourteen gallons; but this is observed, that they drink not except in war, when they are to fight, but water at all times, whereof they will not taft, except it be muddy and not clear, for they avoid clear water, loathing to see their own shadow therein; and therefore when the Indians are to passe the water with their Elephants, they chuse dark and cloudy nights wherein the Moon affordeth no light. If they perceive but a Mouse run over their meat, they will not eat thereof, for there is in them a great hatred of this creature. Also they will eat dryed Figs, Grapes, Onions, Bulruethes, Palmes, and Ivy leaves: There is a Region in India, called Phalacrus, which signifies Balde, because of an herb growing therein, which caueth every living thing that eateth thereof, to lote both horn and hair, and therefore no man can be more industrious or wary to avoid those places, then is an Elephant, and to forbear every green thing growing in that place when he passeth through it.

It will forbear drink eight dayes together, and drink wine to drunkennets like an Ape. It is delighted above measure with sweet favors, ointments, and smelling flowers, for which cause their keepers in the Summer time lead them into the medowes of flowers, where they of themselves will by the quickness of their smelling, chuse out and gather the sweeteft flowers, and put them into a basket if their keeper have any; which being filled; like dainty and nest men, they also desire to water, and fo will go and seek out water to wash themselves, and of their own accord return back again to the basket of flowers, which if they find not, they will bray and call for them. Afterward being led into their stable, they will not eat meat until they take of their flowers, and dress the stems of their mangers therewith, and likewise strew their room or standing place,
Of the Elephant.

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place, pleasing themselves with their meat, because of the favour of the flowers stuck about their cratch, like damne fed porfons which set their dishes with green herbs, and put them into their cups of wine.

Their pace is very slow, for a child may overtake them by reason of their high and large bodies (except in their fear) and for that cause cannot swim: as also by reason that the toes of their feet are very short and singly divided. When they are brought into a Ship, they have a bridge made of wood, and covered with earth, and green boughs are set on either side, so that they imagine they go upon the land until they enter into the Ship, because the boughs keep them from sight of the Sea. They are most chaff, and keep true unto their males without all inconstancy love or separation, admitting no adulteries amongst them, and like men which tafT of Venus not for any corporal lust, but for desire of their successors in their families; so do Elephants without all unchast and unlawful lust, take their venerable complements, for the continuation of their kinde, and never above thrice in all their days, either male or female suffer carnall copulation (but the female only twice.) Yet is their rage great when the female provoketh them, and although they fight not among themselves for their females, (except very seldom) yet do they do burn in this fury, that many times they overthrow trees and hoores in India by their tusks, and running their head like a Ram against them, wherefore then they keep them low and down by subraction of their meat, and also bring some stranger to beat them. There was a certain running Hunter sent into Madagascar, by the Roman Emperor, to hunt and take Elephants; on a day he saw a goodly young Elephant in copulation with another, and instantly a third approached with a direful braying, as if he would have eaten up all the company, and as it afterward appeared, he was an arrival to the female, which we saw in copulation with the other male: when he approached near, both of them set themselves to combat, which they performed like some unfizable waves of the Sea, or as the hills which are shaken together by an earthquake, wherein each one charged the other most furiously for their love, to the terror and admiration of all the beholders, and so at last became both disarmed of their teeth and horns by their often blows; before one had overcome the other, and so at last by the hunters were parted asunder, being ever afterward quiet from such contentions about their females for copulation.

The Indians separate the flaves of the females far asunder from the males, because at that time they overthrow their hoores. They are modest and shamefast in this action, for they seek the Deferts, Woods, and secret places for procreation, and sometimes the waters, because the waters do support the male in that action, whereby he ascendeth and descendeth from the back of the female with more ease: and once it was seen, that in Virgins (a Country of the Confsents) two Elephants did engender out of India, otherwise they couple not out of their own Countries. When they go to copulation, they turn their heads towards the East, but whether in remembrance of Paradise, or for the Mandragoras, or for some other cause I cannot tell: the female seated while she is covered. They begin to engender, the male at fix, ten, twelve, fifteen or twenty year old, the female not before ten years old. They couple but five days in two years, and never after the female is filled till they have been clear one whole year; and after the second copulation, he never more toucheth his female. At that time the male breatheth forth at his nose a certain flat humour like a menstrual thing, but the female hath them not till her place of conception be opened: and alway the day after her filling, she watheth herself before she return to the flock.

The time of their going with young is according to some, two years, and according to other, three; the occasion of this diversitie is, because their time of copulation cannot certainly be known, because of their secrecy, for the greater bodies that bests have, they are the leffe fruitful. She is delivered in great pain, leaning upon her hinder legs. They never bring forth but one at a time, and that is not much greater then a great Cow-calf (of three months old,) which the nouriseth six or eight year. As soon as it is Calved, it feeth and goeth, and flicketh with the mouth, not with the trunk, and so groweth to a great stature.

The females when they have calved are most fierce, for fear of their young ones, but if a man come and touch them, they are not angry, for it seemeth they understand that he toucheth them not for any desire to take or harm them, but rather to stroke and admire them. Sometimes they go into the water to the belly, and there calve for fear of the Dragon; the male never forsaith her, but keepeth with her for the like fear of the Dragon, and feed and defend their young ones with singular love and constancy unto death; as appeareth by the example of one, that heard the braying of her calf fallen into a ditch, and not able to arise, the female ran unto it, and for halfe fell down upon it, so crushing it to death, and breaking her own neck with one and the same violent love.

As they live in herds, so when they are to passe over a river or water, they send over the least or youngest first, because their great bodies together should not cause the deep water to swell or rise above their height; the other stand on the bank and observe how deep he wadeth, and so make account that the greater may with more assurance follow after the younger and smaller, then they the elder and taller, and the females carry over their Calves upon their forefeet, and long eminent teeth binding them fast with their truncks, (like as with ropes or male gurs, that they may not fall) being sometime holpen by the male; wherein appeareth an admirable point of natural wisdom, both in the carriage of their young, and in fending of the leffer foremost, not only for the reason aforesaid, but also because they being hunted and prosecuted, it is requisite that the greatest and
The History of Four-footed Beasts.

The bringing of Elephants out of Ships.

It is true, Ailuroto, of their fighting.

Gillius, Aelianus, Cælius, Zoroaster. Their fear of Rams, Swine, and other beasts.

Volaterranus.

The cruelty of the females to their wounded Calves, Solinus, Stat. Seboisii.

Ælianus.

and strongest come in the rear and hindmost part, for the safeguard of the weaker, against the fury of their persecutors, being better able to fight then the foremost, whom in natural love and policy, they set farthest from the danger.

Marius which had been thrice Consul, affirmed, that he saw Elephants brought on board at Puteoli in Italy: they were cau’d to go out of the Ship backward, all along the bridge that was made for them, that to the fight of the Sea might terrifie them, and cau’d them more willingly to come on land, and that they might not be terrifie’d with the length of the bridge from the continent. Pliny and Solinus affirm, that they will not go on shipboard, until their keeper by some intelligible signe of oaths, make promise unto them of their return back again.

They sometimes, as hath been said, fight one against another, and when the weaker is overcome, he is so much abased and cast down in minde, that ever after he feareth the voice of the conquerour.

They are never so fierce, violent, or wilde, but the fight of a Ram tameth and dismayeth them, for they fear his horns; for which cause the Egyptian picture an Elephant and a Ram to signify a foolish King that runneth away for a feartull fight in the field. And not only a Ram, but also the grunting clamour or cry of Hogs: by which means the Romans overthrew the Carthaginians and Pyrrhus which trusted overmuch to their Elephants. When Antipater besieged the Megarians very hastily with many Elephants, the Citizens took certain Swine and anointed them with pitch, then let them on fire and turned them out among the Elephants, who crying horribly by reason of the fire on their bodies, did discomfit the Elephants, that all the wit of the Macedonians could not restrain them from madnes, fury, and flying upon their own company, only because of the cry of the Swine. And to take away that fear from Elephants, they bring them up with them when they are tamed, young Bigges and Swine ever since that time. When Elephants are chafed in hunting, if the Lions see them, they run from them like Hinde-calves from the Dogs of Hunters, and yet Ipheciras layeth, that among the Elephians or western Egyptian, Lions set upon the young Calves of Elephants and wound them; but at the fight of the mothers, which come with speed to them, when they hear them cry, the Lions run away, and when the mothers finde their young ones imbred in their own blood, they themselves are so enraged that they kill them and so retire from them, after which time the Lions return and eat their flesh. They will not induce the favour of a Mouse, but refuse the meat which they have run over; in the river Ganges of India, there are new Wormes of sixty cubits long having two arms; these when the Elephants come to drink in that river, take their trunks in their hands and pull them off. There are Dragons among the Ethipians, which are thirty yards or paces long, these have no name among the inhabitants but Elephant-killers. And among the Indians also there is an ascribed and native hateful hostility between Dragons and Elephants: for which cause the Dragons being not ignorant that the Elephants feed upon the fruits and leaves of green trees, do secretly convey themselves into them or to the tops of rocks: covering their hinder part with leaves, and letting his head and fore part hang down like a rope, on a fuddain when the Elephant comeath to crop the top of the tree, she leapeth into his face, and diggeth out his eyes, and because that revenge of malice is too little to satisfy a Serpent, she twinneth her gable like body about the throat of the amazed Elephant, and so strangleteth him to death.

Again they marke the footsteps of the Elephant when he goeth to feed, and so with their tails, net in and entangle his legs and feet: when the Elephant perceiveth and feeleth them, he butteth down his trunk to remove and untie their knots and gins; then one of them thrutcheth his poisoned tilling head into his Nostrils, and so stops up his breath, the other prick and gore his tender belly-parts. Some again meet him and flic upon his eyes and pull them forth, so that at the last he must yield to their rage, and fall down upon them, killing them in his death by his fall, whom he could not repuls or overcome being alive: and this must be understood, that forasmuch as Elephants go together by flocks and herds, the subdi Dragons let the foremost pafl, and fet upon the hindmost, that so they may not be oppreft with multitude.

Also it is reported that the blood of an Elephant is the coldest blood in the world, and that Dragons in the scorching heat of Summer, cannot get any thing to cool them, except this blood; for which cause they hide themselves in rivers and brooks whither the Elephants come to drink, and when he putteth down his trunk they take hold thereof, and instantly in great numbers leap up unto his ear, which is naked, bare and without defence: whereabout they suck the blood of the Elephant until he fall down dead, and so they perish both together.

Of this blood cometh that ancient Cinclaria, made by commixture of the blood of Elephants and Dragons both together, which alone is able, and nothing but it, to make the best representation of blood in painting. Some have corrupted it with Goats-blood, and call it Milton and Minnow, and Memnona: it hath a molt rare and singular vertue against all poisons, beitie the unmatchable property afofaid.

These Serpents or Dragons are bred in T-generation, in whose heads are many precious stones, with such natural fells or figurative impression, as if they were framed by the hand of man, for Podistipus and Tetrass affirm, that they have seen one of them taken out of a Dragons head, having upon it the lively and artificial flame of a Chariot.

Elephants are enemies to wilde Bulls, and the Rhinoseros, for in the games of Pompey, when an Elephant and a Rhinoseros were brought together, the Rhinoseros ran infinitely and when his horn upon a stone,
Of the Elephant.

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Part fharpnefs admirable, were affirmeth through instruments. The

wherein a chains, firft trunck gain, ftamp upon and unto Javelins upon produced other grievous piercing wobden

The Centurion a main battel Jugurtha and his skill, was

the Shieid, being for the defence, to the tooth, and the Gryphins which overcome almost all beasts, are not able to stand with the Lions or Elephants.

The females are far more strong, cheerful, and courageous than the males, and also they are apt to bear the greater burthens; but in War the male is more graceful and acceptable, because he is taller, giving more assured ensigns of victory and fortitude: for their strength is admirable, as may be conjectured by that which is formerly recited of their trunk, as Varti-man affirmed, that he now three Elephants with their only heads, drive a great Ship out of the Sea-water where it was fastened unto the shore. When he is most loaded he goeth full, for he can carry a wooden Tower on his back with thirty men therein, and their sufficient food and warlike instruments.

The King of India was wont to go to war with 30000 Elephants of war, and before these he had also followed him 3000 of the chiefest and strongest in India, which at his command would overthrow Trees, Horses. Wals, or any such thing flaying against him: and indeed upon these were the Indians wont to fight, for the defence of their Coast and Country. The farthest region of that continent is called Partalis, inhabited by the Ganguides and Calinge, the King whereof was wont to have seven hundred Elephants to watch his Army, and no mean Prince in all India which was not Lord of many Elephants. The King of Padrope kept in flippend, eight thousand every day, and beyond his Territory was the King of Molwdt and Mainilde, which had four hundred Elephants. These fight with men, and overthrow all that come within their reach, both with their trunks and teeth.

There were certain officers and guides of these Elephants, which were called Elphantarches, who were the governors of sixteen Elephants, and they which did institute and teach them Martial discipline, were called Elephantagni. The Military Elephant did carry four persons on his bare back, one fighting on the right hand, another fighting on the left hand, a third which fought backward from the Elephants head, and a fourth in the middle of these holding the reins and guiding the beast to the defecration of the Souldiers, even as the Pilot in a Ship guideth the stern, wherein was required an equal knowledge and dexterity, for they understand any language quickly: for when the Indian which ruled them said, Strike here on the right hand, or eile on the left, or refrain and stand still, no reasonable man could yeeld reader obedience. They did suffer by iron chains, first upon the Elephant that was to bear ten, fifteen, twenty, or thirty men, on either side two panniers of iron bound underneath their belly, and upon them the like panniers of wood hollow, wherein they place their men at armes, and covered them over with small boards, for the trunck of the Elephant was covered with a mail for defence, and upon that a broad sword, and two cuibs long; this (as also the wooden Caiffe or panniers aforeaid) were fastened first to the neck, and then to the rump of the Elephant. Being thus armed, they entered the battel, and they threw unto the beast that made them more fierce wine, red liquor made of Rice, and white cloth, for as the fight of any of these, his courage and rage increaseth above all measure; then at the sound of the Trumpet he beginneth with teeth to strike, tear, beat, spoile, take up into the air, call down again, flamp upon men under feet, overthrow with his trunk, and make way for his riders to pierce with Spear, Shield, and Sword; so that his horrible voice, his wonderful body, his terrible force his admirable skill, his ready and inclinable obedience, and his strange and seldom seen face, produced in a main battel no mean accidents and overturns. For this cause we read how that Pyrrhus first of all produced Elephants against the Romans in Lucania: afterward Afrubal in Africa, Parthicum in the Exit, and Ingurus in Numidas.

Against this new kinds of Cattle-fighting, and Souldier-bearing beasts, on the contrary they invented new kinds of stratagems, as is before set down, and also new instruments of war, for a Centurion in Lucania with a new devised sharp Sword cut of the trunk of this beast, again other invented, that two armed Horfes should draw a Chariot, and in the same armed men with Javelins and sharp Spears, the speedy Horfes should with all force run upon the Elephants, and the spear-men directing their course and weapons, some upon the beast, others upon the riders: did not only wound the beast, but also by celerity of the Horses, escape all danger.

Other again went against him armed Souldiers, having their Armour made full of sharp pricks or piercing piked Nailes; so that when the beast did strike at them with his trunck, he received grievous wounds by his own blows. Again there were certain young men Souldiers, armed with light armour, which being mounted upon swift Horfes, could call Darts with fingual facility, and without the reach of the beast, many times wounding him with long Spears, and so by
example of the Horfe-men, the Foot-men, grew more bold, and with piles in the earth annoyed the belly of the beast, and utterly vanquishing it and the rider. Again, they devis'd things to call flones, whereby they beat off the riders, and many times overthrew the Caffle-bearer, as it were by some violent Stroke of a Cannon-flot; neiter was there ever any more efficacious way to dissuade these monfter-ferning Soul'diers, then by calling of ftones; and lathily they would suffer their Elephants and their riders by poor hopes and appearances of fear, to enter into the midft among them, and so be-gut and inclofe them, that they took the Elephants alive; and alfo more Soul'diers of Darts car-ry'd in Chariots with the strong courfe of Horses, did fo annoy them, that whereas their bodies were great and unwieldy, not nimble to flir out of place, it became more efficacious to kill an Elephant then a Horfe, because many Soul'diers at one time could pierce fo a mark with unrefiitable wea-pons 

And these things are related by Vegetius.

At the laft the fight with Elephants turn'd into a publick game or paftime, both to fee them fough withall by men, and alfo among themselves. When certain prisoners of the Romans were taken by Ammian, he firft contrai'd them to skirmifh among themselves, and fo flew one another except only one; and he was by the like commandement forced to fight with an Elephant, but upon con-dition of liberty if he escaped alive; and thereupon joynd combate, and flew the Elephant, to the great grief and amazement of all the Carthaginians; but going home, according to agreement, Ambal fearing that by this act tho'f great beasts would grow into contempt, fent certain Horfe-men to kill him by the way.

Their trunk or hand is moft eafe to be cut off; for if it happen'd in the adlity or temple-office of Claudius, Antonius and Pli.'mam being Confuls, and afterward in the Circus, when the Luculi were the confons officers. And when Pompey was Conful the fcond time, there were 17 or 20 which at one time fought within the Circus, at the dedication of the Temple of Venus the Victoria, where the Getulians fought with them with Spears and Darts; for there had happened an ad-mirable accident; one of the Soul'diers who having a hurt in his feet did creep upon his knees be-twixt the legs of the Elephants, and caft up the Darts over his head into the beasts belly, which fell down round about him, to the great pleasure of the beholders, fo that many of the Elephants perifi'd rather by Art then the strength of the Soul'dier. No jeffe was the Miracle of another ftain with one froke, for a pile ran into his temples through his eye, and there fack for falt, that it could not be pull'd forth again; which thing was afterward affay'd by Julian Caesar, and in the third time of his Confulship, there were twenty Elephants, which in the Games fought with five hundred men, and fo many with Towers on their backs, bearing three-four men in every Tower.

To conclude, Elephants are afraid of fire, and Martial made this Epigram of a Bull flain by an Elephant, which was wont to domineer in all their triumpft games, wherewith I will conclude this difcourse.

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The taking of Elephants.

In the next place it is good to relate the fory of the taking and taming of Elephants, for in Lyba about the Therobyke, the hunting and taking of Elephants have given many names to Seve-rall Towns, as Elephanitia, and Elephantis, Epithera, Pilothera, and the hunting of Elephants by Pratemen, by the Port Saba, the City Daraba, andLyba. In Africk they take them in great ditches, whereinto when they are fallen, the people pretently with bouches, mattocks, leaves, and digging down of high raifed places, take them out again, and fo turn them into a valley wrought by the labour of man, moft firmly walled on both fides, where with famine they tame him; for when he would gently take a bough at the hand of a man, they adjudged him tame, and grew familiar with him, leadiing him away without all fcruple.

But the Indians ufe a more ingenious and fpeedy means to tame them, which is this: first, they dig alfo a great ditch, and place fuch meat therein as the beafl lovet, who winding it, and coming thereunto, for defire thereof falleth into the foffe or ditch: being fo fallen in, and not able to come forth again, one cometh to him with Whips, beating him very grievously for a good space, to the great grief of the beafl, who through his inclining can neither run away nor help himself; then cometh another during this time of punifhment, and bala'ent the firft man for beating the beafl, who departeth prefently as one afraid of his rebufc, the other piteth the beafl, and fpknk-eth him, and fo goeth away; then cometh the whipper again, and fcorgeth the Elephant as before and that more grievously to his greater torment for a good space together; whereupon the time fulfilled, the other cometh again and fightheth with the whipper, and forcibly femeth to drive him away, and relieve the poor beafl; and this they do fucceflively three or four times; fo at the laft, the Elephant groweth to know and love his deliverer, who by that means draws him out and leadeth him away quietly: While this thing is doing, the ftiner and whipper ufeith a fharp-edged and unwonted kind of habit; fo as he may never be known by the Elephant after he is tamed, for fear of revenge: of which you fhall hear more afterward, in the farther diſcourse and opening the nature of this beafl.

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Pliny.

Alberius.
Of the Elephant.

Artanius and Strabo relate another way whereby the Indians take their Elephants, which because they write upon their own eye sight, of the things they knew sufficiently, I have thought good to express the device: Four or five Hunters first of all chase out some plain place, without Trees or Hills, but declining, by the space of some four or five furlongs, this they dig like a wide ditch as aforesaid, and with the earth then, take up, they raise walls about it like a trench, and in the fides of the trench they make certain dens with holes, to convey in light to the Watchmen, whom they place therein, to give notice and obviate when the Elephants are inclofed; then make they a narrow bridge covered with earth at the farther end of the trench, that the beafts may dread no fallacy; and for the more speedy effecting and compafting their defire, they also inclufe in the trench three or four tame female Elephants, to entice and draw into them the wilde ones.

Now these beafts in the day time feed not so boldly as in the night, and therefore they cannot easily be deceived or taken in the light; but in the night great flocks of them follow the Captain (as we have already thowed) and going near this trench, partly by the voice, and partly by the favour and smell of the females, they are drawn into the trench; then the Watchmen with all speed, pull down the bridge, and other of them go into the next Townes to call for help, who upon the firit notice thereof, come to the place mounted upon the beft and strongest tame Elephants, and fo compaffe them about, giving meat in their preffence to the tame, but beftieving the inclofed, they keep them from all meat and food, until they be fo weakned that they dare enter in among them, but in this manner, they turn in their tame Elephants, and go under their bellies, and fo when they come near the wilde Elephants, they fpeedily convey themselves under his belly, and lay unavoidable fetters upon their feet: then provoke they the tame ones to beat and fight with the wilde, who by reafon of the manacles upon their feet are easily overthrown and fall to the ground; being on the ground, they put halters upon their necks made of raw Oxe hides, and fo bind them to the tame and domestical Elephants: And while they lie on the ground, they get upon them, and to the intent that their Riders may be without danger of harm by them, they cut the skin of their necks round about in a circle, with a sharp fword, and upon the wound they tie and fallen a rope, that fo the pain may conftain the beaft to quiet, fo that by this they begin to feel their own weaknes, and leave off their wildenes, betaking themselves to the mercy of their new Mufters.

But thus raised from the earth again, and yoaked by the necks and legs to the named Elephants, they are safely led home into flables, where they are fattened to great pillars by their necks, and if they refuse to eat their meat, with Tymbrels, Cymbals, Harpes, and other musical instrumens, they are fo entifeled from fallen wildenes, that they forget their firit natures, and yeild all loving obedience to men, as to their victorious conquerors and unrefiftable Mufters.

These beafts by their fagacity and natural infininct, do sometime forefee their own peril, and discover the trains and secret intentions of the Hunters, fo as they cannot be drawn into the ditches and foffes by any allurements; but prefaging their own misfortunes, turn back again upon their Hunters, even through the midit of them, and fo felect to fave themselves by flight, overthrowing their enemies that dare approach unto them. At which time there is a fierce fight, to the great slaughter many times both of men and beafts; for the men to flay his flay, bend their fpears, and charge their darts and arrows, to flrike the Elephant directly on the face, and if the beaft perceive that he hath overthrown any man infantsly he maketh to him, taketh him in his teeth, lifting him up into the air, and cafting him down again, fiampeft upon him, wounding him many times with his teeth or horns, whereby he puttheth him to cruel tormentes, and leaveth him not till he be dead.

And when they invade or set upon a man, they spread forth their broad ears, (which are fathioned like the wings of Oftriches) as the fails of a flip, and drawing up their trunk under their teeth their noefes fland forth like the beak of some fhip, and fo ruth they with unrefiftable violence upon the weak bodies of men, overturning them in no other fort, then a mighty great Hulk or man of war, the little Oares or Whirries in the Sea.

And as the Trumpets in war give the signes of fghting, fo do thofe fend forth fuch terrible yelling and roaring clamors, as bringeth no mean affonmon to his perfecutors: belde the lamentable and mournful voices of men, by them wounded and fallen to the earth; fome having their knees and bones broken, other their eyes trod out of their head, other their noefes preffed flat to their faces, and their whole vifages fo disfigured and disfavoured in a moment, that their nearest friends, kindred and acquaintance cannot know them. Thofe alfo fill the fpaceous air with direful cries, that are heard a great way off, into the Towns and Cities adjoyning, having no other means to efcape out of the way, and from the teeth of the beaft, except he frike his tooth into some root and then it flick falt until the poor overthrown man can creep alide and fave himfelf by flight.

In this conflict, sometime the Elephants, and fometimes men are the conquerors, by bringing upon the beafts divers terrorys and manacles, out of which they are not very eafily delivered: fo men alfo have their trumpets, and fo make the woods and fields ring with them, the ratting of their Armour and Shields, and their own howling and whooping, kinding fires on the earth, cafting both fire, brands and burning Torches into the face of the Elephant, by all which the huge
beast is not a little disfigured and terrified. So that being bereft of their wits, they turn back and run into the ditch which they so carefully avoided before.

But if their rage proceed uncontrolled, and men be forced to yield unto them, forth they go into the woods, making the trees to bend unto them as a Dog or an Orx doth the flanging corn at harvest; breaking off their tops and branches, which hinders their course and flight, as another beast would crop off the ears of corn; but where they are taller than the woods, there they strain every joint and member in them to get ground and overgo their Hunters; which they may perform and attain more easily, because of their customary abode in those places: and when they are escaped out of the sight of their followers, and make account that they are freed from further persecution, then cast they off all fear, and compound their distracted senses into a remembrance of meat, and so gather their food from Palms, Trees or bushes; afterward betaking themselves to rest and quietness.

But if their Hunters come again into their sight, they also again take them to their heels, until they have gotten more ground from them, and then they rest again; and if the Sun decline, and light of day fail the Hunters, and darknes make an end of the chase; then do they compass in the beasts way, and set the wood a fire, (for Elephants fear fire as much as Lions:) So that by all this it appeareth, that the fabulous tales of Gabinius the Roman writer of Elephants, are not to be believed, when he affirmeth, that Elephants will fight against and resift the violence of fire.

The Troglophuge hunt and take Elephants after another manner, for they climb up into the trees, and there sit till the flocks of Elephants passe by, and upon the last, the Watch-man suddenly leapeth (with great courage) taking hold upon his tail and fo sliding down to his legs, and with a sharp Axe which he hath hanging at his back cutteth the nerves and sinews of his legs with so great celerity, that the beast cannot turn about to relieve it self, before he be wounded and made unable to revenge her harm, or prevent her taking; and sometimes the falleth down on the wounded side, and Casteth the Hunter watch-man to death, or else with her force in running, dasheth out his brains against a tree.

The Elephants-eaters (called Elephantoophagus) do observe the like policy, for by health and secretly they set upon the hindmost, or else the wandering solitary Elephant, and cut his sinews, which caueth the beast to fall down, whom presently they befand, and afterward they eat the hinder parts of this beast so call'd down and taken.

Other among the aforesaid Troglophuge, use a more easie, running and leffe perillous kind of taking Elephants; for they set on the ground very strong charged bent-bowes, which are kept by many of their strongest young men, and so when the flocks of Elephants passe by, they shoot their sharp arrows dipped in the gall of Serpents, and wound some one of them, and follow him by the blood, until he be unable to make resistance. There are three at every bow, two which hold it, and one that draweth the firing. Other again, watch the trees whereunto the beast leaneth when he sleepeth, near some waters, and the same they cut half asunder, whereunto when he declineth his body, the tree is overthrown and the beast also, and being unable to ride again because of the short nerves and no flexions of his legs, the head, the lyeth till the Watch-man come and cut off his head.

Arifiotle describeth another manner of taking Elephants in this sort; The Hunter (that he getheth upon a tamed Elephant, and followeth the wilde one till he have overtaken it, then commandeth he the tame beast to strike the other, and so continueth chasing and beating him, till he have wearyed him and broken his untameable nature. Then doth the rider leap upon the wearyed and tyred Elephant, and with a sharp pointed Sickle doth govern him after the same one, and so in shortest space he groweth gentle. And some of them when the rider alighteth from their backs, grow wilde and fierce again; for which caueth they binde their forelegs with strong bands, and by this means they take both great and small old and young ones; but as the old ones are more wilde and obstinate, and so difficult to be taken, so the younger keep so much with the elder, that a like impossibility or difficulty interpolteth itself from apprehending them.

In the Ceylon lake, there are certain fishes (called Oyarimbhi out of whom is made such a fine glew, that it will not be dissolved in ten days after it hath taken hold, for which cause they use it in the taking of Elephants.

There are in the Island Zeira many Elephants, whom they take on this manner: In the Mountains they make certain cloysters in the earth, having two great trees standing at the mouth of the cloysters, and in those trees they hang up a great par-calls gate, within that cloyster they place a tame female Elephant at the time of their usual copulation: the wilde Elephants do speedily wind her, and make to her, and so at the last having found the way betwixt the two trees, enter into her; sometime twenty, and sometime thirty at a time: then are there two men in the said trees, which cut the rope whereby the gate hangeth, so it falleth down and includeth the Elephants; where they suffer them alone for six or seven days without meat, whereby they are fo infibled and famished, that they are not able to stand upon their legs.

Then two or three strong men enter in among them, and with great lances and clubs, belabour and cudgel them, till by that means they grow tame, and gentle; and although an Elephant be a monstrous great beast and very subtil, yet by these and such like means do the inhabitants of India and Ethiopia, take many of them with a very small labour to their great advantage.
Against these flights of men, may bepopoled the tubul and cautious evasions of the beast, avoid- ing all the footsteps of men, if they smell them upon any herb or leaf, and for their flight with the Hunters, they observe this order. First of all, they det them foremost which have the leaft teeth, that so they may not be afraid of combate, and when they are weary, by breaking down of trees they escape and fly away. But for their hunting, they know that they are not hunted in India for no other cause, then for their teeth, and therefore to discource the Hunters, they set them which have the worst teeth before, and reserve the strongest for the second encounter: for their wisdom or natural dexterity is herein to be admired, that they will dispose themselves in all their battles when they are in charge, that ever they fly by course, and inclofe the youngest from peril, so that laying under the belly of their Dams they can fearce be seen: and when one of them flyeth they all flye, to their usual resting places, iriving which of them shall go foremost: And if at any time they come to a wide and deep Ditch, which they cannot pass over without a bridge, then one of them descengeth, and goeth down into the Ditch, and standeth transfere and croffe the fame, by his great body filling up the empty parts, and the residue passe over upon his back as upon a bridge.

Afterward when they are all over, they tarry and help their fellow out of the Ditch or Trench again, by this light or devise, one of them putth down to him his leg, and the other in the Ditch wendeth histrunk about the fame, the residue stands by cast in bundles of sprigs with their mouths, which the Elephant waryly and speedily putth under his feet, and so raieith himself out of the Trench again, and departeth with his fellows.

But if they fall in and cannot finde any help or means to come forth, they lay aside their natural wide disposition, and are contented to take meat and drink at the hands of men, whose presence before they abhorred: and being delivered they think no more upon their former condition, but in forgetfulness thereof, remain obedient to their deliverers.

Being thus taken, as it hath been said, it is also expedient to express by what art and means they are incarcerated and tamed. First of all therefore when they are taken, they are fastened to some Tree or Pillar in the earth, so as they cannot neither kick backwards nor leap forward, and there hunger, thirst, and famine, like two moost strong and forcible Riders abate their natural wildenes, strength, fear and hatred of men: Afterward when their keepers perceive by their dejection of mood, that they begin to mollified and altered, then they give unto them meat out of their hands, upon whom the beast doth cast a far more favorable and cheerful eye, considering their own bondage, and at the least necessity frameth them unto a contented and tractable course and inclination.

But the Indian by great labour and industry take their young Calves at their watering places, and so lead them away, inciting them by many allurements of meat to love and obey them, so as they grow to understand the Indian language, but the elder Indian Elephants do very hardly and seldom grow tame, because of their remembrance of their former liberty, by any bands and oppression; nevertheless by instrumetal musick, joyned with some of their Countrey fongs and ditties, they abate their fiercenes, and bring down their high untractable stomachs, so as without all bands they remain quiet, peaceable and obedient, taking their meat which is before them.

Pliny and Solinus prescribethe jouce of Barly to be given to them for their mitigation, whereunto also agreeeth Deiocrites (calling that kind of drink Zythm) and the reason hereof is, because of the tart sharpnes of Barly water it fland a little while; and therefore also they prescribe Vinegar and ashes to rub the beasts mouth, for it hath power in it to pierce flones, all sharp things penetrate deep into his feth, and alter his nature; the invention whereof is attributed to Democritus.

Being thus tamed, they grow into civil and familiar uests, for Cesar ascended into the Capitol bewixt four hundred Elephants, carrying at either side burning Torches, and Hellogaboles brought four Waggons drawn with Elephants in Vaticanum, and men commonly ride upon them for Amusement neare the River Indus, a Boy of thirteen year old riding alone upon an Elephant, spurrning and pricking him as freely as any man will do a lean horse.

They are taught to bend one of their hinder legs to take up the Rider, who also must receive help from some other present landers by, or else it is impossible to mount on the back of so high a Palmy. They which are not accustomed to ride upon these beasts, are affected with vomiting and catting, like men when they first of all take the Sea. They are ruled without bridle or reins, only by a long crooked piece of wood bending like a Sickle, and nailed with sharp nails, no man can sit more safely and more forty upon a Horse or Mule then they do which ride upon the Elephants. The Indian with their lesser Elephants (which they call baird Elephants) plow their ground and corn.

The common price of Elephants is at the least five hundred Nobles, and sometimes two thousand. The Indian women are moost chaste and continent, yet for an Elephant they take a great pride to be hired for whores, for they imagine that the fame and received opinion of their beauty doth countervail and cover the shameful losse of their honesty (as Arranuus writeth in his book of Indus.)

Since the time that Elephants have been tamed, their natures and dispositions have been the better observed and discoverd; for they willingly obey their keepers, learning all sorts of Arms, to take

The fubility of Elephants a- gainst their Hunters.


The price of Elephants. Their obedience and tractable geule. nes.
The History of Four-footed Beasts.

When the Prizes of Germanicus Caesar were played, there were many Elephants which acted strange feats or parts, four of them went upon Ropes and over the Tables of meat, whereon they set their feet so warily that they never touched any of the ghasts, the boards or standing coups being fully furnished. And allo they learned to dance after Pipes by measure, sometyme dancing foely, and sometyme apace, and then again leaping upright, according to the number sung or played upon the instrument; and they are apt to learn, remember, meditate, and conceive such things as a man can hardly perform.

Their industrious care to perform the things they are taught, appeareth herein, because when they are secret and alone by themselves, they will practice leaping, dancing, and other strange feats, which they could not learn suddenly in the presence of their Masters: as Pliny affirmeth for certain truth of an Elephant which was dull and hard of understanding, his keeper found him in the night practising those things which he had taught him with many fripes the day before, and could not prevail by reason of the beast's slow conceit.

There was an Elephant playing upon a Cymbal, and others of his fellows dancing about him, for there was fastened to either of both of his forelegs one Cymbal, and another banded to his trunk, the beast would obverse jult time, and strike upon one, and then the other, to the admirati

On the reverence of Elephants to Kings.

The King of Indians was watched with four and twenty Elephants, who were taught to forbear sleep, and to come in their tours at certain hours, and so were they most faithful, careful and in

The three kinds of Elephants.

They have also a kind of Religion, for they worship, reverence, and observe the course of the Sun, Moon, and Stars: for when the Moon shineth, they go to the Waters wherein she is apparent, and when the Sun ariseth, they salute and reverence his face; and it is observed in Ethipoia, that when the Moon is changed until her prime and appearance, these beasts by a secret motion of nature, take boughs from off the trees they feed upon, and first of all lift them up to heaven, and then look upon the Moon, which they do many times together, as it were in supplication to her. In like manner they reverence the Sun rising, holding up their trunk or hand to heaven, in congratulation of her rising.

Luba was wont to say, that this beast was acceptable to those Gods which ruled Sea and Land, because of their reverence to Sun and Moon, and therefore Præmonstratenses, offered four Elephants in a sacrifice (to recover the quietnes of his minde) thinking that the Gods would have been
been well pleas'd therewith, but finding that his fearful dreams and visions departed not from him, but rather his disquietudes increased, fearing that the gods were angry with him for that action, he made four Elephants of brass, and dedicated them to the Sun, that so by this deed he might purchase pardon for the former offence.

This Religion of theirs, also appeared before their death, for when they feel any mortal wounds, or other natural signs of their latter end, either they take up the duff, or else some green herb, and mix it up to Heaven in token of their innocency and imploration of their own weaknesses: and in like manner do they when they eat any herb by natural instinct to cure their dilapidations: first they lift it up to the Heavens (as it were to pray for a divine blessing upon it) and then devour it.

I cannot omit their care, to bury and cover the dead carcasses of their companions, or any other of their kind; for finding them dead, they pafs by not them till they have lamented their common misery, by calling duff and earth on them, and also green bushes, in token of sacrifice, holding it execrable to do otherwise: and they know by a natural instinct some affured fore-tokens of their own death. Besides when they wax old and unfit to gather their own meat, or fight for themselves, the younger, of them feed, nourish, and defend them, yet they raise them out of Ditches and Trenches into which they are fallen, exempting them from all labour and penit, and interpreting their own bodies for their protection: neither do they forfear them in sickness, or in their wounds, but stand to them, pulling out Darts of their bodies, and helping both like skilful Chirurgions to cure wounds, and also like faithful friends to supply their wants.

Again, how much they love their young, which is a natural part of religion we have shewed before. Aristippus supposes that they have a kind of divination or divine understanding of law and equity, for when King Boedon condemned thirty men to be torn and trampled in pieces by Elephants, and tying them hand and foot to blocks of wood, cast them among thirty Elephants, his servants and Officers could not by all their wit, skill, or provocation make the Beasts touch one of them: so that it was apparent, they scorned and disdain'd to serve any mans cruel disposition, or to be the ministrants of tyranny and murdure. They moreover, have not only an observation of chastity among themselves, but also are revengers of whoredom and adulterers in other, as may appear by these examples in History.

A certain Elephant seeing his Master absent, and another man in bed with his Mistress, he went unto the bed and flew them both. The like was done at Rome, where the Elephant having slain both the adulterer and adulteress, he covered them with the bed-clothes until his Keeper returned home, and then by signs drew him into his lodging place, where he uncovered the Adulterers, and trenched his bloody tooth that took revenge upon them both for such a villany: whereas the Master wondering, was the more pacified, because of the manifest-committed iniquity. And not only thus deal they against the woman, but they also spare not to revenge the adultery of men; yea of their own Keeper: for there was a rich man which had married a wife not very amiable or lovely, but like himself for wealth, riches, and possessions, which he having gained, was full of all things. His heart to love another, more fitting his lustful fancy, and being desirous to marry her, stripped his rich ill-favoured Wife, and buried her not far from the Elephants stable, and so married with the other, and brought her home to his house: the Elephant abhorring such detestable murdure, brought the new married Wife to the place where the other was buried; and with his teeth digg'd up the ground and threw her the naked body of her predeceesor, intimating thereby unto her secretly, how unworthily she had married a man, monafter with of his former wife.

Their love and concord with all mankind is most notorious, especially to their Keepers and Women: for if through wrath they be incensed against their Keepers, they kill them, and afterward by way of repentance, they convalesce themselves with mourning: And for the manifesting of this point Aristipan tells a notable story of an Indian, who had brought up from a cell a white Elephant, both loving it, and being beloved of it again, he was therewith carried with great admiration. The King hearing of this white Elephant, sent unto the man for it, requiring it to be given to him for a present; whereas the man was much grieved, that another man should possess that which he had so tenderly educated and loved, fitting him to his bow and arrows, and the like; he resolved in his Elephant's love, refused to deny the King, and to flint for himself in another place: whereupon he fled into a Desert region with his Elephant, and the King understanding thereof, sent messengers after him to take away the Elephant, and wishing to bring the man back again, to receive punishment for his contemn.

When they came to the place where he was, and began to take order for their apprehension, the man attended into a deep place, and there kept the Kings messengers off from him by calling of horses, and to do also did the Beast, like as one that had received some injury by them, at last, they got near the Indian, and call him down, but the Elephant made upon them, killing some of them and defending his Master and nourisher, put the residue to flight, and then taking up his Master with his trunk, carried him safe into his lodging, which thing is worthy to be remembered, as a noble understanding part both of a loving friend and faithful servant.

The like may be said of the Elephant of Porus, carrying his wounded Master the King in the battle he fought with Alexander, for the Beast drew the Darts gently out of his Masters body without all pain, and did not cast him until he perceived him to be dead, and without blood and breath, and then did first of all bend his own body as near the earth as he could, that if his Master had any life
Their love to their keepers and all men that harm them not.

Their love of beautiful women.

Plutarch.

left in him, he might not receive any harm in his alighting or falling down. Generally, as is already said, they love all men after they be tamed, for if they meet a man erring out of his way, they gently bring him into the right again, yet being wide are they afraid of the foot-steps of men if they winde their treadinges before they fee their peracons, and when they finde an herb that yieldeth a sufficienc of a mans presence, they smell thereunto one by one; and if all agree in one favour, the Iaff Beaff lifteth his voyce and cryeth out for a token and watch-word to make them all fly away.

Cicero affirmeth that they come fo near to a mans disposition, that their small company or nation feemeth to over-go or equall most men in men and understanding.

At the sight of a mighty woman they leave off all rage and grow meek and gentle; and therefore Elasimus faith, that there was an Elephant in Egypt, which was in love with a woman that fold Corrals, the self same woman was wooed by Aristophanes; and therefore it was not likely, that she was chosen of the Elephant without singular admiration of her beauty, wherein Aristophanes might fly as never man could, that he had an Elephant for his rival, and this also did the Elephant manifest unto the man: for on a day in the market, he brought her certain Apples, and put them into his bosom, holding his trunk a great while therein, handling and playing with her breasts. Another likewise loved a Syrian woman, with whose aspect he was suddenly taken, and in admiration of her face broked the fame with his trunk, with testimonie of farther love: the Woman likewise failed not to frame for the Elephant amorous devices with Beads and Corrals, Silver, and such things as are grateful to those brute Beasts, so he enjoyed his laboure and diligence to her great profit, and her love and kindnes without all offence to his contentment, which caused Haraz to write this verse:

Quid ibi vis mulier nigra dignissima baris?

At last, the woman dyed, whom the Elephant miffing, like a lover distracted betwixt love and sorrow fell beside himself and so perished. Neither offered any man to marvel at such a passion in this Beast, who hath such a memory as is attributed unto him, and understanding of his charge and bufines, as may appear by many examples: for Antipater affirmeth that he saw an Elephant that knew again, and took acquaintance of his Master which had nourished him in his youth, after many years absence.

When they are hurt by any man, they seldom forget a revenge, and so also they remember on the contrary to recompense all benefits, as it hath been manifested already. They observe things done both in weight and measure, especially in their own meat. Agoras writeth that an Elephant was kept in a great mans house in Syria, having a man appointed to be his Overfeer, who did daily deatau and the Beaff of his allowance: but on a day as his Master looked on, he brought the whole measure and gave it to him: the Beaff seeing the same, and remembering how he had served him in times past, in the presence of his Master exactly divided the Corn into two parts, and so laid one of them aside: by this fact shewing the fraud of the servant to his Master. The like story is related by Plutarch and Elasimus, of another Elephant, discovering to his Master the falsehood and privy theft of a unjust servant.

About Lyka in Aflricke there are certain springs of water, which if at any time they dry up, by the teeth of Elephants they are opened and recovered again. They are most gentle and meek, never fighting or biting Man or Beast, except they be provoked, and then being angered, they will take up a man in their trunk and call him into the air like an arrow, so as many times he is dead before he come to the ground. Plutarch affirmeth, that in Ramse, a boy pricking the trunk of an Elephant with a goad, the Beaff caught him, and lift him up into the air to shot him away and kill him: but the people and Banders by seeing it, made so great a noise and cry thereat, that the Beaff let him down again fair and softly without any harm to him at all; as if he thought it sufficient to have put him in fear of such a death.

In the night time they seem to lament with sighs and tears their captivity and bondage, but if any come to that field, like unto modest persons they refrain suddenly, and are ashamd to be found either murmuring or sorrowing. They live to a long age, even to 200 or 300 years: if sicknes or wounds prevent not their life: and some but to a 120 years: they are in their belte strength of bodie at three score, for then beginneth their youth.

Iuba King of Lyka writeth, that he hath seen tame Elephants which have descended from the Father to the Son, (by way of inheritance) many generations: and that Ptolemaeus Philadelphus had an Elephant, which continued alive many Ages, and another of Seleucus Nicomachus, which remained alive to the last overthrow of all the Antiochi.

The Inhabitants of Taxila in India affirm, that they had an Elephant at the least three hundred and fifty years old, for they said it was the fame that fought so faithfully with Alexander for King Porus, for which cause Alexander called him Aias, and did afterward dedicate him to the Sun, and put certain golden chains about his teeth with this inscription upon them: Alexander filius Ioucis Asiatic Sitel: Alexander the son of Jupiter consecrateth this Aias to the Sun. The like story is related by Iuba, concerning the age of an Elephant, which had the impression of a Tower on his teeth and was taken in Atlas 400 years after the fame was engraven.

There are certain people in the world which eat Elephants, and are therefore called of the Nomades (Elephantophagi) Elephant-eaters, as is already declared: there are of these which dwell in Darabas.
Darabes, near the Wood Eumen, beyond the City Saba, where there is a place (called the hunting of Elephants. The Tragelapho live also hereupon, the people of Attick call Afebebe, which live in Mountains, do likewise cut the flesh of Elephants, and the Adiabene or Megabari. The Namerue have Cities running upon Charriots, and the people next under their Territory, cut Elephants in pieces, and both fell and eat them.

Some use the hard flesh of the back, and others commend above all the delicacies of the world the reins of the Elephants; for that is a wonder that Elamites would write, that there was nothing in an Elephant good for meat, except the trunk, the lips, and the marrow of his horns, or teeth. The skin of this Beast is exceeding hard, not to be pierced by any dart; whereupon came the Fable, Nec con bando etratus Elphas infuriatus, the Indian Elephant careth not for the biting of a Gat, to fence a sufficient ability to repel all evil, and that Notholites must not revenge small injuries.

It cannot be but in such huge and vast bodies there should also be nourish'd some diseases, and that many (as Strabo faith) who are first of all there is no creature in the world able to endure cold or Winter, for their improbity of cold bringeth inflammation. Also in Summer, when the fame is hottest, they cool one another by calling dirty and filthy water upon each other, or else run into the roughlest Woods of greatest Shadow. It hath been shewed already, that they devour Chameleon ons, and thereof pensil, except they eat a wide Olive.

When they suffer inflammation and are bound in the belly, either black Wine, or nothing will cure them. When they drink a Leach they are grievously pained: for their wounds by darts or otherwise, they are cured by Sweets-Beth, or Drinky, or by Opia, or by the flower of the Olive. They fall many times, for which I know no other cure, but to tyse them up full in Iron chains. When they are tyred for want of sleep, they are recovered by rubbing their shoulders with Salt, Oyl and Water. Cows milk warmed and infused into their eyes, cureth all evils in them, and they presently like reasonable men acknowledge the benefit of the medicine.

The medicinal virtues in this Beast are by Authors observed to be these: The blood of an Elephant and the ashes of a Werful cure the great Leprofie: and the same blood is profitable against all Rhumatie fluxes, and the Scitizias. The flesh dried and cold, or heavy fat and cold is anomorable: for if it be fried and steeped in Vinegar with Fennel-feed, and given to a Woman with child, it maketh her presently suffer abortion. But if a man taste thereof and steeped with the feed aforesaid, it curseth an old cough. The fat is a good Antidote either by Ointment or Perfume: it cureth also the pain in the head.

The Ivory or tooth is cold and dry in the first degree, and the whole substance thereof corroboreth the heart and helpeth conception: it is often adulterated by Fitches and Dogs bones burnt, and by white Marble. There is a Spadum made of Ivory in this manner; Take a pound of Ivory cut into pieces, and put into a raw new earthen pot, covering and glewing the cover with loine round about, and so let it burn till the pot be thoroughly harden: afterward take off the pot, and beat your Ivory into small powder, and being so beaten, sift it, then put it into a glass, and pour upon it two pound of distilled Rose-water, and let it dry. Thirdly, beat it unto powder again, and sift the second time, and put into it again so much Rose-water as at the first, then let it dry, and put thereunto as much Camphir as will by upon three or four single Goat's, and work it all together upon a Marble stone into little Cakes, and so lay them up where the air may not corrupt and alter them. The vertue hereof is very precious against spitting of bloud, and the Bloudy-flux; and also it is given for refrigeration without danger of binding or attraction.

After a man is delivered from the Lethargy, Peltitude, or sudden forgetfulness, let him be purged and take the powder of Ivory and Hiera Raffh, drunk out of sweet water: This powder with Hony-Attick, take away the apetis in the face: the fame with white Mits drunk with water, refiltheth and avoideth the Leprofie at the beginning. The powder of Ivory burnt and drunk with Goats-bloud, doth wonderfully cure all the pains, and expell the little stones in the reins and bladder: Combes made of Ivory are moist wholefome, the touching of the trunk cureth the Headach: The Liver is profitable against the Falling-evil, the same vertue hath the gall (if he have any) against the Falling-evil.

The fame by anointing, cureth a lowifie skin, and takeaway that power which breedeth these vermin: the fame perfumed cælah Agae, helpeth a woman in travaill, and driveth Gnats or marfihes out of a house.

Of the EILK.

As the Elephant last handled, could not live in any Country of the world, but in the hot Eastern, and Southern Regions; so the Elk on the contrary is most impatient of all heat, and keepeth not but in the Northern and Cold Countries. For Poland, and the Countreys under that Climate will not proferve an Elk alive, as it hath been often tried by experience: for which cause, they are not found but in the colder Northern Regions; as Russia, Prussia, Hungary, and Lithuania, in the Wood Holynia, and among the Burjuffles-Scythians, but most plentiful in Scandinavia, (which Porfulfus callith the Celtey) for all the Ancients called the Kingdoms of Germany, and the North, Celeriae, Countries inhabited by the Celtey.
The Figure of the \textit{E L K} with \textit{Horns}.

This Beast is called in Greek, \textit{Alke}; and in Latine, \textit{Alces}, or \textit{Ace}; which was a name of one of \textit{Able-}
ans Dogs in \textit{Ovid} : the \textit{Turks, Valemrians}, the \textit{Hungrians}, \textit{Lajar}, the \textit{Illyrians} and \textit{Polarians}, \textit{Los}; in
the singular, and plurally, \textit{Loffe}, for many Elks. \textit{Albertus Magnus} calleth it \textit{Alcher} and \textit{Ally}, and after-
ward \textit{Lipurrurus, a Horie-Hart}. The \textit{Germans, Elch, Elleud, and Elist}, by a \textit{Metrothesis} of \textit{Alke}, or
\textit{Ace} : and for my part I take it to be the same Beast which \textit{Piny} calleth \textit{Macblis}, for there is nothing
attributed to an \textit{Elk} which also doth not belong to \textit{Macblis}.

The \textit{E L K} without \textit{Horns}.
I finde not any unreconcileable difference among Authors concerning this Beast, except in Cæsar, 
lib. 6. of his Commentaries, who by the relation of others, (not by his own sight) writeth that 
there are Elks in the Hercynian Wood, like unto Goats in their spotted skins, who have no horns, 
no joints in their legs to bend withall, but sleep by leaning unto trees like Elephants, because when 
they are down on the ground, they can never rise again. But the truth is, that they are like to 
Roes or Harts, because Goats have no spotted skins, but Deer have, and there may easilie be a flip 
from Caprea, a Roe, to Capre, a Goat: and Cæsar himself confesseth, that the similitude is in their spotted 
skins, which are not compatible in Goats, but in Roes.

And whereas he writeth that they have no Horns, the error of this relation may be this, that either 
he had only seen a young one before the horns came forth, or else an old one, that had lately 
lost his horns; and by this I suppose that the authority of Cæsar is sufficiently answered, so as we 
may proceed to the description of this Beast collected out of the ancient Writers, Paufanias, 
Polemeus, Cæsar, and Solinus, Pliny, and the later Writers confenting with them in all things, (excepting 
Cæsar in the two things aforesaid.) Albertus Magnus, Mathew, Mabutus, Sib. Moniplier, Erasmus, 
Stella, Johannes, Bonarius, Baron of Balice, a Polonium, Johannes Kemmanus, io. Pontianus, Antonius Schonehergerus, Christopherus Wifjurger, and that most worthy learned man Georgius Joachimius of Rheatis, and 
Baron Sigismund.

Paufaniasippoloth it to be a Beast betwixt a Hart and a Camel, and Albertus, betwixt a Hart and a 
Horse; who therefore as it has been said, calleth it Equi-corvus, a Horse-Hart; but I rather by 
the horns afterward described, and by the foot which Bonarius had, do take and hold it to be as big 
every way as two Harts, and greater then a Horse, because of the labour and qualities attributed 
thereunto: whereunto also agree Albertus.

In Swadd and Riga they are tamed, and put into Coaches or Chariots to draw men through great 
snows, and upon the ice in the Winter time they alle are most swift, and will run more miles in one 
day than a Horse can at three. They were wont to be prefects for Princes, because of their singular 
strength and swiftness; for which cause Alcitus related in an emblem, the answer of Alexander to 
one that asked him a question about cerenity whether hee doth not alway make walle; which Alex- 
ander denied by the example of the Elk in their Verbes:

Alcaest genio infinita suffinet Alex, 
Uniguis & [modern] fort [anabolomenos].
Conspicul Axiondromus fci respondisse regani, 
Qui in obstricta tempore geltis brevi,
Nunquam iniqua diversus volect quod & indicat Alex,
Fortius hic dubitatis, osce anum fiet?

- Pliny affirmeth (in my opinion) very truly that this Beast is like an Oxe, except in his hair, which 
is more like to a Hart, his upper lip is so great, and gatten over the neather so far, that he can- 
not este going forward, because it doubleth under his mouth, but as he eateth he goeth backward 
like a Sea-crab, and so gathereth up the graps that lay under his feet. His mane is divers both up. 
on the top of his neck, and also underneathe his thorax it buncheth like a beard or curled lock of 
hair, howbeit, they are alway maned on the top of the neck. Their neck is very short, and doth 
not answer to the proportion of the residue of his body, and therefore I have expressed both figures 
of the Elks.

Their fore-head is very broad, two spars at the leath: it hath two very large horns, which we 
have here also express, both for the right side and the left: so as they bend toward the back, 
in the plain edge, and the spires or pikes it forward to the face: both males and females have 
horns, they are solid at the root, and round, but afterward branched, and grow out of their 
eyes, its are broader then a Harts, and are also very heavy, for they weigh at the leath twelve 
pounds, and are not above two foot long, and the breadth measured from the longest pike to the 
other opposite side, about ten inches: the root next to the skin, is more then a man can well gripe 
his hand, and therefore here is expressd the figure of both horns, both in male and female; for 
there is no difference in their natures that I can learn, and their horns they lose every 
year. His ears and back are very long, and hanging down, the colour for the most part like 
a Hart; and sometimes white and Monilier affirmeth, that in the Summer they are of ruffier 
colour, and in the Winter brown or backish-coloured. His fore-legs without all joynets to bend, 
wherein resembling an Elephant, and therefore at leapest coming to Poffs or Trees, and not 
lying on the ground. His hooves are cloven like a Harts, and with the fore-feet he pierceth 
the Dogs that hunt him, for he fighth not with his horns, but with his fore-legs. It is a melanc- 
holic Beast, and fearful to be seen, having an ambling pace, and keeping in the wet, watry, and 
marshy places, delighting in nothing but in moisture. The fleth is fat and sweet, but ingrate- 
ful to the palate, and engendereth melancholy. The Germanus call his Beast Ellewd, which in 
their language signifieth miserable or wretched, and in truth if the report thereof be not false, it 
is in a most miserable and wretched cafe, for every day throughout the year it hath the Falling- 
fickeus, and continueth in the pangs thereof until the hoof of his right fore-foot touch his left ear, 
which comes not to pas but by the extremest torments of the body, for while the members are 
reached and stretched with many strains and Convulsions (as it falleth out in that sickness) 

Of the quan- 
tity and nature. 
Bonarius.

The rising of 
Elks and their 
labour.

Of his parts 
and manner of 
feeding.

Pliny.

Monilier.

Kemmanus.

Pontianus.

Sigismund.

Baris.

Of the colour.

The manner 
of their flight.

The place of 
his abode.

The name 
of his head in 
the German 
tongue, and 
the true signi-
fication there-
of.

The sickness 
by of Elks.
by chance the aforesaid foot rubbeth the laid ear, and immediately thereupon the Beast is delivered from his pangs: whereby we are to admire the works of our Creator, which having laid so heavy an infirmity upon this poor Beast, wherewith he is dayly tormented, yet hath he also provided a remedy for that evil in the hoof of his own foot, making the torments of the disease to be the Apothecary for applying the remedy to the place of cure.

They live in herds and flocks together in Scandinavia, and when the waters are frozen up, the wilde Mountain-Wolves set upon them in great multitudes together, whom they receive in battle upon the Ice, fighting most fiercely and cruelly till one part be vanquished: In the mean time the Husbandmen of the Country observe this combat, & when they see one side go to the wall, they persecute them, & take the victors part, for it is indifferent to take either the one side or the other; but most
most commonly the Elks are conquerers by reason of their fore-feet, for with them they pierce the Wolves or Dogskins, as with any sharp pointed Spear or Javelin.

Some have been of opinion that these are wilde Aces, but they are led hereinto with no reason, except because they are used for travel and burden as is before said, for there is no proportion or resemblance of body betwixt them: besides, they have cloven hoofs, for the most part, although Spermannus Baro affirm, that there are some of this kinde which have their hoofs whole and undivided. Being wilde it is a most fearful creature, and rather desireth to lie hid in secrect, than to fly, except pursued by Hunters; and there is no danger in hunting of this Beast, except a man come right before him, for on his sides he may safely strike and wound him; but if the Beast fallen his fore-feet on him, he cannot escape without death. Notwithstanding it is a Beast (as hath been said) as great as two Harts, yet is it above measure fearful, and if it receive any small wound, or shot, instantly it falleth down and yeeldeth to death, as Sermon hunting, with Spermann the Second King of Elms in the Woods of Lutania, tried with his own hand, for with his hunting Spear he pierced one a very little way in the skin in the presence of the King, who presently fell down dead.

In some Countries of ancient time (faith Pausanias) they took them on this manner. They having found out the field or hill where the Beasts are lodged, they compass it in by the space of a thousand paces round in circle with wails and toils invented for that purpose, then do they draw in their nets round like a purse, and so inclose the Beasts by multitude. who, commonly smelling his Hunters, hideth himself in some deep ditch or cave of the earth; for the nature of this Beast hath framed to it self a most sharp fragacity, or quick scent of smelling, being not herein inferior to any of the best Dogs in the world, because it can a great way off discover the Hunters, and many times while men are abroad in hunting of other Beasts, this is suddenly start out of her lodging place, and so discovers, chased, and taken.

Other again take it by the means that they take Elephants, for when they have found the trees wherunto they lean, they so cut and flaw them, that when the Beast cometh, he overthroweth them, and falleth down with them, and so is taken alive.

We read that there were Elks in the triumph of Aurelian at Rome, and in the games dedicated by Apollo and Diana, and celebrated by Valesius Pudicivius, were many Elephants, Elks, and Tygers. Likewise there were ten Elks at Rome under Cordianus. When they are chased eagerly, and can finde no place to retire themselves in, and secrct, they run to the waters, and therein stand, taking up water into their mouths, and within short space do so, as he that being quenched or fotted out of them, upon the Dogs, the heat thereof so opprefteth and faldeth them, that they dare not once approach or come nigh her any more.

The greatest vertue of medicine that I can learn or finde to be in this Beast, is in the hoof, for that worn in a Ring, it refiliseth and freeth a man from the Falling evil, the Cramp, and cureth the fits or pangs, if he be put on when he is in his formin extremity: also scraped into powder and put into Wine and drunk, it is used in Polonia against the same evil. In like sort they mingle with Triacle, and apply it to the heart, or else hang it about their neck for an Amulet to touch their skin against that disease: and because that both in ancient time, and also now adays, this Beast is feidom seen, and more seldom taken, the hoof thereof being so often approved for the iles before said, the rarity (I say thereof) maketh it to be sold very dear, which would be (if they could be found or taken) in more plentiful manner.

Some Mounte-banks fell in spent thereof a Bugles hoof, but it may easily be described by scrapeing, for (it is faid) it smelleteth very sweet, whereas a Bugles fauour eth very ill and strong. It is observed also, that it hath not this vertue except it be cut off from the Beast while he is yet alive, and that in the months of August and September, at what time these Elks are most of all annoyed with the Falling-sicknes, and then it hath strongest vertue to cure it in others.

Others affirm, it wanteth his operation if it be cut off from a young one, which never tasted of carnal coopsation, and so hath not been dulled thereby: but howsoever, this is certain, that some times it cureth, and sometime it faileth, and as there can be given no good reason of the cure, so I rather ascribe it to a superflitious conceit or belief of the party that weareth it, rather then to any hidden or affaired work of nature. The skins of this Beast are dreefed by Tawyers, with the fat of fishes and Alum, to make breast-plates, and to shelter one from rain, and they sell them for three or four Nobles a piece, but in Cracovia for fifteen Florens. It may be discerned from a Harts skin by blowing upon it, for the breath will come through like as in a Buffe, and the hairs also of this Beast have also hollow passages in them when they grow upon the back of the Beast, or else soon after the skin is taken off.

Some alfo use the Nerves against the Cramp, binding the offended member therewith, and herewith do we conclude this story of an Elk, referring the reader to the tale of Acida related before in Cacus, if he have desire to know it for the affinity betwixt the name thereof, and Alces an Elk.
The names in Greek.

The etymology of *Ibys* a Ferret.

Ferrets swim not.

The Latin names.

Their courage and nature in the earth, Scaliger.

Whether Ferrets be *Ibys*.

Of the *Ferret*.

I take it to be most true without all exception, that the *Græcius* call a Ferret *Gaula agria*, a wilde Weasit, *Ibys* and *Ferretius*, although *Eymology* and *Hesychius* ascribe the reason of this latter name to her lodging under Oaks and Olive-trees. *Ibys* also was a common name of all Weasils, to those *Græcius* which never knew or saw any other than one kind of them, or as Scaliger against Cardan will have it to signify a wilde *Canis* Weasil, and not a tame kind, being domestical and living in houses, and that these differ only from one another in place and manner of living, and not in colour, stature or qualities. And where *Aristophanes* citeth it among other Beasts which are devourers of fish; in my opinion there is no Beast that more defireth Fith, then Ferrets and Cats; and for this cause it hath his name *Ibys guesi Ichthiun*, of eating of Fish; and yet I cannot consent unto them which will have it descend and hunt Fith in the waters, like Oters or Beavers: for it abhorreth both swimming or diving, but neer to the waters it hunteth Fith, where for the most part being wilde it remaineth.

The *Latines* call this Beast *Viverra*, and *Furo*, and *Ferretius*, and *Furetus*: because (as shall be afterward manifested) it preyeth upon Comies in their holes, and liveth upon Weasils, and in the earth will kill a Conie fix times as big as her self, but being abroad on the land, in the open air is nothing so wilde, strong or full of courage. From *Ibys* is derived *Ibises*, and the German *Iitis*, for a Ferret: this is called by the French *Furon*, *Ferret*, and *Fufon*, and by the Spaniards, *Feron*, and *Faram*, and from the English *Ferret* is the German *Fret*, derived by a common Syncope, and in the time of *Georgius Agricola*, it was called in Germany, *Furette*, and *Fretel*; and the English word feemeth also to be derived from *Fretta in Latine*, which by a like Syncope is contracted of *Viverra*, as to any different learned man it may appear at the first sight of derivation.

But herein feemeth an unreconcilable difference, that it is reported of the *Ibys* by *Gaza*, the interpreter of *Aristotle*, that it was most greedy of Honey, and for that cause it will seek out the Hives of Bees, and enter them without all fear of stings. But when *Pline* speaketh of *Ibys*, he doth not call it *Viverra*, or once attribute unto it the love of Honey, but rather the hatred and loathing thereof, in so high a degree, that if he tait of it, it falleth into Consumptions, and hardly escapeth death. And these things Scaliger alledgeth against Cardan, only to prove that *Ibys* and *Viverra* are two distinct Beasts, and that *Cardan* was miftaken in affirming, that they were but several names, expressing one and the same Beast.
Of the Ferret.

The answer whereunto may be very eafie, for although Pliny leaveth without rehearftal their love of Honey, it doth not necessarily follow, that they love it not (as Aristotle before him conftantly affirmed) and Scaliger nameth no Author, nor bringeth any reafon to demonstrate their hate of Honey, or any harm which injucent them by eating thereof: and therefore againft his authority may Strabo be oppoited, who in his third Book, speaking of the Conies of Spain, and of their Hunters and Harriers, out of their holes, he taketh and nameth indifferentily without all dijinition and exceptiion, Viperes, and Ibyx, for the one and other. Niphus tranflateth Ibyx, a Martel, but without reafon; for the fame man finding in Ariflotle, that there is war betwixt Loculuts and Serpents, which is fitly called Ophiomachia; whereas Aristotle nameth Afis, a Locult, he falleth in doubt whether it were not better to be Ibyx, a Martel, or as other copies have it Apis, an Apefe, which can by no means agree unto them, for there is a kind of Locultus (called Ophiomachum) becaufe of their continual combates with Serpents. And therefore not to fland any longer upon this difference, omitting alfo the conjecture of TertuJ, which confoundeth Ibyx with Milites, a Glend or Kyte, which cannot fland reasonable, because Hermer faith, there was a kind of Caps made of the hairs of Ibyx, nor yet of Albeorus his new found name of Aneforius, nor Alvicens his Rase, or the French, Filius, which is a Poul-Cat.

I will defend to the defcription of the parts and qualities, wherein the Authors themselves at variance, make their own reconvocation, by attributing the fame things to the Ibyx, and Ferret, except that of an obfure Author, which faith that Ibyx is Analemor, as big as a Greyhound, and that it is wifer and more induftrious in his youth and tender age, then in his perfection of strength and years.

These Ferrets are lefier then the Malicean or Gentlewomen's Dogs, and they were firft of all brought out of Africa into Spain, and therefore are called by Strabo, African Wefliffs, becaufe of their fimilitude with Wefliffs: for Spain, Italy, France, and Germany, have not this Beaf bred among them, but brought them out of other Countries. But in England they breed naturally of the quantity afofareid, and they are tamed to hunt Cones out of the earth. It is a bold and audacious Beafe, enmy to all other, except his own kinde, drinking and flucking in the bloud of the Beaf it biteth, but eateath the fift. When the Warener fetheth it down to hunt, he firft of all maketh a great noife to fray all the Cones that are abroad into their holes, and fo having frighted them, pitcheth his Nets, and then puttheth his tame Ferret into the earth, having a long lirring or cord with Bels about her neck, whose mouth he muzzleth, fo that it may not bite the Cony, but only terrify her out of her boroufh and earth with her presence or claus; which being performed, she is by Dogs chaflèd into the nets, and there overwhelmed, as is afofareid in the history of the Cones.

Their body is longer for the proportion then their quantity may afford, for I have feen them two flans long, but very thin and fmall. Their colour is variable, fometyme black, and white on the belly, but moft commonly of a yellowifh fandy colour, like Hermeline or Wool, dyed in urine. The head little like a Mufes, and therefore into whatfoever hole or chink the putteath it in, all her body will eafily follow after. The eyes fmall, but fiery, like red hot iron, and therefore the teete moft clearly in the dark. Her voyce is a whying cry, neither doth change it as a Cat: She hath only two teeth in the neither chap, flanding out, and not joined or growing together. The genital of the male is of a bony fubfance, (wherein Pliny and Scaliger agree with Cardan and Strabo for the Ibyx alfo) and therefore it alway handeth fliffe, and is not lefter at one time then at other. The pleasure of the fene in copulation is not in the yard or genital part, but in the nerves, muscules, and tu- ficles wherein the faid genital runneth. When they are in copulation, the female lyeth down or bendeth her knees, and continually cryeth ex Cath, either becaufe the Male pincheth and claweth her skin with his fharp nails, or elfe becaufe of the rigidity of his genital. And when the female defireth copulation, except the be with convenient fpeed brought to a male, or heuffered to come to her, the fwelleth and dyeth. They are very fruitful in procreation, for they bring forth feven or eight at a time, bearing them in their little bellies not above forty days. The young ones newly luttered are blinde 30 days together, and within forty days after they can fee, they may be set to hunting. The Noble men of France keep them for this pleafure, who are greatly given to hunt Cones, and they are fowld there for a French crown. Young boys and scholars alfo use them to put them into the holes of rocks and walls to burn out birds, and lifewise into hollow trees, where out they bring the Birds in the claws of their feet.

The number
of their young
ones.

They are nourifhed being tamed with Milke, or with Barley bread, and they can fat a very long time. When they go, they contrac their long back and make it fland upright in the middle, round like a bowl. When they are touched, they smell like a Martel, and they sleep very much: being wide, they live upon the bloud of Conies, Hens, Chickens, Hares, or other fuch things, which they can finde and over-matter. In their feep alfo they dream, which appeareth by whyning and crying in their feep. Whereas a long fly (called a Fryer) flying to the flaming candles in the night, is accounted among poiyons, the Antidote and relifter thereof is by Pliny affirmed to be a Goals gall or liver, mixed with a Ferret, or wide Wefill, and the gall of Ferrets is held praiifed againft the poiyon of Alpese, although the feeth and teeth of a Ferret be accounted poiyon. Lifewise the gall of a Ferret is commended againft the Fallinge disease, and not only the gall (faith Marcellus) but the whole body, if it be rolled, dreffed, and eaten falling, like a young pig. It is said by Rafis and Albeorus, that if the head of a Wolf be hanged up in a Dove-cote, neither Cat, Ferret, Wefill, Stoa, or other noyfome Beaf dare to enter therein. These Ferrets are kept in little hustches, in houfes, and

The medicines
of Ferrets.
The difference of a Poul-Cat, from the Wilde-Cat, is because of her strong stringing favour, and therefore is called Furtius, of Furtore, because of his ill smell: for all Weasels being incensed and provoked to wrath, smell strongly, and especially the Poul-Cat; likewise when in the Spring time they endeavour procreation, for which cause among the Germans, when they would express an infamous Whore or Whoremaker, they say they think like an Ito, that is a Fitch or Poul-Cat. The French call this Beast Putois, and Futois, as it is to be found in Cerius Figular; the Sauvans, Foutette; the Illyrians and Bohemians, Tberz; and the Polvians, Vildred; and Scalger calleth it in Latine (Gatton saxum) by another name then Furtonis. It is greater then an ordinary Weasif, but leffer then the wilde Martel, and yet commonly fatter: the hairs of it are neither smooth and of one length, or of one colour; for the short hairs are somewhat yellowish, and the long ones black, so as one would think that in many places of the body, there were spots of divers colours, but yet about the mouth it is most ordinarily white.

The skin is fift, harsh, and rugged in handling, and therefore long lafiting in Garments, yet because the Beast is alway fat, the favour of it is so rank, that it is not in great request, and moreover it is said, that it offendeth the head, and procureth aching therein; and therefore it is sold cheaper then a Fox skin, and the fattest is alway the worst of all. The Skinners approve the skins of Fitches and Martels best, which are killed in Winter, because their flesh and luft is much lower, and therefore rendereth a les hurtfull smell then at other times. The tail is not above two hands or palms long, and therefore shorter then is a Martel. In all other parts of the body it equalleth a Martell, or exceedeth very little, having thinner necks, but larger and greater bellies, the tail, legs, and breed, are also of a blacker colour, but the belly and sides more yellow. Some have delivered that the left legs thereof are shorter then the right legs, but this is found untrue by daily experience: They keep in the tops of houses and secret corners, delighting to kill and eat Hens and Chickens, whole craft in devouring his prey is singular; for to the intent that the fily creatures to be devoured may not bewray them to the Houfe-keepers, the first part that they lay hold upon with their mouths is the head of the Hen and Chicken, and by that means stayeth his crying by cropping off the head. Some of these Fitches wander and keep in the Woods, and thereby live upon Birds and Mifs, and such things; some again live by the Sea fides in Rocks, and they take Fishes like Beavers and Otters; and some creep into the Caves of hollow trees, where they eat Frogs, and most of all they delight to be near flas of Carrell, Hay-houfes, and houses, where they meet oftentimes with Eggs, wherein they delight above all other kinds of meat. And thus much for this Beast.
A Fox is called in Hebrew, Ṣeḇuṭ; and in Chaldee, Ṭhaaṭ; and therefore in Psa. 61, where the Hebrew readeth Šeḇuṭāh, there the Chaldee translitereth it Šeelāja; the Arabians call him Ṣab- lah; and Avicen calleth a Fox sometime Ḫābél, and also Ḫālāhāt; the Greek Septuagints, Ἀλπηκός; and vulgarly Ἀλπης, and Ἀλπος; the Latin, Vulpes, and Vulpecula of Volpes, his tumbling-pace; the Italians, Volpe; the French, Regnard; and a little Fox Regnable; the Spaniards, Capó; of ravening; the Germans, Fuchs; the Flemings, Vos; and the Thyrions, Lifis.

The Epithets expressing the nature hereof among Writers, both Poets and others, are these: crafty, wary, deceitful, thinking, strong-smelling, quick-smelling, tyed, warlike or contentious, wicked and rough; the Græcius very colored, and subtil for slaughter; and therefore Christ called Herod a Fox, because he understood how by crafty means he sought to entrap and kill him: and all the Ancients
Ancients called such kinde of men Volpiniere, which every Nation under Heaven doth imitate.

There are store of Foxes in the Alpine regions of Helvetie, and amongst the Captains they abound, so that their multitude maketh them tame, comming into the Cities, and attending upon men like tame Dogs. The Foxes of Savoia are very ravenous, for they kill the strongest Rams and Goats, and also young Calves; and in Egypt they are leffer then in Greece, and most commonly all Foxes are of nativity like a Shepherds Dog. Their colour is reddish and more white toward the head: In 

The Foxes are both black and white, viz. about the river Woga, black and ash-coloured, and in the Province of Ufita; all black, and these are of the smaller sort, which are nourished to make caps of their skins, and are therefore fold at twenty or thirty Florens a skin. In Spain they are all white, and their skins are often brought by the Merchants to be fold at Francis Mart.

In the Septentrional or Northern Woods, there are black, white, and red Foxes, and such as are called Cawgerere, that is Cross-bearings Foxes, for on their backs and othertwhat their shoulders there is a black cross, like an Aeffe: and there are Foxes alfered over with black spots, and all these are of one and the fame malignant and crafty nature: and these (faith George Fabricius) are dilinguished by their regions or habitation: for it is most commonly feen, that Foxes which keep and breed toward the South and West, are of an ash colour, and like to Wolves, having loose hanging hairs, as is to be feen both in Spain and Italy; and there are noted by two names among the Germans, from the colour of their throat. One kinde of them is called Koler, whose throat feemeth to be sprinkled and darkned with cole-duft, upon white, so as the tops of the hair appear black, the foot and flank being white.

The other Birkfeintche, because their throat is all white, and of this kinde the moft splendit white, is most precious. A fecond there is (called Krenzschufche) because of the cross it bareth upon his back and shoulders down to his fore-feet, being in other parts like the former, except the throat which is blacker then any of the other before I spoken of, and these are not bred in Germany, but brought thither from other Nations.

A third kinde is of a bright slate-colour (called Blauwfeintche) and this colour hath given a different name to Foxes, which they call Blauwshimmel, but in the Foxes it is much more mingled, and their Foxes which have rougher and deeper hair are called Braundfeintche.

The Mufcovains and Tartarians make most account of the black skins, because their Princes and great Nobles wear them in their garments: yet are they more easily adulterated, and counterfeited by the fume or smoke of Torchet made of pitch. The white and blew skins are left esteemed, because the hair falleth off, and are also leffer then the other: the red ones are most plentiful: and Sceliger affirmeth that he saw skins brought into France by certain Merchants, which had divers white hairs disposed in rows very elegantly upon them, and in divers places they grew also single. In Norvegia and Suetia, as there are white Hares and Bears, so there are also white Foxes; in Volcofa they are black, as is affirmed by Sigismundus Laber, the picture of the Cross-bearing-Fox which is less then the former is here following express'd and set down.

The Cruigeran F O X.

Serpets, Apes, and Foxes, and all other dangerous harmful Beasts, have small eyes, but Sheep and Oxen which are simple, very great eyes. The Germans when they describe a good Hore, they decipher in him the outward parts of many Beasts, from whom (it feemeth) he partaketh his generosiety, and from a Fox they ascribe unto him short ears, a long and bulthy tail, an eatie and foil treading step, (for these belong to a Fox.) The male Fox hath a hard bony genital, his tail is long and hairy at the end, his temperament and conftitution is hot, as appeareth both because of his resemblance or fimilitude with Dogs and Weafls, and also his rank and strong smeling flavour: for being dead, his skin hath power in it of heating, and his fat or-oyl after a decoction is of the fame force and condition.

The greatest occasion of his hunting is the benefit of his skin, for his fleefh is in all things like a Dogs, and although Calen, Merimacian, and Stibius affirm, that in the Autumn or lattter part of the year, some men use to eat the fleefh of Foxes, (especially being Cubs) that is young, tender, and not smelling: but Asius and Kaflus affirm, (and that with great reason) that their fleefh, and the fleefh of Hig-hogs and Hares, is not agreeable to the nature of man.

But their skin retaineth the qualities of the hot Beaff being pulled off, by reason of the long and soft hair growing thereupon; and the skins of Cubs which are preferred before the elder, are of least value, because their hair is apt to fall off, which being thin doth not admit any deep rootings of the hair. The Thraciates in the time of Xenophon, wore Caps of Foxes skins upon their heads and ears, in the coldest and hardest Winters, and from hence it cometh, that in some Authors the covers of mens heads, (commonly called in Grecæ, Periephalæ) are termed Alpecias, or Alpecis: and for this purpose in Germany at this day, they flit about the skin of Foxes tails, and few it together again, adding to it a sufficient number till it be framed into a Cap: but the skin of the belly and sides is of more previous estimation, because it is more soft and smooth, and therefore is sold for twice so much as the other parts,
In the Summer time the skins are little worth, because that then the beasts are troubled with the Alopecia; that is, the falling off or looseness of the hair; and therefore then also they are dangerous to be used, because of that disease: men which have the Gout, shrinking up of the finews, or other old fluxions of the Rheumes in their legs, can use no better or more wholesome thing then to wear buskins of the skins of Foxes; the Scythians make them shoes, and foal them with the backs of Fox and Mufe skins, upon which they go. The Latins have a proper word for the voice of a Fox, which is, Gannus Gannire, to Ganne, and it is also metaphorically applied to men, when by shrieking clamors they trouble others; as 'Lerence in Adelph. Quid ile gannit? Quid vult? And Plauto also, Gannit odiose omni toti famile; and for this voice did Maccusian write his Verdes.

The voice of Foxes.

But yet as Albertus and Confessianus have truly observed, that in the time of his hunting he will bark like a little Dog, and the Harts are greatly afraid of this ganning of Foxes.

It hath been already shewed in the story of the Badger, how the Fox by laying his excrement in the Badgers den, geteth the fame to his own use; for the abode of Foxes in the day time is in the caves and holes in the earth, and come not abroad till the night. These dens have many caves in them, and passages in and out, that when the Terriers shall set upon him in the earth, he may go forth some other way: and forasmuch as the Wolf is an enemy to the Fox, he layeth in the mouth of his den, an Herb (called Sea-onion) which is so contrary to the nature of the Wolf, and he so greatly terrifies therewith, that he will never come near the place where it either groweth or lyeth; the same is affirmed of the Turtle to save her young ones, but I have not read that Wolves will prey upon Turtles, and therefore we reject that as a fable.

When Aristophanes was converted by the Locavermianus, and included into a rock or quarry of flones, Pliny, he escaped out of their hands, by digging another passage out of it then where he was put in; saying, that it was a shame for a Man to have left wit then a Fox. When they are in their dens, they lie upon their bellies with their hinder legs stretched forth at length, like as a man when he sleepeth on his belly, and therefore it seemeth that their legs are so framed to creep and pierce under the earth and dig out their way after their own pleasure.

This is such a devouring beast, that it forfaketh nothing fit to be eaten, for it killeth Hares and Conies, and with his breath draweth field Mice out of their holes, like as a Hart draweth out Serpents with his breath, and devoureth them. He devoureth also all kind of Pullen, they also eat Grapes, Apples, and Pears; whereupon came the proverb in Plautus, Tan ficelis sinus quam vultur pyron conef; Thou shalt as easily overcome him, as a Fox catch a Pear: which is applied to any easy or dispatchable business. In Arabia, and Syria Palestina, they are so ravenous, harmful, and audacious, that in the night by ganning and barking, they invite one another (as it were) by a Watchword, to assemble in great multitudes together, for to prey upon all things, and they fear not to carry into their dens, old shoes and vessels, or instruments of husbandry: for which cause, when the Husbandmen hear thereof, they gather all things into their houses and watch them.

But as it falleth out in all glutinous ravening persons, that while they strive to fill their bellies, they poison their lives, so also it fareth with Foxes, for nature hath so ordained, that if a Fox eat any meat wherein are bitter Almonds, they die thereof if they drink not presently; and the same thing do Aloeis in their meat work upon them, as Sculler affirmeth upon his own sight or knowledge. Apocynum or Bear-foot gives to Dogs, Wolves, Foxes, and all other beasts which are littered
littered blind, in fat or any other meat killeth them, if vomit help them not, which falleth out very seldom, and the seeds of this herb have the same operation. It is reported by Democritus, that if wile Rue be secretly hung under a Hens wing, no Fox will meddle with her; and the same writer also declareth for approved, that if you mingle the gall of a Fox, or a Cat, with their ordinary food, they shall remain free from the dangers of these beasts.

When they engender, they do admit coxulation, they are joined like Dogs, the male upon the female: and the female when she perceiveth her womb filled, the departeth and liveth very secret, for it falleth out very seldom that a female or Bitch fox is taken great with young. She bringeth forth ordinarily four at a time, and those blind and imperfect, without Articles in their legs, which are perfected and framed by licking, for Bears, Wolves, Lions, Foxes, Dogs, and Hares which are Musurara and Undogus, that is, fruitful, bearing many at one time, and also Cloven or flat-footed into many claves, have not the benefit or nature to perfect their young ones in their wombs.

Kites, Vultures, and Eagles lie in wait to destroy the Foxes Cubs or Whelps. Foxes do not only engender with their own kinde, but also with Wolves, Dogs, or any other beasts of equal proportion, both of quantity and time of going with young; so the Leonian Dogs are engendred by a Dog and a Fox; and the Hyena, of a Wolf and a Fox (as Albertus affirmed) and the Simia Lupae of an Ape and a Fox, as is already in the story of Ape's declared.

There be also many evils wherewithal Foxes are annoyed, and first of all he falleth sometime into madness as a Dog, and the same evils follow a mad Fox, which already are manifest to accompany a mad Dog, and that more often in Summer then in Winter.

When a Fox feeleth himself sick, nature hath taught him to eat the gum of Pinetrees, wherewithal he is not only cured, but also receiveth length of days. They are also vexed with the falling away of their hair; called therefore Alopecia, because Foxes are most commonly vexed therewith, and as we see in Plants, that some of them dry and confuse through want of moisture to feed them, other are suffocated and choked by abundance, and as it were drowned in humidity: so it happeneth in the earth, which groweth out of the body of beasts, and the heads of men, no otherwise than Plants out of the earth, and are therefore to be nourished by humour; which if they fail and wax dry, the hair allo shorteneth with them, and as it were rottest away in length: but if they abound and overflow, then do they loosen the roots of the hair, and cause them to fall off totally.

This disease is called Alopecia, and the other Oppolij, because it is not general, but only particular in one member or part of the body or head, and there it witteth or indenteth like a Serpents figure.

Michael Verus affirment, that sometime the liver of the Fox inflameth, and then it is not cured but by the ulcerous blood flowing to the skin, and that evil blood cautheth the Alopecia, or falling away of the hair, for cause (as is already said) a Foxes skin is little worth that is taken in the Summer time.

The length of their life.

The length of the life of a Fox is not certainly known, yet as Stumpfius and others affirm, it is longer than the life of a Dog. If the urine of a Fox fall upon the graffe or other herbs, it dryeth and killeth them, and the earth remaineth barren ever afterward. The favour of a Fox is more strong then of any other vulgar beast, he flinketh at nose and tail, for which cause Martial calleth it Olidam Vulpec, an Olent or smelling beast.

His olidam clam: sus aget in retia vulpin.

The hunting and taking of Foxes.

Touching the hunting or taking of Foxes, I approve of Xenophont, who avoucheth, Laporum capturam venaticos studio quam vulpinium aliquam, that is, the hunting of the Hare is a more noble game or patience then the hunting of the Fox.

This beast is more fearfull of a Dog then a Hare, for the only barking of Dogs cautheth him to rife many times from his den or lodgings out of the earth, or from the middle of bushes, briars, and bramblest, wherein he hid himself: and for his hunting this is to be observed, that as in hunting of a Hare it hath been already related, the Hunter must drive the beast with the winde, because it hindereth his refrigeration: for in hunting of a Fox he drive him against the winde, and then he preventeth all his crafty and subtilst agitation and deviles; for it layeth his speed in running, and also keepeth his favour fresh alway in the nofe of the Dogs that follow him: for the Dogs that kill a Fox mult be swift, strong and quick fented, and it is not good to put on a few at once, but a good company together, for be assured the Fox will not lose his own blood till he hazzard some of his enemies, and with his tail which he witteth every way, doth he delude the Hunters: when the Dogs are preffed neer unto him, and are ready to bite him, he striketh his tail betwixt his legs, and with his own urine wetteth the fame, and so inflammeth it into the Dogs mouths, whereof when they have tafted, to many of them asit toucheth will commonly leave off and follow no farther.

Their teeth are exceeding sharp, and therefore they fear not to assault or contend with beasts, exceeding their stature, strength, and quantity. Sometime he leapeth up into a tree, and there standeth to be seen and bayed at by the Dogs and Hunters, like as a Champion in some Fort or Castle, and although fire be cast at him, yet will he not defend down among the Dogs; yet he endureth
endureth to be beaten and pierced with Hunters spears, but at length being compelled to forfaketheihsold and give over to his enemies, down he leapeth, falling upon the crew of barking Dogs, likeaflash of lightning, and where he layerth hold there he never looefeth teeth, or affiageth wrath, till other Dogs have torn his limbs, and driven breath out of his body.

If at any time he take the earth, then with Territor Dogs they ferret him out of his den again.

In some places they take upon them to take him with nets, which seldom proveth, because with his teeth he tearoth them in pieces; yet by Calendius this devise is allowed in this Verse:

Et laqueo Vipers & decisae fuisar.

But this must be wrought under the earth in the caves, dens, or burrowes, made of purpose, which is to be performed two manner of wayes, one by placing the Gin in some perth of wood, so as that as soon as the beast is taken by the Neck, it may presently fly up and hang him, for otherwise with his teeth he will tear it afunder and escape away alive: or else that near the place where the rope is fastened, to flap upon the head of the Fox, there be placed some thick collar or brace, so as he can never bite it afunder.

The Foxes have a kind of Gin to take by the legs (which they call Haufpiele) and I have heard of some which have found the Foxes leg in the same Gin, bitten off with his own teeth from his body, rather putting himself to that torment with his own teeth, then to expect the mercy of the hunter; so were away upon three feet: and other have counterfeited themselves dead, referring their breath and winking, not flirring any member when they lay the Hunter come to take them out of the Gin, who coming and his leg forth, not suspecting any life in them, so soon as the Fox perceiveth himself free, away he went and never gave thanks for his deliverance; for this cause Bionius faith truly, that only wife and old Hunters are fit to take Foxes, for they have so many devices to beguile men, and deliver themselves, that it is hard to know when he is safely taken, until he be throughly dead.

They also use to set up Gins for them baited with Chickens in butcher and hedges; but if the setter be not at hand to soon as the Fox is in the Gin, it is dangerous but that the beast will deliver itself. In some places again they set up an iron toole, having in it a ring for the Fox to thrust in his head, and through that sharp pikes, at the farther end whereof is placed a piece of flesh, so that when the hungry Fox cometh to bite at the metal and thrusteth in his head, the pikes stick full in his neck, and he inevitably inured. Moreover, as the harmfulness of this beast hath troubled many, so also they have devised more engins to deceive and take him; for this cause there is another policy to kill him by a bow, full bent, with a sharp arrow, and so tenderly placed as a trap for a Mouse, and as soon as ever the Fox treadeth thereon, presently the arrow is discharged into his own bowels, by the weight of his foot.

Again, for the killing of this beast they use this sleight, they take of Bacon-grease or Bacon as much as ones hand, and rost the same a little, and therewith anoint their flooze-foles, and then take the liver of a Hog cut in pieces, and as they come out of the wood where the beast lodgeth, they must scatter the said pieces in their foot-reps and draw the carcasse of a dead Cat after them, the favour whereof will provoke the beast to follow the foot-reps, then have they a cunning Archer or handler of a Gin, who obsereth and watcheth in secret till the beast come within his reach, and so giveth him his great and deadly wound.

But if the Fox be in the earth, and they have found his den, then they take this course to work him out. They take a long thing like a Bee-live, and open at one end, and iron wiers at the other like a grate, and at the open end is set a little door to fall down upon the mouth, and to incline the Fox when he entretineth in by touching of a small rod that supporteth that door. This frame is set to the Foxes dens mouth, and all the other passagges watched and stopped. The Fox having a desire to go forth, and seeing light by the wiers, misdemeen no harm, and entretineth into the hive which is wrought close into the mouth of his den, and being entred into it, the rod turmeth the door fall at the lower or entrance, and so the Fox is trapped, to be disposed of at the will of the taker.

Foxes are annoyed with many enemies; and to begin with the leaf, the small flies, called Gnats, do much trouble and infect them; again against whom the Fox ueth this policy: He taketh a mouthful of straw or soft hay, or hair, and goeth into the water, dipping his hinder parts by little and little, then the flies betake themselves to his head, which be keepeoth out of the water, which the Fox feeling, dippeoth or diveth into the same under water to his mouth, wherein he holdeth the hay as aforefaid, whereunto the flies runne for sancturary or dry refuge, which the Fox perceiving, suddenly calleth it out of his mouth, and runneth out of the water, by this means eating himself of all those enemies.

In like manner, as all beasts are his enemies, and he friend and loving to none, so with strength, courage, and policy, he dealteth with every one, not only against the beasts of the Land, but also against the monsters of the Sea. When he findeth a nest of Waspes in the earth, or in other places, as in trees, he layeth his tail to the hole, and gathereth into it a great many of them, which he presently dasheth against the wall, or tree, or stones adjoining, and so destroysth them, and thus he continue till he have killed them all, and so maketh himself executor to their heaps of hony.
The History of Four-footed Beasts.

Gillim.

His manner is when he perceiveth or seeth a flock of fowl to fly in the air, to rowl himself in red earth, making his skin to look bloody, and lie upon his back, winking with his eye, and holding in his breath as if he were dead, which thing the birds, namely Crows, Ravens and fuch like observing, because of the hatred of his person, they for joy alight and triumph at his overthrow, and this the Fox endureth for a good reason, till opportunity serving his turn, and some of the fowl come near his howt, then suddenly he catcheth some one of them in his mouth, feeding upon him like a living and not a dead Fox, and doth devour and eat him, as the Leopard doth devour and eat Apes, and the Sea frog other little fishes.

In like fort he receiveth the Hedge-hog, for when the Hedge-hog perceiveth the Fox coming to him, he rowleth himfelf together, like a foot-ball, and doth appear as outward except his prickles, which the Fox cannot endure to take into his mouth, and then the cunning Fox to compass his defire, licketh gently the face and howt of the Hedge-hog, by that means bringing him to unfold himfelf again, and to stand upon his legs, which being done, he infinitely devoureth, or else poisoneth the beast with the urine that he renders upon the Hedge-hogs face; and at other times he goeth to the waters, and with his tail draweth fishes to the brim of the River, and when that he observeth a good booty, he calleth the Fishes clean out of the water upon the dry land, and then devoureth them.

All kindes of Hawkes are enemies to Foxes, and Foxes to them, because they live upon Carrion, and fo in the Province of Ula. Avicen faith a Fox and a Crow fight together a long feafon, and the Crow with his talons fo he gripping the Foxes mouth that he could not bark, and in the mean time the beast and picked his head with her bill until he bled again. The Eagles fight with Foxes and kill them; and Olaus Magnus affirmeth, that in the Northern Regions they lay Eggs and hatch their young in those skins which they themselves have stripped off from Foxes and other beasts.

* The Kites, Vultures, and Wolves, are Enemies to Foxes, because they are all flesh-devouring creatures, but the Fox which hath so many enemies, by strength or subtleties overcometh all. Whereupon Persius calleth a subtil man a Fox, saying,

Afinam vulpi modo subs pectore uniprem.

The medicinal ues of this beast are these, First, (as Pliny and Marcellius affirm) a Fox fed in water till nothing of the Fox be left whole except the bones, and the legs or other parts of a gory body washef and daily bathed therein, it shall drive away all pain and grief, strengthening the defpective and weak members; so also it cureth all the shrinking up and pains in the finews: and Galen attributeth the fame virtue of an Hysana sod in Oil, and the lame perfon bathed therein, for it hath such power to evacuate and draw forth whatsoever evil humour aboundeth in the body of man, that it leaveth nothing hurtful behind.

Nevertheless, such bodies are soon again repleni{h}ed through evil diet, and relapsed into the fame diseafe again. The Fox may be boil'd in fresh or salt water with Annife and Thyme, and with his skin on whole and not flit, or else his head cut off, there being added to the decoction two pintes of Oil.

The fleth of a Fox fed and layed to a fore bitten by a Sea-hare, it cureth and healeth the fame. The Foxes skin (as is alreadie faid) is profitable against all moift Fluxes in the skin of the body, and also the Gout, and cold in the finews. The ashes of Foxes flesh burnt and drunk in wine, is profitable against the thartherns of breath and flippings of the Liver.

The blood of a Fox disjected and taken forth of his urine alive, and fo drunk, breaketh the stone in the bladder; or else (as Merypius faith) kill the Fox, and take the blood and drink a cupful thereof, and afterward with the fame wafh the genital parts, and within an hour the stone shall be voided: the fame virtue is in it being dried and drunk in Wine with Sugar.

Oxen are and Foxes blood infused into the Nostrils of a Leathargick Horfe, cureth him. The fat is next to a Buls and a Swines, for as the fat or lard of Swine may be ufed for the fat of Foxes, and the fat of Foxes for the Swives greafe in medicine. Some do herewith anoint the places which have the Cramp, and all trembling and flaking members. The fat of a Fox and a Drake inclofed in the belly of a Goose, and fo roll'd, with the dripping that cometh from it, they anoint paralytie members.

The fame with powder of Vine twigs mollified and fod in fie, attenuate it and bringeth down all swelling tumours in the fleth. The fat alone healeth the Aegretas and loofene{f}s of the hair; it is commended in the cure of all Sores and Ulcers of the head; but the gall and fame with Mustard-feed is more approved. The fat is also reftor'd for the cure of pain in the ears, if it be warmed and melted at the fire, and fo intiffled; and this is ufed against ringing in the ears. If the hairs rot away on a Horfe tail, they recover them again by washing the place with Urine and Bran, with Wine and Oil, and afterward anoint it with Foxes greafe. When Sores or Ulcers have procured the hair to fall off from the head, take the head of a young Fox burned with the leaves of black Orchades and Alcyonium, and the powder caft upon the head recovereth again the hair.

If the brain be often given to Infants and focking children, it maketh them that they shall remain free from the falling evile. Pliny prefcribeth a man which twinkles with his eyes, and cannot look fdeftantly, to wear in a chain the tongue of a Fox; and Marcellus bideth to cut out the
Of the Gennet-cat.

The tongue of a live Fox, and so turn him away, and hang up that tongue to dry in purple thread, and afterward, put it about his neck that it troubled with the whitness of the eyes, and it shall cure him.

But it is more certainly affirmed, that the tongue either dried or green, laid to the flesh wherein is any Dart or other sharp head, it draweth them forth violently, and renteth not the flesh, but only where it is entred. The Liver dried and drunk cureth often fighting. The same or the Lights drunk in black wine, openeth the paffings of breathing. The same washeth in wine and dried in an earthen pot in an Oven, and afterward seasoned with Sugar, is the belt medicine in the world for an old Cough, for it hath been approved to cure it, although it hath continued twenty years, drinking every day two spoonfuls in wine.

The Lights of Foxes drunk in water after they have been dried into powder, helpeth the Pliny.

Milt; and Myrepia affirmeth, that when he gave the same powder to one almost suffocated in a Plunifie, it prevailed for a remedy. Archigeus preferreth the dried Liver of a Fox for the Splenietick with Oxymel: and Mercurian for the Milt drunk after the same manner: and Sextus adviseth to Sextus, drink it simply without composition of Oxymel.

The Gall of a Fox infilled into the ears with Oil, cureth the pain in them; and mixed with Hony Attick and anointed upon the eyes, taketh away all dimmes from them, after an admirable manner. The Milt bound upon the tumors and bunches of the breed, cureth the Milt in man body. The reins dried and mingled with Hony, being anointed upon kernels, take them away. For the swelling of the chaps, rub the reins of a Fox within the mouth. The genitales because of their grizzly and bony substance, are approved for the dispersing of the stone in the bladder.

The fiones take away pimples and spots in the face. The dung pounded with Vinegar, by anointment cureth the Leprofe speedily.

These and such other virtues medicinal both the elder and later Physicians have observed in a Fox, wherewithal we will conclude this discourse; saying that many writers have devized divers witty inventions and fables of Foxes, under them to express vicces of the world, as when they let a Fox in a Fryers weed, preaching to a fort of Hens and Geese, following the fiction of Archigebus Fox, to signifie how irreligious Palsors in holy habits beguile the simple with fubtility. Also of a Fox teaching a Hare to lay his Creed or Creed betwixt his legs, and for this caufe almighty God in his word comparath fale Prophets to Foxes, Ezek. 13. destroying the young Grapes and Plants. The Weafl brought a Fox into a Garner of Corn through a little hole, and when he had filled his belly, he affayed to come out again at the same place, but in vain, because his body swelled with over eating, and therefore he was constrained to come out as empty and hungry as he came in: whereupon this conference was betwixt them:

Forti per amysiam tuinis Vulpecula rimam, 
Repertis in cameram fretomentis, pulsa tursus 
Festas pleno tentamab corpore fuffra. 
Cui muscela procul, St vit., att, effungere ishine,
Muro cardum repetes aritium, quem macra jwifti.

Of the Generation called Genetha.

This beast is called Genisataz, either for the similitude it holdeth with a Cat, or else because it hath been believed that it was engendered by a Cat, but I rather do affent that the right name thereof is Gennetta or Gelnetha, because they are bred in Spain with the Gennet horfes, and fo taketh his name from the place. Albertus (though a learned man, yet many times he was deceived in the names of beasts) called this creature Genetha, and the Germanus call it Ein Genethakat. The quantity or figure hereof is greater than a Cat, but leffer then a Fox, and therefore I think it about the mold or bigness of a young Fox of fix moneths old. It is a meek and gentle creature, except it be provoked; for in Contentimply they are kept tame, and are suffered to go up and down from house to house like Cats. Being wide, they love the valleys and low places, especially the Marithes or land near the waters, for the steep rocky mountains they cannot endure. And thel Cardan taketh to be of the Weafl kind, because the forme and disposition thereof, especially to the tame and Dometi- cal Weafl, and in Spain they are calld Fornat, being black and aif-coloured, distinguished and vari- ably interlined with many spots.

But Scaliger who was delighted to contradict Jeron Cardan, cannot endure to hear of this com- parison betwixt Weafls and Ginnet-cats, because he faith, the skin of a Gennetta is bigger then three Weafls, and that it reenbileth a Weafl in nothing except in the ears; but Cardan comparison toucheth not the quantity, but only the outward form and qualities, and he himself disagreeeth not that it is equal in quantity to an Otter. But certainly the skin thereof is admirable and beautiful to behold, and if they were not common, but rare and seldom found beasts, it is no question but the price thereof and due estimation would excell many others: For the abundance
dance of spots, their natural and uniform order, their shining splendor and brightnes, give place to no other party-coloured beast, as you may observe in the true figure thereof here declared.

Of the skin.

In the next place I have thought good to express the figure of the skin taken off, which skin, from the head to the top of the tail, was about four spans and one palm long, and the tail was as
long as the body being severed from the skin: the latitude or breadth thereof in the middle, was about one fpan in breadth, the middle of the belly, and the upper part of the neck, were ash coloured, and in the tail were eight black circles and so many white, one successively following the other; the whole body ashered with black spots, and the relidue yellowish white.

The skin smelt sweetly and somewhat like to a Musk-cat, and from Lyons in France they are Oppinat1 brought into Germany, three or four of them being sold for a Noble. It is very probable that it is a little kind of Panther or Leopard: for there is a little Panther which hath such spots, and besides of such a stature and harmless disposition, whose skin in old time was preciouly used for garments, and the favour thereof was very pletant, and therefore I superfede any further discourfe hereof, till we come to the declaration of the greater beast.

Of the GOAT, Male and Female.

The male or great Goat-Buck, is called in Hebrew, Aud, and the leffer Seir, and Zair. The several Chaldean transliteration, Gen. 13. Jerahim, and Numb. 15. Ez; the Arabian, Ten and Mean; the Phcenien, Alpern, and Efin; the Gentiles, Tragos, or devouring or ravening in meat, according to the Verfe;

Tragos ab Edundo quad grana faciata pane.

Alfo Chimon and Enrebem; the Latins, Herus, and fometime Capar, which word properly signifies a gelded Goat, as Merifus fefteth in this Verfe:

Dum jugular hicrum,fallus et fips Capar.

The Indians, Beecho; the Germans, Beck, and for dilinction falk, Grifbock, and Reelebok, and Bezek; the Spaniards, Cabon; the French, Bex, the Hijrins, Koezel.

The reafon of the Latin word Herus, is derived of Hirtus (signifying rough) by reafon of the roughnefs of their bodies. And it is further to be understood, that the general kind of Goats (which the Latins diluting with Herus, Capra, and Haedus, that is, by their lex, or by their age; the Hebrews call them singularly Eze, and plurally Esem, Numb. 15, for a Goat of a year old, you shall read Iskhiufeth. The Chaldean in the general word Duz, the Arabian, Schwab; the Pfhemon, Bex, and wherous Levit. 16, Seir is put for Capar a gelded Goat, where the Chalde rendeth it Zepbarab; the Arabian, Aud, and the Pfhemon Buzalet. And in the fame Chapter you shall read Azaeze, which David kindereth for the name of a mountain near Szie, where Goats ufe to feed and lodge: and the Siponians tranflate it Apoquamun, signifying emiflion or rending away, and for this caufe I fuppofe, that when the Scape-goat was by the Priet lent out of the Temple, he went to that mountain, and therefore the word Koezel feemeth to be compounded of Eze, a Goat, and Azael, that is, he went; for the Scape-Goat went and carried away the evil.

The Gentiles call the female Goat Aba, which feemeth to be derived of Ez the Hebrew word. The Atumnus, Palb, and Metatumb, as I find in Abincus, the Sarazens, Afg.; the Indians, Peace, changing B from the male into P, and the Spaniards, Capron; the French, Clever or Chiemare, the German, Gris; Attumnus, the Hijrins, Koeza; and the Tafmen at this day call a female Goat Zeezi. And this may fuiteth for the names of both male and female.

Their nature is to be declared feverally, except in thofe things wherein they agree without difference: and firft of all, the male is rightly termed Dux et maritus Capronus, the guide and husband of the females, and therefore Virgins faith of him not improperly, Vir gregis ipse Capar. The Her-goat is the husband of the flock and except in his genitals and horns, he differeth not in any proportion or bufidence from the female. His horns are longer and stronger then are the females, and therefore upon propagation he striketh through an ordinary piece of Armor or Shield at one blow: his force and the sharpnes of his horns are fo prenable. He hath many attributes among the learned, as left-fided, aged, greedy, bearded, swift, long-legged, horn-bearer, captain of the flock, heavy, rough, hoarfvoiced, rugged, unarmed, unclean, strong-fmelling, lecherous, brisker, wanderer, vile, wanton, sharp, blinking, two-horned, and fuch like: whereby his nature and qualities are fo deciphered, as it needeth no long treatize of explication.

There is no beaft that is more prone and given to luft then is a Goat, for he joyneth in copulation before all other beafles. Seven days after it is cauned and kiddeed, it beginneth and yeeldeth feed, although without proof. At seven months old it engendereth to procreation, and for this caufe that it beginneth to foone, it endeth at five years, and after that time, is reckoned unable to accomplifh that work of nature. When the Ephraim will declare fecondity or ability of generation, they do it by picturing of a male Goat.

That which is most strange and horrible among other beaftes is ordinary and common among thefe, for in them feare the Brotheer joyneth with the Sifter, and a Camel can never be brought to cover his Dam: but among thefe the young ones being males, cover their Mother, even while they fuck their milk. If they be far, they are leffe venereous than being maclent or lean. Herodorus declarcth that in his time a Goat of Mnefias in Egypt, had carnal copulation with a woman in the open night.
fight of men, and afterward was led about to be seen. When they desire copulation they have a proper voice wherewithal (as it seemeth) they provoke the female to love. This is called it in Italy, Biooari and Biccarie, which the Venetians apply to all lecherous companions as commonly as a proverb, and this they never use but at that time. By reason of his lust, his eyes sink deep into the corners of their holes (called Hirqui) and Apuleius with other Grammarians do derive the word Hircus, whereby this beast is called, from that disposition.
By drinking salt water they are made defirous and apt to procreation. At that time they fight mutually one with another for their females, and it is a term among the late writers, to call those men Hirfi, Goats, which are contented to permit other men to lie with their wives in publick, before their own faces for gain, because they imagine that such is the property of Goats. But I know not with what reason they are moved hereunto, for there is a memorable story to the contrary.

In Sibiri there was a young man called Crotbus, which being not able to retain lust, but forfaken of God, and given over to a reproue lust, committeth buggery with a female Goat, the which thing the maffier Goat beheld and looked upon, and disdained, concealing his mind and jealousy for the pollution of his female. Afterward finding the said young man asleep, (for he was a Shepherd) he made all his force upon him, and with his horns dafted out the buggurers brains. The man being found dead on this manner, and the Goat which he had ravished delivered of a monter, having a Mans face, and a Goats legs, they call it Stevaniur, and place it in the rank of idol Gods, but the wretched man himself was bared with more honour then becomed, for they gave him a noble funeral, and finding a River in Aesvilia which mingled water with another, they called it Crotbus, after the name of that unnatural and beastly monter; whereupon also came the Italian Crotbus which Strabo remembret. By which story it is evident, that jealous rivalry refeth as well in Goats as in Men of more reasonneable capacity and understanding.

The females desire of copulation is no leffe then the males, for while they suck they admit the male, and at the seventh month they conceive. The firstt of their admission to procreation is about the end of Autumn (according to Columella his opinion.) They are not filled the first day of copulation, but the second or third, and thofe which are joyned in November do bring forth their young in the Spring when all things grow fresh and green: wherefore if they chance to be slack, and not willing to engender or couple, their keepers, if this flighth or policy, to procure and flir up their lust. They rub their udders with Nettles uncll they contrain blood, and afterward with a handful of Salt and Nitre, or else with Pepper or Myrrhe; after which rubbing, their desire of copulation much increaseth, and it maketh the female to provoke the male and undergo him more willingly; and this thing also procureth in them abundance of milk (as Arifate affirmeth) he had been tryed by making experiment thereupon of the breasts of Women, Virgins, and Widows: And generally all the keepers of Cattel do herewith rub their genitals, for the furthering and provoking in them carnal copulation, with the things aforesaid.

They being filled and with young, they carry them in their belly five moneths before deliverance. After three years old the female ceaseth to retain in her self or confer to her Kids the strength of nature, and the male after four, so that it is not a part of good husbandry to keep their young which they bring forth after those years, but rather to kill them and make them away. So also it is not good to keep their flirlings, or thofe which are first of all engendred, but rather the second or third feed of procreation. Some of them bring forth twins, and some more, as it is reported of the Goats of Egypt, which bring forth five at a time, because they drink of the fruitful river of Nile, for the Goats of the Country do give thereof to their Cattel, and fetch it into all parts of that region, and in Libya they breed twice a year, bringing sometime three, four, or five at once, but three at a time are never to be kept, but killed and eaten, for they are accounted not worth their bringing up; only cold maketh them to suffer abortments, and sometimes they bring forth monsters like to other Cattel (for all little beasts are more apt to engender monsters then the greater.)

Concerning the time that they bear young, it is in Italy eight years, and being fat they are not apt to conceive, wherefore they make them lean before they admit them to their bucks. One male is sufficient for ten females, and some (faith Parre) provide but one for 1 5 (as Menas) and other but one for 20 (as Murus.) There is no creature that fmeath so strongly as doth a male Goat, by reason of his immediate lust, and in imitation of them the Latin call men which have strong breaths (Hircifi) Goats: wherefore Plutus faith to an old lecherous fellow which could not keep his lips from flavoring of women,

Cun fis jam atatis plenus, anima fatida,
Sens hircis u ofulere mulierem.

And therefore Tibenius Caesar who was such a filthy and great-smelling old man, was called (Hircus vestus) an old Goat, in the Atellanum Comadie. They conjecture of men that have hairy legs to be unchast and full of lust, by reason of their similitude with a Goat, and thofe which have a thirl and clamorous voice, the Greeci call Margoi, (that is, blockheads.) Thofe which have eyes like to Goats they call Argos, Goat-eyes, that is very red eyes. The Egyptians affirm that their female Goats when Sirius the Star in the beginning of Dog-days rieth with the Sun, do continually look upon the East, and that their attentiv observation is a most certain argument of the relation, that is the appearance and departure of the said Dog days. The like things do the Lybian report of their Goats concerning that Star, and moreover that they foresee and forethow change of weather, for they depart from their stables, and run wantonly abroad before flowers, and afterward having well led of their own accord return to their foldes again.

Concerning the description of their several parts, it is good to follow the direction of Colinius first to look to their age (as is before faid) if men defire to provide Goats for herd-bleed and poly,
The History of Four-footed Beasts.

profit, so as their Kids may be like them, and they bear young or continue procreation eight years at the least. And for their outward parts, let them be firm, great, well compacted, full of muscles, and the superfiices of their whole body be soft and equal, without bunches or indentures: therefore a thick hair, two dogs hanging under their snout or chin, are good signs of the belt Goats.

Lorentius.

There are two kinds of Goats, one horned, and of this sort the long sharp-horned beasts, with broad foreheads, are the most approved, and by the circles of their horns their age is discerned: But the unhorned are best for breed, procreation and milk, and such are the Caspian Goats, which are for the most part white, flat nosed, and little of growth. Their eyes are very deep in their heads, and therefore
therefore their fight sharp, strong and continual seeing bright and clear in the night, but the colour of their eyes variable, like to the colour of their bodies; The males have more teeth then the females, for the females want their upper teeth: But males and females have large beards under their chins, and this is called Armacis (Latin Eryngius) but the reason hereof is, because that when a Goat is taken by the beard and drawn out of the fold, all the residue it stand amazed, and so also when any of them hath eaten Sea-holly (call Eryngium) so that Arisfolie confoundeth Eryngium for Armacum, and so taketh one for another. Once in Lemnos there was a male Goat which had so much milk wrung out of his paps growing betwixt his legs, that therewith a Calf, by licking it received the feedings, but afterward the male Kid begotten by the same Goat had the like udders, whereas the owner being much amazed, because it was a prodigious thing, for his satisfaction asked counsel at the Oracle, from whom he received this answer, that it betokened nothing but plentiful encrease of his Cattel. The females have two udders under their loins next to the small of their belly, except the Lybian Goats, and their udders lie under their breast or forepart of their belly, like an Apes. In Naxos the Goats have greater Gales then in any other part of the world, and the forepart is held prodigious; On the contrary, in Chaleon the Goats have no Gales at all. They have many bellies and a round Milt, which thing no other horned-beast hath, except a Sheep. The males have harfer hairs then their females, and the Lybian Goats have hair as long as women's, and very rough curled, which the inhabitants shear off every year, and therewith the Ship-wrights make cable ropes; but in Cilicia and Persia, they shear them and make the fluffe called Zamibot; and another kinde of Cloth called Mathalase. In Arabia they make Tents of Cloth compiled of Asles and Goats hair, and it seemeth that Cilicia received his name of this kinde of Cloth, which is called in Latin Ciliciun, or else that this Cloth was first invented among them, whereupon it received that denomination; but among the Grammarians and Poets, Lana Caprins (Goats wooy) grew to a proverb, to signifie a thing of no weight or moment, as it is in Horace;

After rixatur de lana soci caprina, Propagnt suis armatus

There are another sort of Goats which are called Syrian Goats, and of some Mambrin Goats, and most commonly Indian Goats, because they are most noble in that Country, and that in Cythia; and likewise in the Region of Damias, for Mambrin is a Mountain near Hebron, from whence it is probable, that the word Mambrin cometh; wherefore I have thought good to express the figure both of the greatest of that kinde, as it was taken by Antonius Maja Brasovals, Physitian to the Noble Duke Hercules de Esre, as Ferraria, by one of these Goats brought thither to be seen.
These figures were found pictured in an old manuscript in Germany, which book did intreat of the Holy Land. The greater Goat I conjecture to be the same which Les Afer calleth Adimain, and is found in Mauritania, being as tall as an Asle, and hath very long broad ears pendant, and under them next to their necks two things like dugs or paps, which hang down from their throat, and there are most fruitful in milk, and with these the Lybians plow, and keep them in stead of Kie and other Cattel, for they milk them, and of their milk make Butter and Cheese. Their hair is very short, and they very gentle and familiar; so that the said Les affirmeth, that when he was a young man, and loved those rath and wanton sports wherewithal youth are delighted, he got upon one of these, and rode quietly upon the back of it above a quarter of a mile. They keep, being wilde, in the Deserts of Lybia, and if at any time they fly or wander into Numidia, and the fields thereof, it is accounted by the people and inhabitants a prodigious and monstrous thing.

The latter kind I conjecture to be the right Mambrine or Syrian Goat, although some of the late writers call it an Indian Goat; the reason is, because (as hath been said) they call all strange beasts by the names of Indians, if they finde them not in their own Countrey. The ears of it are large and broad, as the picture described, and such ears have the Goats of Gallia-Narbon, being at the least as broad as a mans span; they are of colour like wilde Goats, their horns very sharp, and standing not far distant one from the other, and have fiones like a Stone Horse, being in all other parts not unlike to the vulgar and common Goat.

Some curious herdsmen (as Alcemon and Archelaus) have delivered to the world, that Goats take breath through their ears; and Philes approveth their conceit, because he had seen an experiment of a Goat, that his mouth and nostrils being flopped shut, nevertheless he seemeth not to be troubled for want of breath: and for this also is allledged the authority of Oppianus, who writeth of certain Goats (called Agari) that they have a certain hole or passage in the middle of their head, between the horns, which goeth directly unto the liver, and the fanned slopped with liquid Wax, suffocateth or sufficeth the beast.

If this be true (as I would not any way extenuate the authority of the writer) then it is very likely that some have (without difference) attributed to all kinds of Goats that which was proper to this kinde alone, for the former opinion is not reasonom: Nevertheless I leave every man to his own liberty of believing or refusing.

There is no beast that breatheth so perfectly and so sure as a Goat for he is not only holp in this sense with his ears, but also hath the Organ of hearing in part of his throat, wherefore when the Egyptians describe a man which hath an excellent ear, they express him by a Goat. There are some kindes of Goats in Libya which have whole hoofs like a Horse, and these are only found in that Region. In all other Nations of the World they are cloven footed.

The use of their several parts is singular, and first of all to begin with their skin, the people of Sardinia (as faith Nymphius) nourish Goats for their skins, whereof they make them garments, being dressed with the hair upon them; and they affirm strange virtue in them, namely, that they heat their bodies in the Winter, and cool them in the Summer; and the hairs growing upon those skins are a cubit long, therefore the man that weareth them in Winter time, turneth the hairy side next to his body, and is warmed by it; and in Summer the raw side, and to the hair keepeth the Sun from piercing his skin and violence of heat: And this also is usit in Suecia, where the women wear garments of Goats hair in the Winter, and also make their childrens coats thereof, according to Virgils laying in Maroeto.
The Sandals which men were wont to wear on their feet in the East Countries, were also made of Goats skins, and there was a custom in Albus, that men for honour of Bovillus, did dance upon certain Bottles made of Goats skins, and full of wind, the which were placed in the midst of the Theatre, and the dancer was to use but one leg, to the intent that he might often fall from the slippery bottles, and make the people sport; whereunto Virgil alluded this saying:

Mullibus in pratis antillos salutre pro utris.

There is also a Ladanum tree in Carmania, by the cutting of the bark whereof there issueth forth a certain gum, which they take and preferveth in a Goats skin; their use in War wherein the Soldiers were wont to be all Winter, and therefore we read that Claudius the Emperor had given him thirty tents of Goats skins for his Soldiers attend upon the Judges, and the Mariners also by these defended themselves from the violence of storms upon the Sea; and so I leave this part of the beast, with remembrance of that which is written in holy Scripture, Heb. 11. that the people of God in ancient times did flee away from the rage of superstition, being anapparelled, or rather meanly disguised in Goat skins, being charitably helped by the beasts, that were cruelly put to death by wretched men.

In the next place the milke of Goats cometh to be considered, for that also hath been, is, and will be of great account for Butter and Cheefe, which the Writers call Tropazia, and Virgil celebrateth the singular commendation both of the Wool and of the Milke, in these Verses;

Hae quoque non cura nos levior tuenda,
Nec minus usus erit, quamvis Miletia magno
Vellera mutavent Tyrios incella subures.
Denitor biso /abeles, biso lario copia laetis;
Rgo magis egressus summavertis ubere multibus,
Letis magis præ sistis manubunt flamina manuar.
Nec minus interea barbat, intanque menta
Cynipit tandent hiroi sestusque commantes
Utsum in Castrorum & miseris velamina natias.

Therefore their milk is profitable for Butter, although inferior to a Cows, yet equal to a Sheeps, and the herdmen give their Goats salt before they be delivered of their young, for this maketh them to abound in milk. Others with Goats milk preferve their Wine from corruption by sourness, first they put into their Wine the twentieth part so much as is of the Wine, and so let it stand in the same vessel covered three or four days, afterward they turn it into a sweet and fresh vessel, and so it remaineth preferve from all annoyance of sourness.

Cheeses made of Goats milk were wont to be called Velabrenses Caöfè, because amongst the Romans they were made at Velabrum, and that with sioak, whereupon Martial made this Dijtoban;

Non quemcumque socum, nec sumum caæsæ omnem,
Sed Velabrensem qui bilis, ipsa sapit.

Aristotle and Julius Pollux do commend the Sicilian Cheefe, which was made of Sheep and Goats milkie together, and by Athenæus it is called, Capæs Tremilicis, and by Simonides Strumilus. In Hereta of Hebrietia there are excellent Cheeses made of Goats milk and Cow milk mixed together. The milk also of a Goat mixed to a Womans milk is best for the nourishment of man, because it is not too fat; yet Galen faith, if it be eaten without Hony, Waters, and Salt, it curdleth in the belly of a man like a Cheefe and inflameth him; and being so used it purgeth the belly; from thence came the fiction of the Poets, that Jupiter was nourished by a Goat, and that afterward in his War against the Titans or Giants, he flew that Goat by the counsel of Themis, and wore her skin for an armor, and so having obtained victory, placed the Goat among the Stars, whereupon she was called Aix ourania, a heavenly Goat, and so Germanicus Cæsar made this Verse upon him, and Jupiter himself was called Aigiochus.
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Of the flesh of a Goat.

The flesh of male Goats is not wholesome for man's body, but the flesh of a female in the Spring and Fall of the leaf, by reason of the good nourishment may be eaten without danger. They are worse then Bull-beef, because they are sharper in concoction and hotter, wherefore if they digest not well, they increase melancholy. The liver of a Goat being eaten, doth bring the falling sickness; yet being falten a good space, and then sod with Vine-branches, or other such broad leaves, to keep them sunder, and some Wine poured into the Water when they almost sod, they become very which and delicate meat; and therefore the Athenians praised the Laconians, that in their feast they call *Cotpis*, they gave a Goat; and held it for a divine meat.

Alfo Glaucebeus an Academick of Corinth, relates of a certain Thespian Champion, which excelled in strength all the Champions of his time, and that he did eat continually Goats flesh, for it is very strong, and remaineth a longfeason in the body, and doth much good being digested, notwithstanding the strong and rank smell thereof, otherwise it is dangerous, as is already said, therefore *Fiesa* having commended the *Kyd*, when he cometh to speak of the *Goat* he writeth thus:

*Cum male olis secut, fit jam super improbus, obfit,*
*Et cadat ante fucus victima Baccho tuo.*

But *Pliny* affirmeth, that if a male Goat eat Barley bread, or Parchmes washed, the same day that he is killed, then there is no poyson in his flesh: the stones of a Buck goat, retfift concoction, and beget evil humors in the body: wherefore such a banquet is called in Greek (Trogoi Hulbertas) for Goats after their copulation, have an evil flesh, not fat, but dry, and the remedy to make their flesh sweeter, is to geld the male when he is young and tender, for his temperature is amended by a cold and moist conformation.

The Inhabitants of Portugal eat Goats flesh, and account it delicate meat; especially such as dwell in the Mountains. In Germany they make of it a kind of meat which is called *Klothüfft*, and is prepared in this manner: they take a Goats heart newly taken out of the body, and flit it into small pieces, and break fix Eggs upon it, and the crumbs of white bread, seasoned with Spices and Saffron, and fo put into a bag, and sod or roasted; afterward they are served upon the table, and fpreaded over with Kitchin Sugar.

The guts being falten are called (Hille) which the French flufe like puddings, and call them (Sauceptif) from whence cometh our English Sawfludge, of this fewet and fat of Goats are the best candles made, because it is hard and not over liquid. The bloud of a Goat hath an unpeakeable property, for it stroueth rufli iron better then a file, it also fortheeth an Adamant stone, and that which no fire is able to melt, nor iron to break, being of such an invincible nature, that it contemneth all violent things, yet is it difsolved by the warm bloud of a Goat. The Load-stone draweth iron, and the same being rubbed with garlick, dyeth and lofeth that property, but being dipped again in Goats-bloud, reviveth and recovereth the former nature.

*Ojbanos* prescribeth for a remedy of love, the urine of a Goat to be mingled with Spikenard, and so drunk by him which is overcome with that passion, affuring him thereby that they shall fall in as great loathing as ever before they were in loving. With the hoofs of a Goat they drive away Serpents, and also with the hairs by burning and perfuming them in the place where the Serpents lodge.

With the horns of Goats they make bowes; for in Delos there was dedicated the horn of a Goat, which was two cubs long and a span; and hereat ought no man to wonder, for that noble Bow of *Pandarus*, which *Homer* commendeth, was made of a horn of a female Goat.

*Apriancus* declareth, that in ancient time they made fruitful their Vine-yards by this means: they took three horns of a female Goat, and buryed them in the earth with their points or tops downward, to the root of the Vine-rocks, leaving the hollow tops, standing a little out of the ground, and so when the rain defended, it filled the horns, and foked to the root of the Vine, perfwading themseles thereby that they received no small advantage in their Grapes. The gall of a female Goat put into a vessel, and set in the earth, is said by *Albertus* to have a natural power to draw Goats unto it, as though they received great commodity thereby. Likewise, if you would have white hairs to grow in any part of a Horfe; shave off the hair and anoint the place with a gall of a Goat, so shall you have your defire. The *Sabean*, by reason of continual use of Myrhe and Frankincense, grow to a loathing of that favour: for remedy of which annoyance, they perfume their houses by burning *Rorax* in Goats-skins. And thus much for the several parts of a Goat.

There were in ancient times three kindes of Heard-men which received dignity one above another; the first were called (Bucellii) Neat-heard, because they keep the greater Cattel; the second were (Opiliones) Shepheardes, of their attendance upon Sheep: the third, laft, and lowest kind, were termed *Arpal*, and *Capratis*, that is, Goat-heard, or Keepers of Goats, and such were the *Loctrefians*, who were called *Odace*, because of their filthy smell, for they had the most part of their conversation among other Beasts.

A Goat-heard or Keeper of thefe Cattel must be sharp, stern, hard, laborious, patient, bold and cheerful, and such a one as can easilie run over the Rocks through the Wilderness, and among the bushes without fear or grief, so that he must not follow his flock like other heards, but go before them: yet must alfo be light and nimble, to follow the wandering Goats, that run away from their fellows, and so bring them back again, for Goats are nimble, moveable, and incontinent, and therefore
Of the Goat.

therefore apt to depart away, except they be restrained by the herd and his Dog. Neither have Goats a Captain or Bell-bearer like unto Sheep, whom they follow, but every one is directed after his own will, and herein appeareth the pride of this Beast, that he scorneth to come behind either Cartel, or Sheep, but always goeth before; and also in their own herds among themselves, the Buck goeth before the female for the reverence of his beard, (as Albiones faith) the labour of the Goat-herd must be to see his Cartel well fed abroad in the day time, and well foulded at night; the first rule therefore in this husbandry is to divide the flocks, and not to put any great number of them together, for herein they differ from Sheep, who love to live together in multitudes, as it were affecting society by which they thrive better, and mourn not so much as when they are alone: but Goats love singularity, and may well be called Schifmatics among Cartel, and therefore they thrive best laying together in small numbers, otherwise in great flocks they are soon infected with the pestilence, and therefore in France, they care not to have Magna Greges, sed places: not great flocks, but many.

The number of their flock ought not to exceed fifty, whereupon Varro writeth this story of Guionius a Roman Knight, who had a field under the Suburbs containing a thousand Acres of pasture ground, who seeing a poor Goat-herd bring his Goats every day to the City, and received for their milk a penny a piece, he being led with covetousness, proposed to himself this gain, that if he flored his field with a thousand Milch-female-goats, he also should receive for their milk a thousand pence a day; whereupon he added action to his intent, and filled his field with a thousand Goats, but the event fell out otherwise then he expected: for in short time the multitude infected one another, and so he lost both milk and flesh: whereby it is apparent, that it is not safe to feed great flocks of thefe Cartel together.

In India in the Region Céntis, the Inhabitants give their Milch-goats dryed fishes to eat, but their ordinary food is leaves, tender branches, and boughs of trees, and also bushes or Brambles; whereupon Virgil writeth in this manner:

_Palmarum ver'à falsas & jammas Lyceis,
Herbertique tubos & amantes arbus dumos._

They love to feed on the Mountains better then in the Valleys and green Fields; always striving to lick up the Ivie or green Plants, or to climb upon trees, cropping off with their teeth all manner wide herbs, and if they be restrained and enclosed in fields then they do the like to the plants that they finde there; wherefore there was an ancient law among the Romans, when a man let out his ground to farm, he should always condition and except with the Farmer that he should not breed any Goat in his ground, for their teeth are enemies to all tender plants: their teeth are also excitable to a tree, and Piny and Varro affirm, that the Goat by licking the Olive-tree maketh it barren; for which cause in ancient time, a Goat was sacrificed to Minerva to whom the Olive was saccéd.

There is no creature that feedeth upon finch diversify of meat as Goats, for which cause they are elegantly brought in by Esopo the old Poet, bragging of their belly dear wherein they number up above five and twenty several things, different in name, nature, and taste; and for this cause Eulathibus defended by strong argument against Difarius, that men and cartel which feed upon divers things, have less health then those Beasts which eat one kind of fruit alone. They love Tamarisk, Aldern, Elm-tree, Affararback, and a tree called Aletarum, which never beareth fruit but only leaves: also three-leaved-grafs, Ivie, the herb Luta, which groweth no where but in Arabia, whereby it cometh to pass, that many times the hair of Goats is found in the gumb called Ladaum, for the peoples greedy defire of the gumb, caueth them to wipe the juice from the Goats beard.

For the increas of milk in them, give them Cinquefoyl five days together before they drink, or else bind Dittany to their bellies, or (as Lacuna translatheth the words out of Alcmeon) you may lay milk to their bellies, belike by rubbing it thereupon. The wilde Goats of Crete, eat Ditany among against the strokes of Darts: and Seraption avoucheth by the experience of Galen, that Goats by licking the leaves of Tamarisk, lose their gall; and likewise that he saw them licking Serpents which had newly lost their skins, and the event thereof was, that their age never turned or changed into whiteflies and other external figures thereof.

Alfo it is delivered by good observation, that if they eat or drink out of vessels of Tamarisk, they shall never have any Spleen: if any one of them eat Sea-holly, the residue of the flock stand still and will not go forward, till the meat be out of his mouth. The Cremaurianus say that Chimaera was killed by Bellerophon the son of Cléomen, in the Mountain Lyceus, and the reason hereof is, that the Poets signified Chimaera to be composed of a Lyon, a Dragon, and a Goat, and in that Mountain all those three were kept and fed: for in the top were Lyons, in the middle were Goats, and also at the foot thereof Serpents. If they suffer heat or cold they are much endangered, for such is their nature that they avoid all extremity, and the females with young are most of all molested with cold; if they have conceived in the Winter, then many Abortions or calling their young followeth.

In like fort it happeneth if they eat Walnuts (and not to their full) unripe, therefore either they must be suffered to eat of them to satiety, or else they are not to be permitted to them.
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If at any time the eat Scammony, Hellebore, Lefferon, or Mercury, they are much troubled in their stomach, and lose their milk, especially the white Hellebore. The Publicans in the Province of Crete, have all the government of the pastures, and therefore they permit not Benzwine to grow in their Country, finding thereby great gain; and if at any time their Sheep or Goats meet with any branch thereof, they eat it greedily, but the Sheep immediately fall to sleep, and the Goats to Needing. "Epeolobros and Sabine are poiyon to Goats. The Herb called in Greek, Rhodo dendron, and may be Englished Rose-tree, is poiyon to Goats, and yet the fame helpeth a man against the venome of Serpents.

The prickly or spindle tree (called also Euphorbus) which growth in the Mount Oceusius called Or dyne) about the bigness of a Pine-apple-tree, having soft leaves like the fame, and it budoth in September, and the flower is like a white Violet flower, this killeth Goats, except they be purged with black Hellebore immediately after they have eaten thereof. The Egyptians when they will describe a man devouring Sheep or Goats, they picture the herb Carilago or Canyza, because it also kill eth them. Also as Osoriffipus affirmeth they avoid Cumin, for it maketh them mad, or bringeth upon them Lethargies, and such like infirmities.

He avoideth also the spettle of man, for it is hurtful to him, and to the Sea-fifth Scolopendra and yet he eateth many venous herbs and growtheth fat thereby; and this also may be added, that Goats grow fat when they are with young, but by drinking of Honey they are weakened, and in danger of death. Concerning their drink, it is necessary for a skilful Goat-herd to observe the nature of the beast, and the belt time and place of their watering, according to the saying of Virgil:

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Jubes frondentia Capris
Arbata sufficere, & floribus praeda recentes.

In the Summer they are to be watered twice a day, and at other times once only in the afternoon; but it is reported of the Goats of Cephalonia, that they drink not every day like other Goats, but only once or twice in fix months, and therefore they turn themselves to the winde or cold air of the Sea, and by yawning, suck into their mouths or bellies that which serveeth them in stead of water. When the Sun declineth, they ly and look not upon one another but on the contrary, and they which lodge in the fields take up their rell amongst their acquaintance. But if they be fed to fold or houfe, they remember it, and repair theire of their owne accord, which thing causeth the Poet to write in this manner:

Arque ipsa memores reducunt in tela, susque
Ducent, & gravido superant vicum, invenere

Concerning their stables or houfes to lodge in, for their defence against the cold, the diligent herd-man must observe, that nothing must be laid under the Goat to ly upon, and it is best to make his stable upon stones, or some other hard floor, and the same must be kept and turned dry every day from the annoyance of their dung, for that hurtest their heads. It is good to set the window of their stable to the Sun, and from the winde, according to the counsel of Virgil:

Et stabula a ventis hyberno opponere soli,
Ad medium conuerfa diem, cum frigidus sim
Jam cadit extremoque irrotat Aquarum anno.

Although Goats be stronger than Sheep, yet they are never so found, for in buying and selling of them, he was never accounted a wise man, that either hoped to buy, or promised to fell without fault. It was sufficient in open Market places, when and where Goats were to be sold, to promise, Hodie capras rete effe & bibere poffe & eam licite habere, that is, that the day of their sale they were well, and could drink, and they were his own, and it was lawful for him to have them.

But farther no man was urged, for (Archeclus faith) they are ever Furtivating, because their breath is hotter, and their copulation more fiery, and therefore their herdmens must not be unprovided of good and sufficient medicine to help them, and not only against their natural diseases, but also their continual horn-wounds which they give one another by their often fightings, and also when they aspire to climb upon steep and craggy pointed rocks or trees, they often fall and are wounded, in such cases they have no such Phylistian as their Keeper, whose bag and box must be as an Apothecaries shop to yeild continual remedies to all their grievances.

The belt means to preserve them in health, next to a good diet and warm lodging, is, to plant

Florentius.

Affen near to their stabling houes. And their continual Ague spoken of before is profitable to their body, for when it departeth and leaveth them, presently they perih and dy. Sheep and Goats have a natural forelight of the Pelhine or Marrain, of Earth-quantes, and of wholesome temperate weather, and of abundance and store of fruits; but neither of both shall be ever infetted by the Pelhine, if you give them the powder of a Storks Ventricle or maw one spoonfull thereof in water every day.

Quemilus.

And whereas all other kinde of Caftel when they are sick, confume and pule away by little and little, only Goats perih suddenly, insomuch as all that are sick are unrecoverable, and the other
The flock must be instantly let bleed and separated before the infection overspread all; and the reason of their sudden death, is because of their abundance of food, which ministrith speedy flux for the fire of their diseases to burn. At such times they must not feed all the day long, but only thrice or four times a day be led forth to grafts, and brought in again to their mangers.

If any other sicknefs annoy them, they are to be secured with Reed, and the roots of white Thorn beat together with iron Pellets, and mingled with rain Water; and so given to the Cattel to be drunk: but if this medicine help not, then either fell them away, or else kill them, and salt them till you mean to eat them. Goats are not troubled with Lice or Nits, but only with Tickes.

There is a certain Wine called Melampodion, the report is, that one Melampus a Shepherd had it revealed unto him, to cure the madness of Goats: it is made of black Hellebore, and Goats milk. Goats are also mollified and subject to the falling sicknefs, and this is known by their voyce and cold moist brains; and therefore the Roman Priests were commanded to abstain from touching such Goats.

They are also troubled with the Gout; the Female-goat caffeth the pain of her eyes by prick- ing them upon a Bull-ruth, and the Male-goat by prick- ing them upon a Thorn, and so pitifous matter followeth the prick, whereby the sight is recovered without any harm done to the Apple; and from hence it is supposed, that the Physicians learned their Parakentesis pricking of fore eyes of the Needle.

The Females never wink in their sleep, being herein like the Roe-bucks. There are certain Birds (called Capri-mulgi) because of their sucking of Goats, and when these or any of them have sucked a Goat, they presently fall into a blinde. If at any time the be troubled with the Dropefly, an issue must be made under her shoulder, and when the humour is avoided, stop up the hole with liquid pitch. They drink the feed of Sefelis to make them have an eafe delivery of their young, and for that caufe Columella prescribed a pinte of sod Corn and Wine to be infused into their throats in that extremity; or some other medicines being like unto Sheep, we will reserve their description to that History.

These Goats have in ancient times been used for Sacrifices, not only by the Sovereign command of the Almighty God, but also by the practice of Heathen people; for their perfect sacriifce which consisted of a Ram, a Goat, a Hog, and a Bull, was called Hecatombe and Trytis.

The reason why Swine and Goats were sacrificed among the Heathen, was, because the Swine dig up the earth with their noyes, and root out the Corn; they were sacrificed to Ceres; and the Goats spoil the Vines by biting, for which caufe they sacrificed him to Bacchus; that to the drunken God might be pacified with the blood of that Beast, whose hallowed grapes he had devoured; whereupon the Poet writeth thus:

**Sui dederat ponsas : exemplo territus hortum**
**Palmite debueras abstinentia, Capre.**
**Quem squalens aliquis dentes in voto prementem,**
**Talia non tacent dixit dolore dequit :**
**Rube caper vitem, tamen hinc sum flabis ad aras,**
**In tua quadflargi cornua possis, quir.**

When they sacrificed a Goat in Graeea, they tried him by giving him Peafe or cold water to drink, which if he refused, they also refused him for sacrifce, but if he tasted it, they took and offered him.

**Martial** having seen, or rather heard of a Countryman, when the Beast was flain, the Priest commanded the poor Countryman to cut off the fones, _Teter ut immacule carnis abiret ador_, to let the unwholefome vapour of the unclean flefh out of the body. Afterward the Priest being busy about the Sacrifice, and flooping down to the carcas of the Beast, his cords appeared behind him betwixt his legs, the which when the Countryman saw, he suddenly cut them off with his sharp knife, thinking that the ancient ceremony of fasting required this to be done: whereupon Martial wrote this Epigram,

**Sic modo qui Tuscus fuerat, num Gallus aruifex,**
**Dum jugulus biroim, faucis es ispe caper.**

The _Mundifians_ worshipped Goats both males and females, because as they imagine they were like to their God Pan. The _Egyptians_ also deified the male Goat for his genital members, as other Nations did Priapus. The _Gentiles_ had also a brazen Goat, whereupon _Venus_ rode in brafs, which picture they called (Panæmon) and _Venus_ (Epitropia; ) I think that last could not be better described, for venereous persons will suffer their whore to do any disgrace unto them, for their carnal pleasure. And thus much for these male and female Goats, now follow the stories of the wild Goats and the Kids in order.
Here is no man that shall see this Beast, but will easily yield unto my opinion, that it is a Goat, and not a Deer, the hair, beard, and whole proportion of body most evidently demonstrating so much, neither is there any difficulty herein, except for the horns which turn forward at the point, and not backward, this thing yet swarveth not so much from a Goat as from a Deer, and therefore can be no good reason to alter my opinion. There are of this kinde, as Doctor C. affirmeth, in the Northern part of England, and that figure which is engraved at Rome in a Marble pillar, being a remembrance of some Triumph which Pliny seteth forth, differeth in no part from this Beasts description and proportion: Yet I take it that it may be brought into England from some other Nation, and so be seen in some Noble mans house, but that it shoulde be bred there, I cannot finde any monument of authority, but I rather conjecture the same to be bred in Spain. Of these kindes there are three Epigrams in Maritials, whereby is declared their mutual fights killing one another: their fear of Dogs, and their fleth desired both of men and beasts.

The first Epigram describing their wilful fight, one killing another, and so saving a labour to the Hunter, for they kill themselves to his hand, is thus:

Frontibus adversiis molles concurrerere damas
Vidimus; & seti forte jacere part.
Spectauere Canis praelam, suspauit; superbus
Venator, curo n сравнisse suo.
Unde leves animae tanto calliere furare?
Sic pugnant Tauri, sic coeberere viri.

The second Epigram is a Dialogue speaking to the Emperor, who took care to encrease his game, seeing not only men were enemies to them, but they also to one another, whereupon he wrighteth this diflusion:

Aspicis imbelles tentent quum fortes dama
Prehita; tam timidis quaem sit ira feris.
In mortem partis concurrerere frontibus audent,
Vis Caesar damis parare? mise Canes.

The third Epigram is a complaint of their weak and unarmed state, having neither teeth like Bores, nor horns like Harts to defend themselves, but lie open to the violence of all their enemies:

Dente timetur Aper, defendat corum servorum,
Imbelles dama quid mihi praedam susus?

These are of a whitish yellow colour on the back, and are nourished sometime for the pleasure, and sometime for the profit of their pottage, for they will suffer hunting like a Deer, and also he named for milk like a Goat. And hereof I finde no other especial mention among Authors, beside that which is already rehearced.
Of the WILDE GOAT, and the Figure of the Helvetian, Alpian, WILDE or ROCK-GOAT.

Wilde-goats are transfigured into many similitudes, and also dispersed into many Countries beyond the Seas and in the Alps, the picture of the Alpian Wilde-Goat is here set down. They are also to be found in Italy, in the Mountains of Fisorda and Tetrica, in so much as the same Goats which are nourished there, are said to be derived of the same Goats, these are called Cythian Goats, because they are bred in the Mountains of Deis called Cythara. There are of these which are found in the tops of the Libyan Mountains as great as Oxen, whose shoulders, and legs abound with loose flagggy hair, their thins small, their faces are round, their eyes are hollow and hard to be seen.

Their horns crooking backward to their shoulders, not like other Goats, for they stand far distant one from another; and among all other Goats they are indiscernible with a pent singular dexterity of leaping, for they leap from one top to another, standing a great way alander, and although many times they fall down upon the hard rocks, which are interspersed between the Mountains, yet receive they no harm: for such is the hardnefs of their members, to resist that violence, and of their horns to break their falls, that they neither are offended thereby in head nor legs.

Such are the Goats of Seradum as Cato writeth, which leapeth from Rock to Rock, above three-score foot: of this kinde are those Goats before spoken of in the History of the same Goat, which are thought to breathe out of their ears, and not out of their nostrils; they are very swift and strong horned: the love betwixt the Dams and the Kids in this kinde is most admirable: for the Dam doth most carefully educate and nourish her young; the young ones again, do most thankfully recompence their mothers carefulness, much like unto reasonable men, which keep and nourish their own Parents in their old decrepit age, (which the love of God and nature doth enjoy them) for satisfaction of their own education; so do these young wilde Goats, toward their own mothers: for in their age they gather their meat and bring it to them, and likewise they run to the rivers or watering places, and with their mouths suck up waters, which they bring to quench the thirst of their Parents: and when as their bodies are rough and ugly to look upon the young ones lick them over with their tongues, to making them smooth and neat.

And, if at any time the Dam be taken by the Hunters, the young one doth not fortake her till he be also inflamed: and you would think by the behaviour of the imprisoned Dam towards her young Kids and likewife of the Kid towards his Dam, that they mutually contend one to give it self for the other: for the Dam foreseeing her young one to hover about her in the hands of her enemies, and continually to follow; with lighs and tears feemeth to wish and persuade them to depart, and to save themselves by flight, as if they could say in the language of men, "Fugite filii inflos vextatis, nem me miferam capit materum ripine privata: that is to say, Run away my sons, save your selves from these harmful and greedy Hunters, lest if you be taken with me, I be for ever deprived of the name of a mother. The young ones again on the other side wandering about their Mother, bleat forth many a mourful song, leaping to the Hunters, and looking in their faces, with pitiful aspect, as if they said unto him, We adjure you (oh Hunters) by the Maker of us all, that you deliver our Mother from your thraldom, and instead of her take us unhappy children, bend your hard hearts, fear the laws of God which forbideth innocents to be punished, and consider what reverence you owe to the old age of a mother; therefore again (we pray you) let our lives satisfy you for our Dam's liberty. But poor creatures, when they see that nothing can
move they unexorable minde of the Hunters, they resolve to dye with her whom the cannot deliver, and therupon of their own accord, give themselves into the hands of the Hunters, and so are led away with their mother.

Concerning the Lybian Goats before spoken of, which live in the tops of Mountains, they are taken by nets, or snares, or else killed by Darts and Arrows, or some other art of hunting. But if at any time they descend down into the plain fields, they are no less troubled, then if they were in the waves of some great water. And therefore any man of a slow pace may there take them, without any great difficulty.

The greatest benefit that ariseth from them is their skin and their horns; with their skins they are clothed in Winter time against Tempelts, Frosts, and Snow, and it is a common weed for Shepherds and Carpenters. The horns serve them in stead of Buckets, to draw water out of the running streams, wherewithall they quench their thirst, for they may drink out of them, as out of cups; they are so great, that no man is able to drink them off at one draught, and when cunning artificers have the handling of them, they make them to receive three times as much more.

The self same things are written of the Wilde Goats of Egypt, who are said never to be hurt by Scorpions. There is a great City in Egypt (called Cuprau) who were wont to be much addicted to the worship of Isis, and in that place there are great abundance of Scorpions, which with their stings and poisons, do oftentimes give mortal and deadly wounds to the people, whilst they mourn about the Chapel (for they worship that Goddess) with funeral lamentation: against the sting- ing of these Scorpions, the Egyptians have invented a thousand devises, whereof this was the principal: At the time of their assembly, they turn in wilde female Goats naked among the Scorpions lying on the ground, by whose presence they are delivered and escape free from the wounds of the Serpents, whereupon the Capiter do religiously consecrate these female Goats to divinity, thinking that their Idol Isis did wholly love them, and therefore they sacrificed the males, but never the females.

It is reported by Plutarch, that wilde Goats do above other meet love meal and figs, wherefore in Armenia there are certain black fishes which are poisons; with the powder or meal of these fishes they cover these figs, and cast them abroad where the Goats do haunt, and asoon as the Beasts have taffed them, they presently dy. Now to the Wilde Goat before pictured, called in Latin, Capricornus, and Caupronus; and in Greek, a Cacos, and Aegistro, and of Homer Ixanu; of the Germans, Gom- mel, or Gemini; the Boemians which speak Italian, call it Camalco; the Pomerians, Carpemontir; the Po- bernian, Dzyklop; the Bob. miants, Kopynitsk Kolli; is that to say, a Carinthian Goat, because that part of the Alps called Carinthia is near bordering upon Bohemian.

Bellusins writeth, that the French call him Chambrin, and in their ancient tongue Tard, this is not very great of body; but hath crooked horns which bend backward to his back, wherupon he flayeth himself when he faileth from the slippery Rocks or Mountains.

These horns they are not fit to fight they are so small and weak, and therefore nature hath bestowed them upon them for the cause aforesaid. Of all other Goats this is the feaft, it hath red eyes, but a quick eye-light, his horns are black, being nine or ten fingers long, and compassed about with divers circles, but at the top none at all, which is sharp and crooked like a hook. They arise at the root Paradinale, that is by equal distance one from another, being hollow the breadth of ones thumb, the residue fold like the Harts.

The Males in this kind differ not from the Females, neither in horn, colour, or proportion of body: they are in bigness like the common Goat, but somewhat higher. Their colour is betwixt brown and red. In the Summer time they are red, and in the Winter time they are brown. There hath been seen of them which were white and black, in distinct colour one from another: and the reason hereof is, because they change colour many times in the year. There are some of them altogether white, but these are seldom found; they inhabit for the most part the Rocks or Mountains, but not the tops like the Ieeks, neither do they leap so far as the foraid Goats. They come down sometim to the roots of the Alps, and there they lick land from the Rocks, like as the Villagetame-goats to procure them an appetite.

The Helvetians call these places in their natural tongue Faltizen, that is Salaris: about these places do the Hunters hide themselves, and secretly with guns, bows, or other such instruments, they suddenly flock and kill them. When they are hunted they creep upon the steepest Rocks, and most inaccessible for Dogs; by that means providing their own safety: but if the Hunters persist after them, and climb upon the Rocks with hands and feet, they leap from thence, from stone to stone, making their way to the tops of the Mountains, so long as they are able to go or climb, and then they hang by the horns of their head, as if they were ready to fall, which caused Martial to write thus:

Pendentum famito Capronam de rupi video
Catauran iiperi, decisit illa Canis.

Where the Poet attributeth that to the Roe which belongeth to the Wilde Goat, and there they hang many times till they perish, because they cannot loose themselves again, or else they are shot with Guns, or fall down headlong, or else are driven off by the Hunters. From the day of Saint James they use themselves to the coldest parts of the Mountains, that by degrees they may be accustomed to the cold. I have known some
Of the Goat.

of their made came, so that they have descended down to the flocks of tame Goats, whom they do not avoid like the Iex.

From thefe wide Goats hath that fame herb (called Doronicum) and of the Graecian, Doronicum, given a name among the German, Germeleb Wort; that is, Wilde-goats-herb, being excellent to cure the Colick, and therefore highly eftemed among the Arahians, Graecians, and Moftamaniats. It is hot and dry in the second degree; and the Country people in Helvetia do give it against dizziness in the head, because thefe wide Goats oftentimes feed upon the same, and yet are never troubled with that infirmity, although they run round about the Mountains.

There are Hunters which drink the bloud of this Goat coming hot out of his body, immediately after the wound given, against that ficknefs. The fat and milk of a wide Goat mingled together, have cured one long fick of the Putick. The wide Goats of Greet, being wounded with poiyoned darts, run presently and eat of the herb Dittani, by the verue and juyce whereof, they not only avoid the arrow which ficketh in their skin, but also death, and cure the poiyon.

Of the KID.

Having formerly discoursed of several kindes of Goats, now it followeth that we shold also interest of the Kid, which is the iflue of a Goat; and fiirth of the several names thereof. It is called in Hebrew, Eged; which because it Signifieth also a Lamb, they put unto it Haijim, and the plural Masculine is Gediain, and the femine Geduth. Gen. 35, where the Chaldean transla- tion hath Cadex; the Persians, Butakale, or else Cadali basan; for the Feifians render Cadali for Sketer; in Hebrew, Bahan, for Jifim. The Sepuqgnts render Erifon; and vulgarly at this day, the Graecians call him Erifon; but the truth is, that Erifon are Kids of three or four months old, and after that time until their procreation, they are called Chimeras; the Latins call him "Nelido abedendo," from eating (as Isidens faith) for then their flefs is tender and fat, and the taft thereof pleasant. The Italians call it Cavette, or Capette, and Caracello; the Egyptians which speak Italian, Ucel; the Spaniards, Cabrito; the French, Chereus; the Germans, Gife; or Kiflai; the Po- lonians, Costel.

It was a question whether nature would finish her parts upon a young one out of the dam's belly, wherefore a triall was made upon a Kid which never faw the dam, for upon a fcafon a defection was made upon a Female-goat great with young, and out of her belly was a young one taken alive, fo as it could never fee the mother; the fame Kid was put into a houfe where there were many bowls full of Wine, Oyl, Milk, and Hony, and other liquid things; there also lay besides him divers kindes of fruits, both of the Vine, of Corn, and of Plants; at laft this Kid was seen to arife and fland upon his feet, and as if some bod have told him that his legs were made to walk upon, he flook off all that mouthines which he brought with him out of his mothers belly, afterward he scratched his fide with his foot, and then went and smelted at all the former veffels, and at laft coming to the milk bowl, he flapped and licked thereof, which when the beholders law, they all cryed out that Hippocrates rule was moft true, Animantium natura effe indicata, that is to fay, the natures of creatures are not formed by art, but of their own inclination.

There is nothing more wanton then a Kid, whereupon Ovid made this verfe:

Spelendis vitro, tenero lascivior bado.

They often jump and leap among themselves, and then they promise fair weather, but if they keep continually with the flocks, and depart not from their mothers, or continually fwick or lick up their meat, they fore-flew a fiorum, and therefore they must be gathered to their folds, according to the Poets faying;

Sic fine fine modoque
Pabula delibet cum tuis vesper adire
Compellat caulis, monstrabunt adsive nimbor.

If Geefe fwallow the hairs of Kids or Goats, they dy thereof. Kids are not to be seperated from their Dams, or weaned till they be three months old, at which time they may be joyned to the flocks: they are nourifhed when they are young after the fame manner as they be at a year old, ex- cept that they must be more narrowly looked unto, left their laficuliousness overthrow their age: and besides their Milk, you must give unto them Three-leaved-grafs, Ivye, and the tops of Lenthil tender leaves, or small twigs of trees: and whereas commonly they are brought forth in twins, it is bef, to choose out the strongest headed Kid for the flock, and to fell the other away to the Butchers. Out of the rennet of the Calves or Kids is the Coagulation.

There was a certain law (as appeareth by Baifin) in the Books of the civill Lawyers, that chooe should be made of the skins of Kids, as appeare by ancient Marble monuments at Rome, which thing Martial approveth in his verfe to Petrus; fiewing how time altereth all things, and that the skins of Kids which were wont to cover bald heads, are now put upon bare legs; the verfe are chefe that follow,
The History of Four-footed Beasts.

Hadina tibi pelle contengi
Nuda tempora verticenique calce,
Feitiva tibi, Phoebes, dixit ille
Qud dixit opus sese colatus.

Aherus. Out of the hide of a Kid is made good glee, and in the time of Cicero they fluffed beds with Kids hair: their flesh hath been much esteemed for delicate meat; and for that cause dressed and trimmed sundry ways; the best Kids for meat have been said to come from Melas, or Umbratiæ, or Viburtianum, which never tailed herbs, but have more milk in them then bloud, according to the saying of Juvenal.

De Viburtino veneti pinguisfimus agro
Habitus & tæo grise mollor, infestus berbe,
Nec dum aæus virgus humilis mordere falieth.

Anothus. For this cause they may safely be eaten all the year long while they suck, both of men of temperate and hot constitution, for they are less hurtful then the Rams and do easily digest, and nourish temperately, for they engender thin and moist bloud, and also help all hot and temperate bodies, and they are at the best when as they are neither two old, that is above fix months, nor too young, that is under two months.

The red or handly coloured are the best, yet is their flesh hurtful to the Colick. Simeon Sethi affirmed, that if a man eat a Kids liver before he drink in the morning, he shall not be over drunk that day. Celcius also pretendeth it in the sicknes of the Holy-fire. They are wholesome, solid, roasted, or baked, but the ribs are bell fods. Plautus teacheth one way whereby it was dressed in his time for a delicate dish; they took some field Herbs and fat broth, two whites of an Egge well beaten together, with two heads of Garlic, a little Saffron, and a little Pepper, with the Kids flesh, put all together into a dish, rosted before at the fire upon a spit (with Parley, Rosemary, and Laurel leaves) and so serv'd out with that sauce, and set on the table but if they did not eat it before it was cold, it weakened the eye-sight, and rais'd up venereal flux.

The blood also of a Kid was made into a bludding, and given to be eaten of them which have the Bloudy-fiss. They have also devis'd to dress a Kid hot, and to fill his belly with Spices and other good things: likewise it is sod in Milk with Laurel, with divers other fashions, which every Cook is able to practice without the knowledge of learning.

And thus I might conclude the discourse of Kids with a remembrance of their constellation in the Waggoner, upon the Bulls horn, which the Poets observe for signs and tokens fore-saying rain and cloudy weather, according to Virgil verse:

Quantus ab occasu venientis pluvialis Hadir.

These Stars rise in the Evening about the Nones of October, and in December, they wont to sacrifice a Kid with Wine to Faunus. There is a Bird called Captitius, which is a great devourer of Kids and Lambs, and the same him is hunted by a Dragon, for when the hath fill'd her self with these Beasts, being weary and idle, the Dragon doth espy her upon her and overtake her. Also when they fish for the Worm seven cubits long in the River Isar, they bait their hook with a Lamb or Kid, as is reported by Athenæus; and the Ancients were wont by inspection into the entrails of Kids, to declare or fear or into things to come, as Gyralius amongst other their superfluous vanities re-heardeth.

The manifold medicinal properties of Goats come now in the end of this story to be declared and first of all it is to be noted, that these properties are several, both in the male, female, and Kid; and therefore they are not to be confounded, but as the diligence of learned Authors hath inventing and left them severally recorded, so they require at our hands which are the heirs of such beneficial helps, the same care and needful curtefie.

There are some which do continually nourish Goats in stables near their dwelling houses, with an opinion that they help to continue them in health; for the Ancients ordained that a man which had been bitten or stroke by Serpents, and could not easily be cured thereof, should be lodged in a Goats stable. The hairs of a Goat-buck burned and perfumed in the presence, or under a man whose genital is decay'd, it cureth him.

The powder of a Wine bottle made of a Goats skin with a little Rose, doth not only stain the bloud of a green wound, but also cure the same. The powder of the Horn with Nitre and Tamariack seed, Butter, and Oyle, after the head is shaven, by anointing it therewith, strengtheneth the hair from falling off, when it growths again; and cureth the Alpiga, and a horn burnt to powder and mingled with meal, cureth the chippings in the head, and the fots: for taking away the smell of the arm-pits, they take the horn of an old Goat, and either scrape or burn the same, then add they to it a like quantity of Myrrhe, the Goats tail, and first scrape or shave off the hair, and afterward rub them therewith every day; and they are decay'd by that perfuration.
The blood fried in a pan, and afterwards drunk with Wine, is a preservative against intoxications, and cureth the Bloudy-flix; and the blood in a Sear-cloth is applied against the Goat, and cleanseth away all Leprories, and if the blood come forth of the nose without heat, then rub the nose with this blood of a Goat. It being fitted to meet cureth all the pains of the inward parts: being rubbed upon coals fayeth the looseness of the belly, and the same applied to the belly mixed with fine flour, and Rozen, eateth the pain in the small guts; the same mixed with the marrow of a Goat, which hath been fed with Lentils, cureth the Drop little; and being drunk alone, breaketh the stones in the reins; and with Parsley drunk in Wine, also dissolveth the stone in the bladder, and preventeth all such calculating gravel in time to come.

There is a Medicine called by the Apothecaries Divina manus, Gods hand, against the Stone, and they make it in this manner. When Grapes begin to wax ripe, they take a new ear then pot, and pour into it water, and feethe the same till all the cream or earthy substance thereof be ejected: and the same pot cleanseth, then take out of the flock a Male-goat of four year old, or thereabouts; and receive his blood as it runneth forth of his slaughtered body into that pot, so as you let go the first and last dream thereof to the ground, and lave the residue: then let it thicken in the pot, and so being therein congealed, break it into many pieces with a reed, and then covering it with some binnens cloth, let it abroad in the day time where it may gather dew, and then the next day set it abroad in the Sun again to exhalte the same dew, (if in the mean time there fell no rain) then let it dry, and afterward make thereof a powder, and preserve it in a box, and when the evil pincheth, use a spoonful of it with Wine of Cret; and Pulsagium commendeth the manifold benefit thereof, for he had often tried it, and with a medicine made of an African Sparrow mixed with this, he procured one to make water, and to void a great stone which had not vented his urine in many days, and lived in the mean time in horrible pains, and the same vertue is attributed herein, to be anointed near the bladder; and one be bathed in the warm air, and oftentimes both the Bath and the Oyntment be reiterated. Marcellus teacheth how one may make trial of the vertue of this blood, for if he take a Male-goat, and put him up clofe seven days, feeding him in the mean time continually with Bays, and afterward cause a young Boy to kill him, and receive his blood in a bladder, and put in the said bladder sandy stones, like unto those that are engendered in the bladder of a man, within a short time he shall see those stones dissolved, and scarce to be found in the bladder of blood, by which he confidently affirmeth, that nothing in the World is of like power to remove the Stone; but within he willleth some superflitious observations; as namely, that he be killed by a chaste person; and on a Thursday, or Sunday, or such like; but the conclusion is, that the said Blood must be dried to powder in an Oven, and afterward prescribeth that three ounces thereof, one ounce of Thyme, one ounce of Pennyroyal, three ounces of burned Pulpus, one ounce of white Pepper; one ounce of Apium, and one ounce of Lovage-feed to be given to the party in sweet Wine fasting, and having no meat in his stomack undigested, and having digested the medicine, he must eat prefently.

And therefore if it be true, as all antiquity and experience approveth, that the Goats blood breaketh and dissolveth the Adamant stone, then much more (faith Jacabus Silvius) may it work upon the stone in a mans bladder. The flesh of Goats decoct in water, take away all bunches and kernels in the body. The fat of this beast is more moist then a Females or a Kids, and therefore it is most strong in operation, to scatter, dissolve, and resolve more then a Sheep. It cureth all Fissures in the lips mixed with Goose-grease, Rozen, Pitch, and the marrow of a Hart. Also if one be troubled with swellings in his Temples or in his Legs, let him use of this fewt half a pound, and a pound of Capons-grease mixed therewith, and spreading it upon a cloth like a Sear-cloth, let him apply it to the fore, and it shall help mightily. Also when the neck of an Ox swelleth, it hath been proved for a golden remedy, to take and anoint it with Goats-grease, liquid Pitch, the Marrow of a Bugle or Ox, and old Oyl, and may as well be called Tetephermum, as that of Galen made of Wax, Rozen, Pitch, and Goats-feewer. Also if the bloud be fallen into an Oxens legs, it must be let forth, or else it will breed the maundy; and therefore first of all the place must be cut with a knife, and then rubbed with clouts wet in Salt and Oyl, and half of all anointed with old Sewer and Goats-grease.

Two ounces of this Goats-grease, and a pint of green Oyl mixed together, and melted in a pot, and infused into one that hath the Bloudy-flix, cureth him speedily: when the hot dung or flume of a Goat is mixed with Saffron, and applied to the gouty members Hydropick, it worketh upon them a strange cure: and some adhere unto the flanks of Ivy beaten, Mustard-feed, and the flower of a wide Cucumber.

The Liver of this Beast laid upon a man that hath been bitten by a mad Dog, caufeth him never to be afraid of water: the same being faded, yeeldeth a certain liquor, and fore eyes being anointed with that liquor, within twelve times recover; and drunk in sharp Wine, and laid to the Navel, fayeth the Flux; also fod in Wine, no feum or froth being taken off from it, but permitted to joyne with it, helpeth the Bloudy-flix.

The entraits of a Goat eaten are profitable against the Falling-sicknes. The gall killeth the Leprofies, all swellings and botches in such bodies, and being mingled with Cheefe, Quicksilver, and powder of Sponge, and made as thick as Honey, taketh away the spots and burls in the face. It also rooteth out and consumeth dead flesh in a wound, and also mingled with Bran and the Urine of a Bull,
Bull, cureth the scurrie in the head. Actus also teacheth women how to conceive with chide, if the dip a purple cloth in Goats blood, and apply it to her Navell seven dayes, and afterward it with a man in the prime and encrease of the Moon. The Gall of a wilde Goat is commended privately for the help of them that are purblind, and for all whitenes and Ulcers in the eyes: and when the hairs which trouble the eyes be pulled up, if the place be anointed with the Gall of Goats, the hair will never grow any more.

In the Milt being sod, helpeth the Flux, and the Spleen taken out of the beasts belly, and applied to the Spleen of a Man, doth within short time cease it of all pain, if afterward it be hanged up in any fume or smoke to be dried. Albertus and Raffi say, that if a Man eat two Goats bones, and presently lie with his wife, the shall bring forth a male child, but if he eat but one, then shall the child have but one bone. The fume decocted with Hony, and laid to Ulcers and swellings, dissolveth or draweth them, and mingled with Vinegar, is most profitably used to take away black spots in the face.

And if he which is sick of the falling evil do eat thereof fifteen pills, or little bals, it shall procure unto him much cafe. If it be mingled with Mouse-dung, toasted at the fire and sprinkled with Hony, and so anointed upon bald places, where you would have the hair to grow again, and mingled with Vinegar wherein a Sea-onion hath been steeped, and bound to the forehead or temples, afflicteth the pain of the bran-pan.

The Pastoral Carthagiensis, to the intent that the humour flowing out at their Childrens noses, may never hurt them, burna vein in the crown of the head with Wool, when they are four year old, and thereby may conceive that they are kept and confirmed in perpetuall good health: and if when they burnt their children, they fell into a Cramp, they eased them presently by calting upon them the urine of Goats. When a Man is thick of hearing, mingle together the Gall of an Ox, and the Urine of a Goat, and infused into the ears, although there be in them a very matterfull.

Galen. prefcribeth this portion to evacuate that Water which lyeth betwixt the skin by Urine, if one drink Hylopes water and the Urine of a Goat: Likewise it helpeth the Droppie, and the durt of an Elephants tooth drunk in this Goats Urine, it dissolveth the stone in the reins and bladder, without all fearful peril and danger.

The medecines arising out of the female Goats are these. We finde that the female Goat, and the land rood being foddled together, are cures of singular worth for the discharges of all living four-footed beasts. The (Magi, or) wisemen say, that the right eye of a green living Lizard, being taken out, and his head forthwith struck off, and put in a Goats skin is of a great force against quartern Aques. The ashes of a Goats hide befarmed over with Oil, taketh away the spots in the face. The same ashes made of Goats hide, recovereth the blisters and galls of the feet. The flaving of the Goats skin being rubbed with Pumice Stone, and mixed with Vinegar, is an excellent approved good remedy for the Smalpox.

If a Woman bleed overmuch at the nofe, let her breaths be bound with a thong made of a Goats skin. The fame being foddled with the hair on it, the juice being foked up, flayeth the belly. It is not good for those that have the falling ficknes to flay pe or be in a Goats skin, if at any time the passion moveth them to; yet yet it is hurtful for their head, by reason of the rank smell, and not for any other particular cause.

Goats hairs being burnt, do appease all ifues of bloud, which being mixed with Vinegar, they are good to flanch the bleeding at nofe, and you may blow in their nostrils Goats hairs burnt and whole, and also Myrhe mixed with Goats hairs fo burnt. The fame also burnt and mingled with Pitch and Vinegar, helpeth the bleeding at nofe, and being put in the nofe they flie up lethargies.

The favour of the Goats horn, or of the hair doth the like, Goats dung in sweet water, doth expell the stone in the body, fo doth the ashes of Goats hair in like manner, which being burnt and bruifed, and given in a medicine, they do mightily help and recover the Strangury. It is also reported that Goats horn and the hair being burnt, will drive away Serpents: and their ashes foked or anointed, is very good against strokes or flingings of Serpents.

To flay the Flux in the belly, take the hairs that grow behind on the Goats sitting place, and burn them, which being tempered with beaten Barley and Oil, must be perfumed under a mens feet.

Goats flesh being rofted by the fire where dead men are burnt, is good for those that have the Falling-ficknes. The fame is a good remedy against the falling ficknes. It is good for such to abstain from Hogs flesh, Beef, or Goats flesh. They that drink Goats bloud wax pale prettily on it, which is excellent to get out spots of any thing: is also good against those that are intoxicate with poison, and therefore must be drunk with wine, and being sod with marrow, it is good against the same disease: fo is the male Goats bloud. The root of Cinkefoyle drunk in wine, helpeth ill humors. Goats bloud also, either of the male or female, affwageth the inwards and the flowings or lasses of the belly; it is good for those that have the Droppie, being tempered with Hony, and also foddled with marrow.

Some use it against the Bloudy flux and pain of the belly, being also foddled with marrow it is good against the same disease. If you mix Goats bloud with Chiefe freight in brood, and a little Robin put into it, whereof make a plaiater, and lay it to the belly or other parts, and it recovers any pain thereaboutes.
The fat of a male Goat is more fæter, and therefore good for those that have the Bloodly flux. The substance of a Goat is fat, yet is not the fat of a Goat fo moift as a Swines, but for bitings, and those that are grieved in their belly Goats fat is better then Swines, not because it hath more operation in it to expell the grief, but by reason it is thick, whereas the Swines greese will run about like oil; neither is the fat of Kids fo warm and dry as female Goats, neither the male Goats so fat as the gelled Goats, in Latin called Hircus; also female Goats fat is more binding then the Tallow of Oxen, but the males fat is good against Scorpions made in a perfume. It is also good for those that are poisoned with French green flies, called Cantibarideris. Being tempered with Wax, it taketh away the flinging of Serpents; it helpeth any biting or wound. If a Womanes breaft griefe her after her delivery of childe, let her feethe husked Barley and Scallions, and the fat of a male Goat, whereof, let her drink a little. Against the ache of the eyes, take Goats fat and Sheeps together, with a little warm water.

Almost every grief of the body if it be no wound, will be more easily recovered by plaisters, but if the grief be as it were grounded, (or an old grief) let it be burned, and upon the place so scorched, put Butter or the fat of a male Goat; it will also recover and heal kibes and Chilblains, It helpeth The Kings evil; so doth the fat of the female Goats help the fame disease. The males fat mixed with Ashes, taketh away the roughness of the nails; it also healeth the nails of the Leprofe without any pain, it expelleth the Cantibarideris being applied with the juice of the Grape that groweth on a wilde Vine. This Goats fat is profitable to help any about the straightness of their mouths and teeth, being tempered with wax, it layeth Sores and Blisteres, and with Pitch and Brimstone it healeth them, and being applied with Hony and the juice of a Brambel, it cureth the swelling ariseth in the hands or finger, especially in curing of Pellons.

The fat of a Bull well falted, or sift be in an aitch or grief, dipt in oil without Salt, and fo after the fame manner is the male Goat fat us’d, which being tempered with Rofes, taketh away the whoales or blisters that rise in the night: being alfo dropped into the ears of one that is deaf, it recovereth him.

It helpeth the Fallinge sickness, putting thereto as much of the gall of Buls, jutf of the fame weight, and feethe it together, and then lay it in the skin of the gall that it touch not the ground, and drink it out of the water. It is also good against the flinging of Scorpions, being applied with Butter and the meal of Zea, warmed and wathed with red Wine.

The broath that is confequente of Goats fat foddon, is excellent for tho’se that are troubled with the Puffick, to fup now and then a fea; also it helpeth the Cough being tempered with new sweet wine, that an ounce may be put in a goblet, and fo mixed with a branch of Rue. It being alfo foddon with husked Barley, eafeeth tho’se that have frettin in the guts.

The fame alfo foddon with Barley flowre and Wine made of Pomgranates and Cheeffe, let it be given to tho’se that are troubled with the Bloodly flux, and let them take it with the juice of husked Barly.

Rafin alfo faith, that the fat of a fierce Lion is of such fingular account, that if a Gylfer be made of it, with the water of Barly fod, either with the water of toited meal, and boyled Swach, and fo disfolved with Wax, it is a moft preuious remedy for the swelling of the inwards. But Goats fat doth much help the griefs of the inward parts that nothing cometh forth but cold water. The fat of the Buck Goats many use (being fod with bread and afhes) againft the Bloodly flux; and alfo the She Goats fat being taken out of her back alone being a little cold, and then fupped up: Other allow the fat to be foddon with Barly flower, Cinnamon, Annife, and Vinegar mixed together. The fame fat taken fo out of the back mixed with Barly, Bran, and Cinnamon, Annife, and Vinegar, of each of them alike, and feethe thereof, and being strained give it the patient that is diseafe with the Bloodly flux, and it shall most speedily help him.

The fame alfo mixed with Pellitory and Cyprian Wax, may be laid to the Gowt. Alfo foddon with Goats dung and Saffron, and layed on the Gowt it affwageth the grief.

The marrow of the female Goats, in the fourth place next after the marrow of the Harts, the Calf and the Bull is commended of Dioscorides, but the laft of all is the Sheeps fat. The Harts is moft renowned of all, next the Calves, then the Buck Goats, and laft of all the female Goats. To help the grief of the eye, take the marrow of Goats and anoint your eyes, and it will cure them. Goats bloud fod with marrow may be taken again, against all toxical poison.

Pliny faith, that their dung being anointed with Hony, is good for the watering or droping of the eyes, and their marrow against aches. The bloud of Goats, their marrow, and their Liver, is very good to ease the belly. Goats bloud foddon with the marrow, helpeth the Bloodly flux, and tho’se that have the Droppe; and I think that the Buckis is more effectual and of greater operation, fo it be eaten with Maffick. Alfo the Goats marrow is good for the eyes of Horfes.

The right horn of a Goats is of some held to be of more effect then the other, which I rather hold to be superflitious; whatsoever other reafon or secret quality the Horn may afford for the bitings of Serpents, take Goats horn and burn the hairs of them, and the afhes of them foked in water, and Goats milk with the horn, and wilde Marjoram, and three cups of Wine put together, and being drunk against the flinging of an adder expellet the poison.

The afhes of Goats horn being all anointed with Oil, tempered with Mirtle, layeth the sweating of the body. Harts horn and Goats being burned, and (if it be requisite) is good to wash the teeth

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**Marcellius.**

**Galen.**

**Aetius.**

**Pliny.**

**Galen.**

**Calamedius.**

**Pliny.**

**Aesopus.**

**Dioscorides.**

**Pliny.**

**Marcellius.**

**Dioscorides.**

**Pliny.**

**Marcellius.**

**Sextus.**
withal, and it will make them look white, and the gums soft. It is also good against the bloody flux and watering of the eyes in regard they are moist ulul; yet they neither affwage the griefes nor consume them, which are of a cold and dry nature.

Harts horn being burnt as also a Goats horn, takeh away bitings. Goats dung or the horn being burnt to ashes, and dipped in Vinegar, flippeth the blood. The corrupt blood that cometh out of a Buck Goat, is more effectual and of a better operation; and the ashes of a Goats horn or dung foked in Wine or Vinegar, and anoint the Nostrils, layeth bleeding at the Nofe.

Goats horn being burned at the end, and the pieces or scorchings that are from thereof, must be shaken into a new vesse long till the horn be quite consumed, then beat and bruise them with Vinegar made of Sea-onions, and anoint the evil called Saint Anthonies fire; and it is of a miraculous operation.

It will make one sleep that is troubled with the weakness of his head and watching, if it be laid under their pillow. It being mixed with Bean and Oil of Mirtie, it keepeth the hairs rank that are falling off the head. The favour of the horn burnt destroyeth the falling fikkles, so doth the femell of the intrials of a Goat or the Liver eaten; likewise it raiseth up a Lethingwerk man. They use also the horns of Harts and Goats to make white the teeth, and to soften the gums. The same horn or shaven into mixt hony, represeth the flux of the belly. In the pain of the belly perfume the flavings of the fame, mingled with Oil and burned catly; the fame perfume is good to be laid upon the Ulcers of Horfes.

The hoes of Goats are prescribed by Palladins to be burned for the driving away of Serpents, and the dust of them put into Vinegar cursethe Aphasis. The dust of their hoes is good to rub the teeth withal, also to drive away the swellings in the saibste called St. Anthonies fire, burn the foot of the Goat with the horn, and reserve the dust thereof in a box, and when you will use it, wet the place first with Wine, and afterwards caft on the powder.

The juice of a Goats head sod with hair, is commendeth for surthanes in the belly, and the ancient Magicians gave the brain of the Goats to little infants against the Falling fickles, but perssed through a gold Ring, the same cureth Carbunckles in the belly being taken with Hony.

If the body or head be rubbed with that water or meat which falleth out of the mouth of a Goat, mingled with Hony and Salt, they kill all kinde of Lice, and the fame thing giveth remedy to the pain of the belly, or if it be taken overmuch it purgeth. The broth of the entrails to be gargarized in the mouth, cureth the exaceration of the tongue and arteries.

The Liver of the female Goat sod and eaten, is given against the Falling evil, and taketh from them Convulsion, and with the liquor thereof, after it is sod, it is good to anoint the purblind eyes; alio it is good to hold the eyes open over it while it feetheth, and to receive into them the fume, and the reafon hereof is, because Goats see as perfectly in the night as in the day time, and therefore Celius faith, that this medicine is most agreeable to them that cannot see at all in the night, as it happeneth to Women whose monethly courses are stopped, and then it is good for them to anoint their eyes with the Blood of a Goat, and eat the Liver sod or rofted. The powder of the Liver burnt purged and drunk in Wine cureth the Colick.

If a woman in travel or with childe be fwoollen up, let her take a Goats liver rowled in warm ashes, and let her eat it in four days, and drink old wine thereunto, fo shall she be delivered. The Gall is contrary to all poisoned Witch-craft made upon the rulbick Wesfle1 and if the Kings evil be daily touched therewith at the beginning, it will keep it from over spreadding, and with beaten Alum it dispereth Scabs. The old Magicians were wont to lay, that when a Man rubbed his eyes when he lay down, and put under his neck pillow, he thould sleep soundly; it driveth away scabbes in the head if it be mingled with Fullers chalkule, fo as the hairs may be dry a little; and the fame with Hony helpeth the eyes, according to the saying of Serenus;

The Phystians in application hereof to the cure of eyes take many ways, and mixe it with other drugs, as when they give it against whitenes in the eyes with Hellebore, against wounds and Pin and Webs with Wine; and against the broken tunicles with a womans mik, and therefore Rafis and Albertus do jullly call the Gall of a Goat an Eye-salve, and also being infilled into the ears when they are full of pain, it cureth them, first mingling it with a scruple of Hony in an earthen sheard, and interfuing into the ear, and flutting it in with a little wool.

Alfo all the pains in the ears are cured by the itakes or joyce of Leeks, Gall of Goats, and sweet water; and if there be any Rupture in the ear, then use therewith a womans mik, or warm Oil of Rofes: likewise against the Cankers in the gums, and the Squinacy, it is profitable to use it with Hony. For all tumors or swellings in the neck, take equal quantities of this Gall, of Goole-greafe, and the yolk of an Egg, and thefe being all mingled together, let the offended place be rubbed therewith.

The fame with the joyce of Cyclamine and a little Alum loofeneth the belly, and Wood being well dipped therein and bound to the Navel of the belly, expellethe the Worms; it cureth the faults in the feet by anointment; it also hath another virtue in it expraysed by the Poet in this Verse;
The melt fod cureth the Blandy-flux, and the bladder burnt and given in poftet-drink is good for them that cannot contain urine in their sleep, and the fecunds of a female Goat being drunk in Wine of women after their delivery, ejecteth and caufeth their feconds also. The milk is many ways available, for Democritus the Phyfitian, in the recovery of Confidia the daughter of Serritus, which had been Confult, ufed the milk of Goats a long feafon which he fed with Lentils: Sea-crabs mixed with this milk, expelleth poyfon; and the first milk of a Goat which is milked from her after the weaning of the Kid, drunk by him that hath a quartane Age, caufeth the fits thereof. And some of the ancient Phyficians gave as much dung of Swallows as will ly upon three groats, mixed with this milk against a quartane Age, and when young Lambs were fick, the fhepheards cured them by infuflng into their chaps the milk of Goats; the powder of Btony drunk out of Goats milk flayeth bleeding.

The holy fire is a difeafe of Sheep almost incurable, because if any remedy do but touch them, they fall mad: but they only in this malady admit for the recreation or remedy Goats milk. The root of the greater Siler decocted in Goats milk, cureth those cold ulcers in the flfth or belly, when the place looketh black or liveth fenne: and Apellus taught his followers and patients to drink it againft the Icht, or any biting, and if at any time there be any strain in any member of the body, to that the Article fecmeth to decline and lose his former strength and humor, it is recoverd again by binding unto it Lyne-feed in Goats milk. Fџuratus advieth to wash the face therewith, that the beauty of it may be more fpandant. Take feven Sea-crabs, and being beaten to powder, mingle them with one pint of Goats milk, and a cup of Oyl, and fo strain them diligently, and mixe them into a Horfes mouth which is fick of the Head-ach, and it shall cure him.

The milk alfo by the countел of ibis, with the juycce of Cabages, Salt, and Hony, is given against the thornes of breath; and if the right eye of a Chomeion be pulled out of her alive, and put into Goats milk, and applied to the eyes, it cureth the whiternes of the eyes.

The fat of a Bull mixed with this milk, and infuflng into the ears, cureth their matterie evils, and caufeth them to hear more affuredly and firmly. The gums of children anointed therewith, caufeth their teeth to come forth with lefs pain, and fafeloth the loofe teeth by often rubbing: the corners in the throat, and the Arteries are delivered from exacerbations by purgaring this milk, either warmed at the fire, or else as it cometh forth of the udder.

The feed of Crettes decocted in this milk, and drunk, caufeth the pains in the stomac'h, and alfo purgeth being mixed with Salt and Hony. Marcellus precribeth this excellent purgation, which shall never make the party fick, that is a pint of Goats milk, two ounces of Salt Ammoniack, and one ounce of the bell Mecis, beat them all together, and give them to the patient fasting, and fo let him walk a good while, till the medicine be wrought in his body; and if a woman be with childe, and oppressed with Head-ach, or have an Age, the may falely take this milk fod with Hony.

The Phyficians make a fpecial drink of this milk, which they call Selkion: it is fod in a new earthen pot, and hath put into it the branches of a fig-tree, and fo many cups of sweet water, as there were pints of milk, and when it boyles, keep it from fething over, but putting into it a silver veflil with cold water, and being taken from the fire divide it into many veflils till it be cold, fo the whay will part from the milk: and some take the whay and fcheid it again till the third part be only left, and afterward let it abroad in the Sun to cool, and this may be falely drunk five days together (every day a pint) at five feveral times, againft the Falling evill, Melancholy, Palflies in Leprories, Gows or pains in the Articles, and the ficknes of the Liver, which is like to a Pleuretie. Or let him drink the Goats milk, the third part thereof mingled with Hony (as Hippocrates precribeth) or with the feed of Matridum, (as Serenus counfelleteth) in this verfe:

\[ \text{Stomacho moderat or} \]

\[ \text{Semina Matthi folfa cum little capella.} \]

A draught of Goats milk fodd with Mallows, and a little Salt put to it, renufteth the gripings of the belly, and if you put a little Rennet unto it, it will be more profitable. Goats milk tempered with Rennet, before it be altogether strained, while it is warm, it must be given to thofe that have the Blandy-flux to drink, and it will help them prefently: put alfo to a good portion of sweet Wine mingled with Goats milk, and a little Rennet of a Kid (as much as a Nut-kernel is) which being tempered with the hand, let it be given to the patient, labouring with the Blandy-flux, before it be strained, for the space of three days. Let this drink be given one that is falling about the time he rifeth, and being boyled, put fufficient-Barley flour to it, and being in like manner like pap or potage, you must give it to the patient to drink for the fame difeafe.

Goats milk being fodd half away, may be given to thofe that have the Blandy-flux. If they that be troubled with fretting of the guts, and the Flinx, are weaken'd by reafon of their often going to the foul.

The broath of a fat Hen fodd with Butter or Goats milk, or Sheeps, warmed by it felf, or elfe fodd with Butter, is very good to be given unto them. Take three ounces of Amyllum, being a kinde
Marcellus. of meat; three months old, into as much Goats milk as you shall think fit, and so give it the patient by fapfofitory means for the Bloudy-flix. Oxen, Sheeps, or Goats milk, layeth the exacularions and flowings of the belly, so it be fed on the coals, after the use of glyters, if a man secrete inwards do bind with filth, but if not, after the homets be led to the roots and flock of the yard, freth Goats milk must be applie of the mesure Hemian, and no least, but it must not be done all together, but apart. The next day let the milk be the only half be diminished, still taking away that which is uppermost (I mean the skin or froth that gathereth in setting) and so use it.

For the risings and flowings of the belly and the Fix, it is very good to get Cows milk or Goats, as is before mentioned of the Cow. Panick being fed in Goats milk, helpeth the belly, being taken twice a day, and so it is good for the fretting of the guts. Old bread tempered with Goats milk, being given those that have the Flux in their belly twice a day, in manner of loping, it is a present help.

The juice of planted pease, soaked with Goats milk, helpeth the slack of the belly. The milk is good with Goats milk, after one hath failed two days, let him drink Goats milk, that are fed with Ivy, without any other kinde of meat, for three days together.

They that are troubled with the pain in the milke, the belt remedy is this: let milk Goats be kept falling three days, and in the third day let him eat Ivy only, and let them be milked before they drink; and let the failing patient griev'd about his milke, take three Sextaries warm of that milk, so soon as he is milked, and so let him drink it the space of three days, during which time he shall not eat nor drink any other meat, and it shall help him marvellously. He that hath the Computation of the Spleen, let him drink the whay of Goats that are fed with Ivy. Goats milk also half sodden, so it be of them that feed on Ivy only, it may be given to children that are troubled with the pain in the milke. A drink made of Goats milk and rennet put to it (as Cheese is accustomed to be made) and given to those that have the Dropes, they shall be holpen. Also Goats milk kiliceth the Worms.

Those that are troubled with the grief of the reins, let them take three cups of Cretian fiod in Wine, and so much of Goats milk, and three and thirty grains of Cowcumber seed, all well bruised together, which he may drink at one draught. Antholius saith, that a porreger full of Goats milk, with as much Amyan, which is as much as three porrengers of Sheeps milk, and three ounces of Oyl, all which well tempered together, must be given through a horn to a Horse that piffeth blood, and it will remedy the same; and Polygynius saith, that Goats milk and Amyan, with three Eggs and the juice of Pellitory, is good for the same disease in Horses. The meal of Betony soaked out of Goats milk, layeth the blood dropping out of the paps. Phyfition to drink certain medicines made of Goats milk that increase Fenus.

The men of Thesalia drink another root of a certain herb (called Orecim) being fofter and nothing inferior with Goats milk, to fill up men to carnal copulation, and they drink the harder kinde of root to temperate to play it. The root Raps orn (as some call it) being given to women with childe, it maketh them that they cannot conceive, being of watery condition: against which Goats milk soaked with Honey, is an excellent remedy.

If the hinder parts that are somewhats fliferly stand further out then the rest, and open, anoint them with Goats milk warmed. If any mans Sheep be sick, let him take Goats milk mingled with Wine, and so let him give it them to drink. If Lambs be troubled with Agues or sicknes, let Goats milk be given them through a horn.

Cheese made of Goats milk is an excellent help for those that have drunk Mifelden. For other bitings of Beasts, (besides that of a mad Dog) Goats Cheese well dried with wyde Marjoram must be drunk. The same is also excellent against the stinging of Serpents; for all other bitings and stingings of Iffer Beasts, it is also a very good remedy. Being dried out of Vinegar and Honey, taketh away Ulcers and Blisters.

This tame Cheese when it is new, so it be well press'd, and no what y left in it, and mixed with Honey, is most excellent against the quartain Ague. Goats cheese also reprefeth all dolors and punctions; and being soft and new, and made with Honey, and covered with a woollen or linnen cloth, taketh away the puffing up of the flesh. It being dried by scallions, you may anoint Saint Aeculapius.

Antonio fire with it. Being dried out of Honey and Vinegar, (when men do bath) without Oyl it may be anointed on black wheels. That which is freth and well riwared, being laid on the eyes, it quickly affageth the pain. It is also exceeding good for the pricking of the eyes, the grief of the head and feet, it is also good for the dropping of the eyes, with a little warm water applied unto it, and if it be a swelling of the eyes, then out of Honey, either of which griefs is to be keep warm with what.

For the grief of a mans Yard, sweete Goats Cheese and Honey, of a like quantity in a Poultec made in a new earthen pot, and so laid thereunto twice a day, but not wath the place with old Wine that is to be cured. It is good for Carbuncles; and if a woman be sick of her womb, and troubled with a Fever, let her take half a Chemix of Pettipurege, and so much Nettle-feed, and half a Chemix of Goats Cheefe scraped, being tempered with old Wine, and afterward being sodden, let her sup it up, and if she have the Flux, let her drink the black wilde Grape, and the rinde of a Pomegranate, and a Nut-kernel, and the rennet of a Bull, thefe being washed in black Wine, Goats Cheefe, and Wheat-flower, put them together.
The urine or dung of such Females as live in the Mountains drunk in Wine, cureth the Falling evil; and in Galen time they gave the crindles of Goats in Wine against the Jaundice, and with the same they anoint them that have the Flux, and made into a Poultice, is very helpful against the Colick; but Marcus prepareth it on this manner: first it must be steeped in water and strained, with sixty grains of Pepper, and three prorringers of Sweet water, and so divide it into three equal potions to be drunk, in three several days: but the body of the patient must be first washed or anointed with Aegus, fo as all perditions by sweat may be avoided.

Aetius against the hardness of the Spleen, prepareth a plainer made of Goats dung, Barley meal, and the dung alone against all tumors or swellings of the milt. Against water lying betwixt the skin, and the skin and the flesh this is prepared many ways, and first against the Dropfie, they feeth it in the urine of a Boy which hath tailed of poiffon, or in the Goats urine, till it be as thick that it will fick and cleave, and it will purge all by the belly, and also the thavings of hides which Coriers make, fow in Vinegar with Goats dung is accounted in England a singular medicine to repurge all hydrope swelling in the legs and belly.

The urine of Male-goats drunk in sweet water expelleth the Stone out of the Bladder. Against the pain in the hips, the Aetius prescribeth in this manner, which they call aduotion (betwixt the thumb and the hand) there is a hollow place wherein they put Wool dipped in Oyl; afterward they set on fire little piles of Goats dung in the fame Wool, and there let it burn till the flame and vapour thereof be fensibly felt in the hip-bone: some use to apply this to the fat, but in our time it is all out of use, and feeng yet the pains of the hip do rather fall into the thighs, flins and legs, then irreed up into the Armes and shoulders, Aetius and Carnarvius fay, that this aduotion for the hips was used in the ancient time divers ways, and some on this manner, holding the burning dung in a part of tongs unto the leg of that side where the pain lyeth, untill the aduotion be felt in the hip, and this cure used Diocorides.

Quintillus used another way, which was this: he first of all heat the Goats dung, and therewithall burned the soft and fethy part of the great toe, neer unto the nail, untill it pierced to the sick place; after which, they lay beaten leaves of Leeks with Salt to the place, but in the hard bodies of Country men inured to labour, they apply the Dung of Goats with Barley meal and Vinegar.

The same with Saffron and Goats fweat, applied to the Gout, hath effect; or else Mustard seed, flacks of Ivy, Betony, or the flower of Wilde-cucumber, the fame drunk with Spikenard, or other Spices, firret up a Womans flowers, and caufeth efficac deliverance, but being beaten into Meal and Vinegar, and laid to a Womans belly, with Wool and Frankincense, layeth all Fluxes and Issues: alfo little bals of the fame with hairs, and the fat of a Sea-calf, wrought al together, and perfumed under a woman, hath the fame effect, or else the liver of a Sea-calf, and the thavings of Cedar-wood.

Pliny affirme that, the Mid-wifes of his time lade the greatft Flux of the belly by drinking the urine of a Goat, and afterwards anointing it with the dung of a Horse that hath bruised his hoof; Goats boid with Vinegar cureth the fame, and an Aple-tree have worms in it, the dung of a Goat and the urine of a man laid to the root drive them away.

The urine of Goats blood drunk with Vinegar, refifteth the Stinging of Serpents. and also being laid to bunches and swallowings in the feth, in what part forey they be, it diuiffeth and expelleth them. Against the fitches of the neck, which they call, Ophidiatrrs, take urine of a Goat, and the heads of Scallions bruised to juice, and imbue them into the ears; and the fame mingled with the Oyl of Rifes and a little Nitre, cureth the pain in the ears by infuffion, or by the fmoke perfumed in a Goat's horn twenty days together.

Against natural deafness take the horn of a Goat newly flain, and fill it with urine, and hang it up nine days in the smoke, and afterwards ufe it. The urine of a Goat made warm, and infliffed into the ears, and the fame anointed with fat, is good for the veins of the throat. For the Dropfie drink one spoonful mingled with Cardam, and warm it at the fire: alfo mingled with Wine or Water, it expelleth the Stone in the Bladder, according to the faying of Serenus:

Ne cu nefien unmine capere probatur humor,
Obvit hic morbum fabeaflaque fame remittit.

The fame Phyfitian prescribeth Goats crindles to be drunk in Wine against the Jaundice, and to try the fluxes of women, the fame dung tyed in a cloth about unquiet children, especially women-kind, maketh them more full; being mingled with Wine, cureth the bitings of Vipers, and the dung taken out of the Goats belly and anointed upon the fore, cureth it with all speed: the fame vertue it hath to heal men wounded by Scorpions, being decocted in Vinegar, it cureth also the biting of a mad Dog, mixed with Honey and Wine.

Being laid upon a Wound it keepeth it from swelling, it hath the fame vertue mingled with Barley meal, but healeth the Kings evil. It is used alfo to raper fores and ruptures, being applied to the fuppurations, it keepeth down the swallowings of womens breasts, being first dryed, and then steeped in new Wine, and so laid to the fore, for it digetheft inflammation.

When the eye-lids be thick, hard, red and bald, take Goats dung and Mouse dung, of either a like quantity burned, and twice so much of the powder of the Grecian canes, with Honey Atech; and anoint
The History of Four-footed Beasts.

Dams, also doth: laying it round about the wound, it cureth burnings and draweth out heat, with Oyl of Roses and Vinegar (as Galen writeth.)

It is also commended for broken joints, because it suftereth them not to swell or start out, being once fet, therefore must it be used with Honey and Wine, and it hath the same operation for broken ribs, for it openeth, draweth and healeth: also it being decocted with Vinegar, it healeth the pains in the nerves, although they be ready to rot, and eafeoth the pain in the joints: the fime of a fat Goat cureth the Gout, and the contraction or shrinking of the nerves, being dressed with Vinegar, and made as thick as Honey, it helpeth the trembling members. It is very dry, and therefore (Araldew faith) it cureth the Fistula, making a plaifer thereof with the meal of Beans, Wine and Leigh, which hath been seen wonderfully to dry up the Fiftula. With Oxyem and Vinegar it cureth the Aeftium, but it muft be burned.

Take seven bals of Goats dung, work them in Vinegar, then anoint your fore-head therewith, and it eafeoth the pain in the head, or else mingle it with Oyl of Roses, and spread it upon a cloth laying it to your temples, change it morning and evening, and you shall finde great ease thereby.

If the eyes be swollen at any time, binde this dung unto them: being mingled with liquid pitch and Honey, healeth them which are sick of the Quinffe; being gargarized in the mouth, he which is sick of an old Cough, let him take the dryed trundle and put them into the bell Wine, and drink it off, to thall he presently avoid his feem and filthy humor, and be healed.

The Remedies out of a Wilde Goat.

The fame vertue which are in the Goats before spoken of, do also belong to the Wilde Goats, the blood take away bunces in the fleeth; and being mingled with Sea-palm, eafeoth the hair to fall off. An Ointment made of the fat of Goats, is profitable to them which have webs in their eyes; and the fat of Mountain Goats, helpeth infected Lighes: His liver broiled upon coals and taken alone, helpeth the Flix, but most certainly when it is dried and drunk in Wine: the gawis is good for many things; especially it is a Treacle against poiyon, suffusions, whitenes and bijnedd of the eyes, by anointing it curereth the purblinde and the webs in the eye; and generally it hath the fame properties in every part as the tame Goats before spoken of.

The like may be said of the Kids or young Goats and first of all A Kid being fit stonder alive, and his warm fleeth laid to a poiyoned wound, doth most affuredly heal the same. Others take the warm fleeth of Kids and perfume them with hair, by the favour whereof they drive away Serpents: the skin newly pulled off, and put upon the body beaten with fripes, take away their pain: others again use it against the Crampisand not without reason, for the tender skins of Limbs & Goats, being sprinkled or dipped in warm Oyl; giveth very much strength and patience to endure the Convulsion.

Fraxagor prescribeth the fleeth against the Falling evil; and by gargarizing the brood when it was fode, cureth the Quinffe and forenefs of the throat. Demetrias faith, that the brain being drawn through a gold ring, and given to a Hawk which hath the Faling sicknes, it will work admirably upon her. The blood being dried and decocted with marrow, is good against all intoxicates passions, and being mingled with sharp Vinegar before it be congealed, it helpeth the spitting of blood: the same being eaten, cureth all kindes of Flixes, being taken three days together. Galen rehearseth in the Antidote of Urbane, among other things, the blood of Kids to draw the dead young ones out of the Dams belly.

With the fat there is an Ointment made with Rose water, to heal the fiffures of the lips and nose, which is much desired of Women, not only for the before rehearsete vertue, but also becaue by anoiting they keep by it their face from Sun-burning. The French and Italian call it (Tomato) becaue it smelleth like Apples, they put alo into it Musk and Rose water, a pound of Kids fewer, and warm it in a Bath untill all be white, and so wath it with the fode Rose water, and afterward refe the in a glafs: The Ointment which is called (Ulycemium album) is like unto it: the afhes of the thighs of a Kid, healeth burtinefs, and lacheth blood: the rennet is also commendable against Hemlock, or Toad-fool, and against all the pooyounful strokes of Sea-beats: being drunk in Wine, it layeth bleeding, and refreheth excrations of blood: being taken with Vinegar it helpeth the fix: being drunk falling, it hath some operation to stay womens flowers. The lights of a Kid fod and eaten falling, preserve from drunkennefs that day; and the powder of it burned, eafeoth the itching of the eyes, and peel eye-lids, if it be applid like Sinbium: likewife the bladder of a female Kid drunk in powder, helpeth the inconfoency of urine: the milk laid upon the spleen of an infant, affwages the pain and tumors thereof; the liver is not fit for temperate men, but for weak cholerick men.

The Inhabitants of the Mount Atlas do gather Eusforbium, and corrupt it with Kids milk, but it is discerned by fire; for the good Eusforbium being burned, yeeldeth an unacceptable favour, and so we conclude this story, with the two Emblems of Alcohol. One againeth them that take much pain, and make good beginnings, but evil ends, like a Goat which giveth a good meath of milk, and over-turneth it with her foot.
The other Emblem is upon a Goat, the which by her Keeper was constrained to give a young Wolf fuck, who afterward notwithstanding that good turn, devoureth his Nurse; and it may be applied unto them which nourish their own harms, and save a thief from the gallows.

**Cepra lupum men sponite me nunc unde latte.**
**Quod male pastoris provida cura jubet:**
**Creverit ut semel, mea mea postwhere paxsit:**
**Improbitas nullo spectitur obsequiis.**

There is a pretty comparison of a Harlots love to a fisherman, which putteeth upon him a Goat skin with the horns, to deceive the Sargus-fish, for that fish loveth a Goat above all other creatures, and therefore the fisher-man beguilith her with a false appearance, as the flattering love of Harlots doe simple minds by fained protestations.

**Of the GVLO.N.**

His Beast was not known by the Ancients, but hath been since discover'd in the Northern parts of the World, and because of the great voracity thereof, it is called (Gulo) that is, a devourer in imitation of the German, who call such devouring creatures Viljuff, and the Swedians, Greff; in Lithuania and Muscovia, it is called Raffomelk. It Mathias is thought to be engendered by a Hiena and a Lionis, for in quality it resembleth a Hiena, and it is the fame which is called (Crucuta:) it is a devourer and an unprofitable creature, having sharper teeth then other creatures. Some think it is derived of a Wolf and a Dog, for it is about the bigness of a Dog; it hath the face of a Cat, the body and tail of a Fox; being black of colour: his feet and nails be molt sharp, his skin rully, the hair very sharp, and it feedeth upon dead carcasses.

When it hath found a dead carcass he eateth thereof so violently, that his belly standeth out like a bell; then he seeketh for some narrow passage betwixt two trees, and there draweth through his body, by pressing whereof, he driveth out the meat which he had eaten: and being so emptied returneth and devoureth as much as he did before, and goeth again and emptieth himself as in former manner; and so continueth eating and emptying till all be eaten. It may be that God hath ordained such a creature in those Countries, to express the abominable gluttony of the men of that Country, that they may know their true deformed nature, and lively ugly figure, represented in this Monster-eating-beast: for it is the fashion of the Noble men in those parts, to sit from noon till midnight, eating and drinking, and never rise from the table, but to disgorge their Romachs, or eafe their bellies: and then return with refreshed appetites to ingurgitate and consume more of Gods creatures: wherein they grow to such a height of beastliness, that they love both feme and reafon, and know no difference between head and tail. Such they are in Muscovia, in Lithuania, and most famous of all in Tartaria.

These things are reported by Olaus Magnus, and Mathias Michan; But I would to God that this fame (more then beastly intemperate gluttony) had been circumscrib'd and confined within the limits of those unhchristian or heretical-apollatical-countries, and had not spread it self and infected our more civil and Christian parts of the World; so should not Nobility, Society, Amity, good fellowship, neighbourhood, and honesty, be ever placed upon drunken or glutinous companions: or any man be commended for bibbing and lurking in Wine and Beer like a Swine: When in the mean season no spark of grace, or Christianitie, appeareth in them: which notwithstanding they
they take upon them, being herein worse then Beasts, who still reserve the notes of their nature, and preserve their lives; but these lose the marks of humanity, reason, memory and sense, with the conditions of their families, applying themselves to confume both patrimony and peace in this voracity, and forget the Badges of Christians, offering sacrifice to nothing but their bellies. The Church forfake them, the spirit accuseth them, the civil world abhorreth them, the Lord condemneth them, the Devil expelleth them, and the fire of Hell it self is prepared for them; and all such devourers of Gods good creature.

To help their digestion, for although the Hiena and Gulon, and some other monsters are subject to this glutanny, yet are there many creatures more in the world, who although they be Beasts and lack reason, yet can they not by any famine, stripes, or provocations be drawn to exceed their natural appetities, or meate in eating or drinking. There are of these Beasts two kinds, distinguished by colour, one black, and the other like a Wolf, they seldom kill a Man, or any live Beasts, but feed upon carrion and dead carcasses, as is before said; yet sometimes when they are hungry, they prey upon Beasts, as Horses, and such like, and then they frigely ascend up into a tree, and when they see a Beast under the same, they leap down upon him and destroy him. A Bear is afraid to meet them, and unable to match them by reason of their sharp teeth.

This Beast is tamed, and nourished in the Courts of Princes, for no other cause then for an example of incredible voracity. When he hath filled his belly, if he can finde no trees growing to near together, as by fiding betwixt them, he may expel his excrements; then taketh he an Alder-tree, and with his fore-feet rendeth the same asunder, and seteth through the midst of it, for the sake aforefaid. When they are wilde, men kill them with bows and guns, for no other cause then for their skins which are precious and profitable; for they are white spotted, changeably intertiled like divers flowers; for which cause the greatest Princes, and richest Nobles use them in garments in the Winter time, such are the Kings of Poland, Sweedeland, Coaftland, and the Princes of Germany; neither is there any skin which will notten take a colour, or more confidently retain it. The outward appearance of the said skin is like to a damask garment, and besides this outward part, there is no other memorable thing worthy observation in this ravenous Beast, and therefore in Germany, it is called a four-footed Vulture.

**Of the GORGON or Orange Lybian Beast.**

Among the mani old and divers sorts of Beasts which are bred in Africk, it is thought that the Gorgon is brought forth in that Country. It is a fearful and terrible beast to behold, it hath high and thick eye lds, eyes not very great, but much like an Oxe or Bugils, but all fiery-bloody, which neither look directly forward, nor yet upwards, but continually down to the earth, and therefore are called in Greek, Catoblepunts. From the crown of their head down to their nose they have a long hanging mane, which make them to look fearfully. It eateth deadly and poyfonful herbs, and at any time hee lese a Bull or other creature whereof he is afraid, he presently caufeth his mane to fland upright, and being fo lifted up, opening his lips, and gaping wide, sendeth forth of his throat a certain sharp and horrid breath, which infecteth and poysoneth the air above his head, so that all living creatures which draw in the breath of that air are grievously afflicted thereby, losing both voyce and sight, they fall into lethal and deadly Convulsions. It is bred in Heperia and Lybia.

The Poets have a fiction, that the Gorgone were the daughters of Medusa and Pouxopis, and are called Sirengs, and by Hesiodus Sibens, and Euryale, inhabiting the Gorgodian Islands in the Atlantic Ocean, over against the gardens of Heperia. Medusa is said to have the hairs of her head to be living Serpents, against whom Perseus fought, and cut of her head; for which cause he was placed in Heaven, on the North side of the Zodiac above the Wagggon, and on the left hand, holding the Gorgous head. The truth is that that there were certain Amazons women in Africk, divers from the Scythians, against whom Perseus made war; and the Captain of those Women was call Medusa, whom Perseus overthrew, and cut off her head, and from thence came the Poets fiction, describing it with Snakes growing out of it as is aforefaid. These Gorgons are bred in that Country, and have such hair about their heads, as not only exceedeth all other Beasts, but also poysoneth when the b(ndeth upright. Pliny called this Catoblepunts, because it continually looketh downward, and faith that all the parts of it are but small, excepting the head, which is very heavy, and exceedeth the proportion of his body, which is never lifted up, but all living creatures dy that see his eyes.

By which there ariseth a question, whether the poyson which he sendeth forth, proceed from his breath, or from his eyes. Whereupon it is more probable, that like the Cockatrice he killeth by seeing, then by the breath of his mouth, which is not competable to any other Beasts in the world. Besides when the Souldiers of Marius followed Jugurtha, they saw one of these Gorgons, and supposing it was some Sheep, bended the head continually to the earth, and moving slowly, they set upon him with their swords, whereas the Beast disclaiming, suddenly discovered his eyes, setting his hair upright, at the fight whereof the Souldiers fell down dead.

Marius hearing thereof sent other Souldiers to kill the Beast, but they likewise dyed as the former. At left the Habitants of the Country, told the Captain the poyson of this Beast nature, and that if he were not killed upon a sudden, with the only sight of his eyes, he sent death into his hunters.
hunters: then did the Captain lay an ambush of Soldiers for him, who slew him suddenly with their spears, and brought him to the Emperor; whereupon Marcellus sent his skin to Rome, which was hung up in the Temple of Hercules, wherein the people were feasted after the triumphs; by which it is apparent, that they kill with their eyes, and not with their breath.

So that the fable of Serosius, which reporteth that in the furthest place of Atlas, these Gorgons are bred, and that they have but one eye a piece, is not to be believed, except he mean, as else-where he confefseth, that there were certain maids which were sitters, call Gorgons; and were so beautiful, that all young men were amazed to behold them. Whereupon it was said, that they were turned into ftones: meaning that their love bereft them of their wit and fene. They were called the daughters of Cetus, and three of them were made Nymphs, which were called Porphre, Enyo, and the third Dimos: so called as Geraldus faith, because they were old women, so soon as they were born, whereunto was affigned one eye and one tooth. But to omit these fables, it is certain that sharp poifoned fights are called Gorgon Blepen, and therefore we will follow the authority of Pliny and Athenaeus. It is a Beafl all fet over with scales like a Dragon, having no hair except on his head, great teeth like Swine, having wings to fly, and hands to handle, in nature betwixt a Bull and a Calf.

There be Islands called Gorgones, wherein these Monfters—Gorgons were bred, and unto the days of Pyrrhus, the people of that Country retained some part of their prodigious nature. It is reported by Xenophon, that Hanno, King of Carthage ranged with his Army in that Region, and found there certain women of incredible swiftnetfs and peculiaritv of foot. Whereof he took two only of all that appeared in fight, which had fuch rough and sharp bodies, as never before were seen. Wherefore when they were dead, he hung up their skins in the Temple of Juno, for a monument of their iftrange natures, which remained there unto the deftruction of Carthage. By the confideration of this Beafl there appeareth one manifest argument of the Creators divine wifdom and Providence, who hath turned the eyes of this Beafl downward to the earth, as it were thereby burying his poifon from the hurb of man; and shadowing them with rough, long, and flrong hair, that their poifoned beams should not reflect upwards, until the Beafl were provoked by fear or danger, the heavines of his head being like a clog to refrain the liberty of his poifonful nature, but what other parts, vertues, or vices are contained in the compas of this Monfter; God only knoweth, who peradventure hath permitted it to live upon the face of the earth, for no other caufe but to be a punishment and scourge unto mankind; and an evident example of his own wrathful power to everlafting destruction. And thus much may serve for a description of this Beafl, until by Gods Providence, more can be known thereof.

Of the HARE.

A Hare is a four-footed Beafl of the earth, which the Hebrews call Aranbet, in the feminine gen-der, which word gave an occafion to an opinion that all Hares were females, or at the leaft that the males bring forth young as well as females: whereof we shall fee more in the fequell of this fatory. And the Jews fay, that it signifieth nothing elfe in Hebrew but a Hare, for which word Deur. 14. the Chaldee tranflate Aratoba; the Arabians, Erreb; the Persians, Kargos. Avicenna cal-lefth it Aranberti; Sabinus, Aranbertis, Aranbertus, and Arasben; the Saracents, Arneph; the Gracians, Lagos, Lago, Lagos, because of his immoderate luft. It is called Foon for his fear, and in Latine, Lupus, of Leopes, signifying fwiiftnefs of feet, and that it is not heard when goeth; howsoever some men derive it from Lepor, the Greek word, others derive Lagos from La, betokening elevation, and Oos, signifying an ear, because the pricketh up one of her ears when the runneth. The Italiens cal-lefth it Luveta; the French, Liureau, and Lourebat, Leurebat; the Spaniards, Liebre; the German, Hals, or Hatt; the Ilyrians, Zogicz.
There are four sorts of Hares, some live in the Mountains, some in the Fields, some in the Marshes, and some everywhere without any certain place of abode: They of the Mountains are most swift, they of the fields less nimble, they of the marshes most slow, and the wandering Hares are most dangerous to follow: for they are so cunning in the ways, and mutes of the field, running up the hills and rocks, because by custom they know the nearest way, and forbearing down hills, sometime making heads upon the plain ground, to the confusion of the Dogs, and the dismayning of the Hunter.

Pellæus faith, that there be certain Hares called Elymenus (almost as big as Foxes) being blackish, of long bodies, and large white spots upon the top of their tails; these are called of their country (like the Elymen Dogs). There be also Hares called Mofchias, so called because of their sweet smell, or else that they leave in their foot-steps such a strong savour, whereunto when the Dogs fennel, they are said to be almost mad. At Pisâ the Hares be very great, because there they have more grateful meat then in other places.

In the neither Panemnes they are much fatter and better tafted than they be in Italy, the Italian Hare hath its fore-legs low, a part of his back-pale yellowish, the belly white, the ears long: In Gallia beyond the Alps, they are also white, and therefore some have thought that in the Winter time they eat snow: and this is certain, that when the snow melteth, their colour is much altered. There hath been white haired Conies, whole skin was black, and hair of their ears black. They are bred in Libya, in Sephonia, and in Italy, in the top of the Mountains, and so brought into other Countries. Some again have been white in the Winter, and return to their former colour in Summer. There are great store of white Conies in Flânia, and Lezovina, but they are leffer esteemed and sold cheaper. (Schoenberger's faith) the back of a Hare is commonly ruffer, or like Olive colour interlined with some black spots: the common Hare of the Alps never changes colour, and it is greater than the ordinary Hare. There are white Hares also in England; and in Muatovia, there are a multitude of Hares of all colours, but no where so many as in the Demer Islands, because there are no Foxes there to kill the young ones, or Eagles, which frequent the highest Mountains in the Continent, and the people that inhabit there regard not hunting.

In Athens (Mauriæs faith) there were no Hares, but Alcuin affirmeth the contrary. Hares brought into Italy, d'ye presently, and if they range a little about the Country, yet return them to the haven where they came to land, and depart not from the shore till they be dead. Hagesander Delphicus writeth, that in the reign of Antigonus, there was such a number of Hares in Atlantia, (and afterward in Lebros) that the Inhabitants were constrained to go to the Oracle, and demand counsel how to refit the Hares, from whom they received answer, that they must nourish Dogs and kill them: and whereas they so abounded in Lebros, which at the peoples own request and care, multiplied to their great harm; afterward a sign of the Hare was placed in Heaven, to remember them, that nothing so much hurteth man-kinde, as their own desires: as in ancient time there was not a Hare in those Countries.

In the next place we are to describe all the parts and members of Hares, for it is admirable to behold how every limb and part of this Beall is composed for celerity: and first of all the head is round, nimble, short, and of convenient longitude, prone to turn every way; the ears long and lofty like an Asse, for Nature hath so provided, that every fearful and unarm'd creature should have long and large ears, that by hearing it may prevent its enemies, and save it self by flight. The lips continually move sleeping and waking, and from the flit which they have in the middle of their nose, cometh the term of Hare-lips, which are so divided in men; for if a Woman with child fee one of them suddenly, it is dangerous, if the childe prove not Hare-lipt. They have alfo teeth on both fides.

Whatsoever Beall be born in your flock, having that mark upon them, which is commonly called Hares-tooth, never suffer them to suck their dam, but call them away as unprofitable and baf- fard cattell; the neck of a Hare is long, small, round, foft, and flexible, the fotheadlone ftrait and broad, for her more easie turning; her legs before soft and round, flanding a little aunder, very flexible, broader behind then before, and the hinder leggs longer then the fformer; a beart not narrow, but fitted to take breath in courfe; a nimble back, and fleftie belly, tender loins, hollow fides, fat buttocks filled up, comely, ficroag, and nervy loins, the fore-feet very flexible; only it wanteth a commodious tail for courfe. The eyes are brown, it is a subtile Beall, but not bold; it seldom looketh forward, because it goeth by jumps. The eye-lids coming from the brows, are too short to cover their eyes, and therefore this fene is very weak in them; and befoide their over-much sleep, their fear of Dogs and fwitneffe, caufeth them to fee the lefs; when they watch, they flut their eyes; and when they sleep they open them.

Wherefore the Egyptians when they will fignifie and open a manifest matter, they picture a Hare sleeping. They watch for the moft part all the night: when the eye-lid of a man is pulled back, so as it will not cover the ball of the eye; the Graecians call it Lagophthalma, that is, Hares-eyes, for so doth Callus define it, it cometh sometimtes, when in the cure it is cut away too much, or else when the hinder lid falleth down, and flandeth not up to meet the other, but concerning the colour of their eyes, it is not very possible to difcover it, as well for the caufes aforesaid, as also because it is seldom taken but dead; yet this is certain, that with what colour it beginneth, in that is continueth to the laft, according to Virgils verfe:
The liver is so parted at once, that a man would think there were two livers in one body, and Pliny is bold to affirm, that in Britium, Thrine, Propontis, Scygmum, Boltra, and other places they are all such. Archebodius upon this occasion affirmeth, that a Hare beareth young both male and female, so that the Grammarians know not what of what sex to make it. Albertus and Demostrus are absolute in this point.

Bionius confesseth he cannot tell, the common sort of people suppose, they are one year male, and another female. Eliasius also affirmeth so much, and by relation of his friend, he ventureth the matter, and faith moreover, that a male Hare was once found almost dead, whose belly being opened, there were three young ones alive taken out of her belly, and that one of them looked up alive, after it had lain a while in the Sun, and it put out the tongue as though it desired meat, whereupon milk was brought to it, and so it was nourished.

But all this is easily answer'd, if a man follow the cotinuel of Archebodius, and look upon the secrets of nature, he shall finde a most plain dilinitio; but the hunters object that there be some which are only females, and no more: but no male that is not also a female, and so they make him an Hermaphrodite. Nepher also affirmeth so much, for he saw a Hare which had stones and a yard, and yet was great with young, and also another which wanted stones, and the males genital, and also had young in her belly. Bandellus faith, that they are not stones, but certain little bladders filled with matter, which men finde in female Hares with young, such as are upon the belly of a Beaver, where-in also the vulgar fort are deceived, taking those buncles for stones, as they do these bladders. And the use of these parts both in Beavers and Hares is this; that against rain both one and other seth thereout a certain humor, and anoint their bodies all over therewith, and so are defended in time of rain. The belly of a Swow, a Bitch, and a Hare, have many cels in them, because they bring forth many at a time, when a Hare lyeth down, the bendeth her hinder legs under her loins, as all rough-footed Beasts do.

They are deceived, which deliver by authority of holy Scriptures, that Hares love to lodge them upon Rocks, but we have manifestel else-where, that those places are to be understood of Conies. They have fore-knowledge both of winde and weather, Summer and Winter by their noxes, for in the Winter they make their forms in the Sun-fline, because they cannot abide frost and cold, and in the Summer they reit toward the North, remaining in some higher ground, where they receive colder air.

We havefewed already that their flight is dim, but yet herein it is true that Platarch faith, they have Visum induficium, an indefatigable sense of seeing, so that the continuance in a mean degree, countervaileth in them the want of excellency. Their hearing is most pregnant; for the Egyptian when they signifie hearing, picture a Hare; and for this cause we have fewed already that their ears are long like horns, their voyce is a whining voyce, and therefore Authors call it Vagittum, as they do a young childe, according to the verfe of Ovid:

Intus ut infantia vagiit ore Puér.

They reit in the daytime, and walk abroad to feed in the night, never feeding near home, either because they are delighted with forien food, or else because they would exercise their legs in going, or else by secret instinct of nature, to conceal their forms and lodging places unknown; their heart and blood is cold, which Albertus aliggneth for a caufe of their right-feeding: they eat also Grapes, and when they are overcome with heat, they eat of an herb called Lactea Lepere, and of the Roman, and Histrarian, Celerbati, of the Veterinari, Lebucium; of the French, Lefroite; that is, Hares-letece, Hares-houfe, Hares palace; and there is no diufafe in this Beast the cure whereof of the doth not seek for in this herb. Hares are said to chew the cud in holy Scripture, they never drink, but content themselves with the dew, and for that caufe they often fall rotten: It is reported by Philippus Belat, that when a Hare drunk Wine, the infinitely dyed; they render their urine backward, and their milk is as thick as a Swines, and of all creatures they have milk in udders before they deliver their young.

They are very exceedingly given to sleep, because they never wink perfectly: some Authors derive their name Lagos in Greek, from Laiin to see, and thereupon the Greeks have a common proverb Lagos Cathedon, a sleeping Hare for a dissembling and counterfeiting person, because the Hare feeth when the sleepeth; for this is an admirable and rare work of Nature, that all the residue of her bodily parts take their reit, but the eye flandeeth continually senti- neling. Hares admit copulation backward, and herein are they like to Conies, because they breed every moneth for the molt part, and that many; at that time the female provoking the male to carnal copulation, and while they have young ones in their belly they admit copulation, whereby it cometh to pafs, that they do not litter all at a time, but many dayes sunfer, bringing forth one perfect, and another bald without hair, but all Blinde like other cloven-footed-beasts. It is reported that two Hares brought into the Ille Carpathus, filled that Island with such abundance, that in short time they destroyed all the fruits; whereupon came the Whether malé bear young like females.
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The proverb Carpathius Legem, to signify them which plow and sow their own miferies.

It falleth out by divine Providence, that Hares and other fearfull Beasts which are good for meat, shall multiply to greater numbers in short space, because they are naked and unarmed, lying open to the violence of men and beasts, but the cruel and malignant creatures, which live only upon the devouring of their inferiors, as the Lyons, Wolves, Foxes, and Bears, conceive but very seldom, because there is lefts life for them in the world, and God in his creatures keepeth down the cruel and ravenous, but advancesthe simple, weak, and despised: when the female hath littered her young ones, she first hicketh them with her tongue, and afterward seeketh out the male for copulation.

Hares do seldom wax tame, and yet they are amongst them, which are neither Placide nor Fere tame nor wilde, but middle betwixt both, and Cardane giveth this reason of their untameable nature, because they are persuaded that all men are their enemies. Scaliger writeth; that he saw a tame Hare in the Cattle of Mount-Pegal, who with her hinder legs would come and strike the Dogs of her own accord, as it were defying their force, and provoking them to follow her. Therefore for their meat they may be tamed and accustomed to the hand of man, but they remain incapable of all discipline, and ignorant of their teachers voice, so as they can never be brought to be obedient to the call and command of their teacher, neither will goe nor come at his pleasure.

It is a simple creature, having no defence but to run away, yet it is subsile, as may appear by changing of her form, and by scraping out her foot-steps when she leapeth into her form, that so she may deceive her Hunters, also she keepeth not her young ones together in one litter, but layeth them a furlong one from another, that so she may not lose them all together, if peradventure men or beasts light upon them. Neither is the careful to feed her self alone, but also to be defended against her enemies, the Eagle, the Hawk, the Fox, and the Weep, for the fear of all these naturally, neither can there be any peace made betwixt her and them, but the rather trufthem the scathing brambles, the solitary woods, the ditches and corners of rocks or hedges, the bodies of hollow trees, and such like places, then a dissembling peace with her adversaries.

The wilde Hare when she taketh a Hare, she feteth one of her talons in the earth, and with the other holding her prey, striveth and wresting with the Beast until she have pulled out his eyes, and then killet him. The Foxes also compass the poor Hare by cunning, for in the night time when he falleth into her foot-steps, he restrains his breath, and holdeth in his favour, going forward by little and little, until he finde the form of the Hare, and then thinking to surprize her, on a sudden leapeth to her at catch; but the watchful Hare doth not take leap after a careless manner, delighting rather in subtilty than security, when the perceiveth the approaching of such a guest, (for the windeth him with her nostrils) and thinketh it better to go from home, than make a fealt to her foe.

Wherefore the leapeth out of her form and runneth away with all speed she can. The Fox also followeth, but a far off, and the hearing her adversary no more, betaketh her self to reit again, under some bramble, or other bush, supposing that the ground the hath gotten shall never be recovered of her again: but the Proverb is old and true. Fair and softly goest far, to the Fox which feldom getteth meat, but winneth it with his wit and his heels, followed as fast as he can; for a flow pace over-taketh the Hare at reit, which when the perceiveth, forth the goeth again, forfaking her quiet sleep, for the safe-guard of her life, and having gone so much ground as she did before, the betaketh her to reit the second time, hoping that now she hath quit her self from her foe; but the Foxes belly hath no ears, and therefore hunger is to him like a thousand whips, or a whole kennel of Hounds, forcing him forward after his game.

The Hare for her better safe-guard getteth up into some small tree, being sleepy and weary through the Foxes pursuit; the Fox cometh to the tree and shaketh it by the roots, and will not suffer the Hare to take any reit, for he hopeth that time and travel will bring her to his diift; the leaps away again, and leteth no graps grow under his feet, hoping that her heels shall deliver her from the Foxes teeth. After follows the Fox, and at length as the greater purfe over-weighteth the smaller, and the great Horfe of War over-weigheth the little hunting Naph, doth do the Junly limbs of the Fox, out-laf the weak legs of the Hare, and when the can go no more, needs must her weaknes betray her to her foe, and so was her flight and want of reit like a sicknef before her death, and the Foxes preluence like the voyce of a palling bell.

And on the contrary, all the labour of the Fox, like a gentle and kinde exercize for the preparing of his stomack to such a fealt. The fift and leaf of kinde of Wolves are also enemies to Hares, and the Weale do craftily sport and play with the Hare until he have wearied him, and then hangeth fift upon her throat, and will not los her hold, runn the Hare never so fall, till at last through want of breath, and loss of blood, she falleth into the hands of her cruel play-fellow, who turneth sport into good earnell, and taketh nothing from her but her blood, leaving her carcasse to be devoured by the hands of others, and in this manner is the filly Hare hunted by beafts: Now let us hear how she is hunted of men.

It is before exprefled, that every limb of a Hare is composed for celerity, and therefore the never traveleth but jumpeh, her ears lead her the way in her chase, for with one of them she kiketh to the voyce of the Dogs, and the other the ftrecheth forth like a fail to haffen her courfe, always stretching her hinder-feet beyond her former, and yet not hindering them at all; but sometimes when her ardent desire maketh her ftrain to fly from the Dogs, the falleth into the nets, for fith
is the state of the miserable, that while they run from one peril, they fall into another; according to the saying of holy Scripture, 1sa. 2:4. *He that goeth out of the snare, shall fall into the ditch.* And this is to be noted, that if the Hare had the wit to run forthright, and never to turn, she could not be so easily over-taken; but because of her love to the place of her breed, there she is taken and losteth her life where she had her beginning: for the preferreth that place above all other for safety. Again some of the elder Hares, assooned as they hear the Dogs, fly to the tops of the high Mountains, and from hence more easily run up the hill, then down.

Wherefore the Hunter must studiously avoid that disadvantage, and keep her down in the valleys. In paths and high ways the runneth more speedily, wherefore they must be kept from that also. The Hares of the Mountains do oftentimes exercise themselves in the plain, and through precipice grow acquainted with the neerer ways to their own lodging; so that if at any time the husbandmen set upon them in the fields, they daily with them till they seem to be almost taken, and then on a sudden take the neerer way to the Mountains, not suspected by the Hunters, and so take sanctuary in the unaccustomed places, whither Dogs nor Horfes dare ascend. For the Hares which we keep in the buffies are not able to endure labour; and not very swift (by reason of the pain in their feet) growing fat through idleness and discontinuance of running, they must be hunted on this spot: first of all they go through young woods and hedges, such as grow not very thick, for the thicker hedges they leap over, but when they come to many thick places that they must leap over, they quickly fall down and are tired.

The Dogs first of all go from them carelessly, because they cannot see them through the trees, but suffer them to run in the Woods following a far off by the scent, until at last they get the sight of her, and through their better exercise and skill, easily overtake her: but the campedial or field-hare being leaner of body, and oftener chased, is taken with more difficulty, by reason of her singular agility, she therefore when she begins her course, leapeth up from the ground as if she flew; afterward pafteth through brambles and thick buffies with all expedition; and if at any time she come into deep grass or corn the eaily delivereth her self and flieth through it. And as it is said of the Lyons, that with their tails they flie up their strength and courage; so are the ears of this Beasts like Angels wings, Ships sails, and rowing Oars, to help her in her flight; for when the runneth the bendeth them backward, and weft them in head of sharp spurs to prick forward her dulness, and in her course the taketh not one way, but maketh heads like labyrinths to circumvert and trouble the Dogs, that fo the may go whither the will, always holding up one ear, and bending it at her pleasure to be the moderator of her chase. Neither is the fo unprovident or prodigal of her strength, to spend it in one course, but observeth the force of her protector, who if he be slow and sluggish, she is not profuse of her celerity, but only walketh gently before the Dogs, and yet fafely from their clutches, refering her greatest strength to her greatest necessity; for the knoweth that he can out-run the Dogs when she pleasteth, and therefore it is a vain conceit to trouble her self more then she is urged. But if there be a Dog following her more swiftly then the reft, then the setheth forward with all the force she can and when she hath left both Hunters and Dogs a great way behind her, the setheth to some little hill or riding of the earth, there the rafeth her self upon her hinder legs, like a Watch-man in his Tower, observing how far or near the enemy approacheth, and perceiving that she is delivered from perfit of all danger, seemeth to deride the imbecility of their forces.

The younger Hares by reason of their weak members, tread heavier upon the earth then the elder, and therefore leave the greater favour behindem them: and in ancient time, if the Hunters had taken a young Levern, they let her go again in the honour of Diana. At a year old they run very swift, and their favour is stronger in the Woods then in the plain fields.

The Hare is followed by the fooe and so defecry'd, eispecialy in soft grounds or high-ways, but if they go to the Rocks, to the Mountains, or to the hollow places, they are more uncertain, if they ly down upon the earth (as they love to do) in red fallow grounds they are easily desecry'd.

When they are startled in the plain fields they run far, but in the Woods they make short courses: If they hear the Dogs they raise themselves on their legs and run from them; but if fearful imagination oppresseth them, as they oftentimes are very sad and melancholy, supposing to hear the noise of Dogs where there are none such flitting, then do they run to and fro, fearing and trembling, as if they were fallen mad.

Their footstepes in the Winter time are more apparent then in the Summer, because as the nights be longer, so they travel farther: neither do they smell in the Winter mornings so soon as it is day, until the frost and ice be thawed, but eispecialy their footstepes are uncertain in the full Moon, for then they leap and play together, flattering and putting out the favour; nor in the Spring time also when they do indiger, they confound one another footstepes by multitude.

They which will go forth to hunt or take pleasure in that paltine must rife early, felt they be deprived of the smell of her footstepes, so shall not the Dogs be able any way to finde the Hare, nor the Hunters their game and paltine; for the nature of the footstep remains not long, but suddenly in a manner vaniseth away every hour. Again, they must set the Hills and Rocks, the Rivers, and also the Brooks with nets and gins; whereby as it were dropping up the flitting holes, paths, and ways, wherein the Hare goeth, and the part trutheth, whether they be broad or narrow: The best time for the effecting and bringing hereof is after the Sun-rising, and not in twlight of
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break of the day, left the nets be let near the Hares form, and the be scared away, but if they be let a far off, there is no danger of her departure after the Sun is up, because then the giveth her fell to sleep: the nets must be set on this manner, let the rodes be pitched upright, tailing their faire to the tops, raising the net in the middle, and hang a long rope at one side, that when the Hare is in the net she may not go out again. When the Hare is raiied, he which followeth her to the nets, must drive her in with a great cry, and being in the net, he must gently restrain the Dogs, and make signification to the hunter that she is taken, or else if it fail, let him shew the contrary.

The keeper of the nets must keep silence, left by hearing of his voice she be averted, and the hunter must take the Dogs and go to the forme, there to flart the Hare; and the fashion was in ancient time among the Pagan,first of all to call upon Apollo and Diana, (their imagined Gods of hunting) to speed their sport, and to whom they promised part of their game. But when the Dog is sent forth, and after much winding and calling about, falleth into the footstep of the Hare, then let him loose another, and seeing them run in one course, uncouple all the Hounds, let him follow after, speaking to his Dogs by name, saying now A, then B, Habacuc, and such like words of Art, not preñling them too eagerly at the beginning, but gently encouraging them to the pursuit.

The Dogs take this for a sign of joy, and being glad to gratifie their Masters run along with a gal- lant cry, turning over the doubtful footsteps; now one way, then another, like the cuts of Inden- tures, through rough and plain, crooked and straight, direct, and compass, wagging of their tails, and glistering with their eyes, until they finde the Hares form; then they make signification thereof to the hunter with their tails, voices, and pieces; now running together, now standing still divided aunder, they set upon the beast, who suddenly riseth and turns the cry of the Hounds after her flight, then must the Hunters cry out, Jf Dogs, there boyes, there, Jb, A, Jb, Jc, and the flor- tefl word is fitted to applaud the Dogs.

Let the Hunter also run after, so as he never meet the Hare and trouble the hounds, the poor Hare getts her out of sight, and runs to the place where she was first startled, but if the fall into the nets by the way, the keeper of the nets must give token to the Hunters by his hollowing voice, after the usual manner of woodmen; O oha, O ohe, that the game is at an end, and then call the Dogs by name. If the Hare run far, and fland long on foot, and it the Dogs paffe over the Hares footstep and difcry them not, then must the Hunter recall them with a peculiar hunting term, and lead them to the place, or calling himself about as near as he can, rebuking the Dogs that rage at uncertainties, and exhorting them that be diligent; who when they have found the footings again, run on as before, with all alacrity. In the mean reacon let the Hunter fland till the Dogs do infallibly demonstrate unto him that they have found the game again, then let the Hunter proceed as before, exhorting his Dogs to the sport, and if it last all day, the Hunter must regard that he refrain and keep the Dogs to the weareied Hare, left if they flart a fresh one, their labour be lost. If it be in Summer about noon, let him reft his Dogs for strengthening of their feet till the heat be over; if it be snowie weather, and the winde is Northerly, the footstepes remain long and are not eafiely melted, but if the South winde blow, the footsteps are very quickly shortned: and neither when the snow falleth left, or the winde bloweth strong, must the Dogs be led forth to hunting, for the snow beryth the Dogs nofe, and the froft killeth the heat of the Hares foot; then let the Hunter take his nets and some other companion with him, and go to the Woods or Mountains, tracing out the footsteps of the beast in the snow unto the form, which is in some steep or shadowed place, where the winde blows over the snow, for in such places doth the Hare seek her lodging; having found it, let him not take too near, left he raife her from her feat, but cast round about, and if he find no footings from that place, he may take it for granted that the Hare is found.

Having so done, let him leave her, and seek another before the snow be melt, and the footings dañhed, having respect to the time of the day, that so he may inclofe and take them before the evening: then let him draw his nets round about them, compassing the whole plat wherein the refleth, and then raife her from her fiofl: if she awoide the net, he must follow her by the foot unto her next lodging place, which will not be far off, if he follow her clofe, for the snow doth weary her and clot upon her hinder feet, so as the Hunter may take her with his hand, or kill her with his fiaffe.

Bloweth another way of taking Hares: The Hunters spread and divide themselves by the untillled and rough wayes, leading a Gray-hound in a flip, beating the duffes, hedges, and thorns, and many times fending before them a quick smelling Hound, which raife the Hare out of her mufe, and then let go the Gray-hound with hunting terms, and cries, exhorting him to follow the game; and many times the Dogs tear the Hare into many pieces, but the Hunters must pull them bleeding from the mouth of their Dogs.

Others again lie in wait behind bushes and trees to take the Hare on a sudden, and some in the Vineyards, for when they are fat and rety, they are eaily overtaken, especially in the cold of Win- ter. Gyr (as appeareth in Xenophon) was taught to make duches for the trapping of Hares in their course, and the Eagles and Hawkes watch the Hare when she is raiied and hunted by the Hounds, and sit upon her on the right side, whereby they kill and take her, so that it is true which was said at the beginning, that Hares are hunted by Men and Beasts.

Having
Having thus discoursed of Hunting and taking of Hares, now it followeth also in a word or two
to discouer of Parks or inclofed Warrens, wherein Hares, Conies, Deer, Bores, and other such beasts
may always be ready, as it were out of a store houfe or Seminary, to serve the pleasure and use of
their Masters: Graphio luth, that the first Roman that ever inclofed wild beasts, was Faustus Hespi-
num, and Caius faith, that \\u201cHares had been inclofed for the manner was (faith Columella) that-
Richmen poffeed of whole Towns and Lordships, neer some Village, inclofed a piece of land by
pau, madwall, or butt, flushing the fame with divers wild beasts, and such a one there was in the
Lordship that Ptolemy bought of Marcus Pile in Tarsuionum: and Quintus Harenensis saw at Lanreut a
wood inclofed, containing fifty Acres, wherein were nourished all forts of wild beasts, within the compa-
fs of a wall.

Quintus Albea commanded his Forrester to call the beasts together before him, and his guedes fit-
ting at Supper, and imminently he founded his pipe, at the voice whereof there assembled together a
great company of all forts, to the admiration of the beholders. Quintus Fulvia had a Park in Tar-
quium, wherein they were not only the beafts before spoken of, but also wild Sheep, and this
contained forty Acres of ground, besides he had two other. Varro gave a Parke in France,
containing the compafs of three thousand paces, wherein he preferred not only Deer, Hares, and
Conies, but also Doe-mule, Bees, and other Beasts: the manner whereof ought to be thus; first that
the walls or pales be high, or close joyned, so as neither Badgers, nor Cats may creep through, or
Wolves, or Foxes, may leap over: Wherein ought also to be bushes, and broad trees for to cover
the beafts against heat and cold, and other secret places to content their natures, and to defend them
from Eagles and other ravening Fowls: In which, three or four couple of Hares do quickly multi-
ply into a great Warren. It is also good to low Goards, Mifleine, Corn, Barly, Pears, and such like,
wherein Hares delight and will thereby quickly wax fat. For their fatting, the Hunters use another
devife, they put Wax into their ears, and so make them deaf, then turn them into the place where
they should feed, where being freed from the fear of sounds (because they want hearing) they grow
fat before other of their kind.

Concerning the use of their skins, in some Countries they make sleeves and breeches of them,
especially for.workflowing for all outward cold diseases, Heliodorus lay upon a bed filled with new or
wool of Hares, for that there is nothing more fof, for which cause the Cretians made Pounge thereof,
to cleanse the eyes of men. The Goldsmiths use the feet or legs of Hares in stead of brushes or
brooms, to take of the dust from their plate. The flesh of Hares hath ever been accounted a delicate
meat (among all other four-footed beafts) as the Thrufh among the fowls of the air, according to the faying of Martial:

Inter euer Turdus, quius me judicis cortis,
Inter quadrupedes, gloria prima loque.

In ancient time (as Caius faith) the Britains were forbidden to eat Hares, like as the Jews by the
law of Moses, Lev. 11. Deut. 14. Plutarch enquirieth the reaon why the Jews worship Swine, and
Hares, because they did not eat their flefth: whereas unto anfwer was made, that they abftained from
Hares, becaufe their colour, ears and eyes, were like Ases; wherein the ignorance of Gods law ap-
peared, for they abftained from Hares at Gods commandment, because they were not cloven-footed,
for the Egyptians accounted all fufit creatures to be partakers of Divinity.

Their flefth ingenereth thick blood, therefore it is to be prefcribed for a dry diet, for it bindeth
the belly, procureth urine, and helpeth the pain in the bowels: but yet it is not good for an
ordinary diet, it is hot and dry in the second degree, and therefore it nourilheth but little being fo
hard, as Galen witnefeth.

The blood is farre more hot then the flefth, it is thin, and therefore watery like the blood of all fear-
fully beafts; the hinder parts from the loins are most delicate meat, called in Latin, Turdus, for it was
wont to be dressed with fat, and Coriander leafe, yet the forepart is the fweeter, for the manner of the
drifting whereof I leave every man's humour. It was once believed that the eating of the
hinder loins of a Hare would make one fair, or procure blee, whereupon Martial received a Hare
from Gellius a friend of his with this meaffege;

Fomus fepum Marce diebus oris.

And he retorted the jeft in this manner upon Gellius:

Simum non fallis, fi verum (luc mea) dieis,
Edisti numquam, Gellius, in lefserm.

Lampridius writeth that a certain Poet played upon Alexander Severus the Emperor for
eating Hares flefth, which made him fai, whereas in truth he was very black; In this
manner:

Pulcherum quod vides esse nostrum regem,
Quem Syrum fuum detulis propagat.

Venatus
The Emperour seeing those Veres, for Emperours have long ears and hands, made answer unto them as followeth;

Pulchrum quod putas effusum regem
Vulgari (mifrande) de fabella,
Si verum putas eff, non irafcar
Tantum in comedar veniam lepuscular
Ut si animi malis requifis
Pulcher, ne inviden livore mentis.

If any man finde fault with the Emperors Veres, Erosmus hath already answered the objection, that Kings and Emperours are not subject to laws of verifying; besides his answer was in Greek, and this but translated.

The eating of Hares procureth sleep, and thus much for the flesh and parts. The Epithets of a Hare expressing their natures are, Eared, trusting their feet, fearful, careful, fruitful, flying, raging, unhorned, little, crafty, tender, sharp-smelling, swift, whining, and wandering, besides many other Greek names. When Xerxes gathered his Army to go against Greece, a Mare brought forth a Hare, which forestewed that great Army should work no strange effect. And another Mare of three years old brought forth an Hare which spake as soon as it was littered, biting her mother with her teeth, and killing her, and while they looked upon her, sucking her dam's blood, feathers grew out of her back in fashion of wings, which being done, the monfer lifting up the voice spake in this manner; 'Fundite jam labymnas & insivia miseris mortuis, ego hinc abeo: that is to say, O ye wretched mortal men weep and figh, I go away: at which words the flewe away and was never seen more.

There were present at the fight herof seven publick notaries, which called witnesse and made instruments thereupon, (as Antonius Batius writeth in his Epistle to Petrus Tolem of Lyons in the year 1537. in December:) whereunto the said Tolem made this answer, The days fhall come (faith he) except the mercy of God prevent them, that children fhall think they do obedience to their Parents if they put them to death.

They shall grieve because they were born, and fay they are adulterate, as the Hare that was born of the Mare. Likewise it is reported by Lysander, that when the Carminians refused the conduct of the Lacedemonians, and the Lacedemonians befieging the City, fell to be very much afraid, and unwilling to feel the walls; whiles they flood in this amaze, suddenly a Hare leaped out of the town ditch; which thing when Lysander faw, he exhorted his Souldiers, faying, Be not afraid (O ye Spartans) of this fuggifh and unexercifed people, for you fee they flir not out of the City, but fuffer Hares to lodge under their walls; whereupon came the proverb (Dumre lepures sub manibus) Hares fliep under their walls, to ftignifie a flothful, fecure, fuggifh, idle, and untruthie people.

The Eagles of Norway lay their young ones in Hares skins, which themselves pull off. There is also a bird in Sythia, about the bignes of a Buffard, which bringeth forth two at a time, and keept them in a Hares skin which he hangeth upon a bough. Hares were dedicated to love, because (Xenophous faith) there is no man that feeth a Hare but he remembereth what he hath loved.

They fay the City Boco of Laconia was builded by a signe of good fortune taken from a Hare, for when the Inhabitants were driven out of their Country they went to the Oracle to defire a place to dwell in, from whom they received answer, that Diana should shew them a dwelling place: they going out of their Country a Hare met with them, which they confefted to follow, and there to build where the Hare fhould lodge, and they followed her to a Myrtle tree, where the Hare hid her self, in which place they builded their City, and ever afterwards retained with veneration a Myrtle tree. And thus I will conclude this moral discoure of Hares, with that Epigram of Martial made upon occasion of a Hare that in sport paffed through the mouth and teeth of a tame Lion, faying that she was ambitious in offering her life to the Lions teeth in this wise:

Non facit ad sevus cervix nifi prima leones,
Quid fugis hos dentes, ambitio lepus?
Scilicet a magnis ad te defendere tauris,
Et quam cernunt frangere colla velint.
Deferanda tibi est ingentis gloria fatis
Non potes hoc tenum praeda sub bofhi morti.

The medicines of Hares.
Pliny.
it cureth the stone: and Sextus faith, he made trial of it by putting a spoonful of the powder into water wherein was a rand hote, and the same hote did instantly melt and disolve: so likewise a young Hare cut out of the May belly and burnt to powder, hath the same operation. A wafcoat made of Hares skins daylight the bodies of young and old: also the same dipped in Oil laid to the fore places of a Horfes legs where the skin is off by over reaching, it often cureth the fore: the blood taken warm out of the body amended Sun burning, freeclies, pimples, and many other faults in skin and face; which Geoffs prescribes to be done, first by wafting the place many hours together, in the morning with the blood, and afterwards anointing it with oil: the fame virtue is in the fat of Swans mingled with oil, according to the saying of Serenus:

Cyncest adipos bilart mifcefa Lypsin
Omnine malum priferre maculofo ex ore fugabit,
Sanguine vel leposia mobut detoxifuit annunt.

It also cureth and take away the thick skin of the eye, it adorneth the skin, produceth hair in bald places, and eafeth the Gout.

O no cutim, produco pilos, et fede podagra
Sanguine fij fuerint membri furnintia mos.

It being fryed, helpeth the Bloody flux, Ulcers in the bowels, and old lache, and take away the poison of an arrow; it being anointed upon a hot outward Ulcer, it ripeneth it. After a bath, it cureth a great Leprosie by wafting. The Rennet of a Hare by theteth loofefeth the fleth is profitable for Ulcers in the bowels, it breaketh the stone being beaten, and being decocted like a Fox, eafeth the Gout and the shrinking up of the finewes. The fat with the flowers of beans beaten together, dreweth thorns out of the fleth: If a nail flieck in the sole of the foot, beat together the fat of a Hare and a raw Sea-crab, then lay it to the place, and right against it upon the same foot lay also two or three Bean flowers, and it lie a day and a night, and fo it shall be cure’d: and the fame dreweth a poisoned Arrow out of a Horfe. Andeys reporteth to Geoffs, that he hath often heard that the fewet of a Hare layed to the crown of a Womans head, expelth her fecundis, and a dead child out of the womb. The powder made of this wool or Hair flangeth bleeding, if the hairs be pulled off from a live Hare, and flopped into the nofe.

The powder of the wool of a Hare burned, mingled with the Oil of Myrtles, the gall of a Bull, and Allum wafted at the fire, and anoint it upon the head, fallenth the hair from falling off: also the same powder decocted with hony, helpeth the pain in the bowels, although they be broken: being taken in a round ball the quantity of a Bean together; but these medicines must be used every day.

Arnaldus prescribes the hair to be cut shor, and so to be taken into the body against burffenes: A perfame made of the dung and hairs of a Hare, and the fat of a Sea-calfe, draweth forth Womans flowers. The seed of a wilde Cucumber, and an Oyster shell burned, and put into Wine, mingled with the hair of a Hare, and wool of a Sheep, with the flower of Roes, eureth inflammations of Womans secretis after their child-birth. Also Hippocrates prescribes the shell of a Cuttle-fish to be beaten into Wine and layed in Sheeps wool and Hares hair, helpeth the falling down of the womb of a Womans child. Ifa mans feet be scorched with cold, the powder of a Harer wool is a remedy for it. The head of a Hare burned and mingled with fat of Bears and Vinegar, eafeth the hair to come where it is fallen off, and Galen faith that some have used the whole body of a Hare so burned and mingled for the foresaid cure, being layed in manner of a plaiter.

By eating of a Hares head, the trembling of the Nerves and the loffe of motion and fene in the members receiveth singular remedy. Thefe things alfo preverve teeth from aking: the powder of a Hares head burned with fat mingled together, rubbed upon the teeth, or if you will put thereunto the whifeit Fennel, and the dried beans of a Cuttle fish.

The Indians burn together the Hares head and Mice for this purpofe. When ones mouth fmeeteth frong, this powder with Spickard affwage the fneel. The brain is good againft poison. The heart of a Hare hath in it a theriacal virtue, all. The brain is proved to have power in it for comforting and repairing the memory. The fame fed and eaten helpeth tremblings which happen in the afeecions of ficknes, such as is in the cold flaking fit of an Aquae: It is to be noted, that all trembling hath its original caufe from the infirmity or weaknes of the Nerves, as is apparent in old age, although the immediate caufes may be fome cold constitution, as abundance of cold humors, drinking of cold drink, and fuch like; all which tremblings are cured by eating the brain of a Hare roasted, (faith Diffaroides and Egineta.) It alfo helpeth children to breed teeth eafily, if the gums be rubbed therewith, for it hath the fame power againft inflammation, that hony and butter hath: being drunk in Wine and the flowers thereof rofel and eaten, it is good for him that hath any pain in his bladder, and if the Urine exceed ordinary, for flaying therewith, take the brain hereof to be drunk in wine.

The tooth of a Hare layed to that part where the teeth ake, eafeth them. Take the Maw with the dung in it, and waft it in old wine fo as the dung may mingle therewith, and then give it to one fick of the Bloody flux, and it fhall cure him. The Rennet hath the fame virtue that is in a Calves

Serenus

Refis.
or Cows, and whereas Nisianther praises it in the first place, for the virtue it hath in it against poison, Niccan an ancient Phyftitian gives it the second place, for it is full of sharp digesting power, and therefore hath a drying quality. It diffolves the congealed and coagulated milk in the belly, and also clotted blood within in the stomach more effectually then the Rennet of any other beast, being al- way the better for the age.

Being mingled with Vinegar, it is drunk against poison; and also if a Man or Beast be anointed with it, no Serpent, Scorpion, Spider, or Wilde Moule, whose teeth are venomous will venture to sting the body fo anointed; or else inwardly take thereof three spoonfuls with Wine against the said bit- tings, or of any Sea-fish or Hemlock after the wound received; and with Vinegar it is sovereign ag- anist all poison of Chelminthum, or the blood of Buls.

The fame being drunk in Vinegar, or applied outwardly to womens breasts, diffiperseth the co- agulated milk in them; also being mingled with Snails, or any other flifh, which feed upon green herbs or leaves, it draweth forth Thorns, Darts, Arrows, or Reeds out of the belly: or mingled with gum of Frankincense, Oil, bird lime, and Bees-glewe, of each an equal quantity with Vinegar, it blancheth blood, and all ifues of blood flowing out of the belly: and it also ripeneth an old fore, according to the saying of Sennus;

Si indica leporis apicerfa, coagula vinum.

Being layed to the Kings evil in Lint with Vinegar, it diffiperseth and cureth it: also it healeth Cankers, it cureth a Quartain Ague; also mixed with Wine and drank with Vinegar, against the Falling evil and the stone in the bladder: if it be mixed with Sagapumum and Wine Amya, and infused into the ears, giveth help, as also the pain of the teeth. It diffolves blood in the lights, and easeth the pain of blood congealed in your stomach: when one spiteth blood, if he drink Samia and Myrtle with the Rennet of a Hare, it shall give him very prentif eafe.

The latter learned Phyftitians take a drink made of Vinegar and Water, and give it warm to eject and expell blood out of the Lights; and if any drop thereof cleave in the bowels, then do they three or four times together iterate this potion, and after apply and minifter all binding astringent med- icines and emplasters, and for the Bloudy flux it is good to be used: It is held alfo profitable by Disforides and other the ancients, that if the pap or brett of a Woman be anointed therewith, it lay- eth the fucking Infants loofenes in the belly, or else given to the childe with Wine, or (if it have an Ague) with Water.

There is, faith Arifidote, in the Rennet a fiery quality, but not in the highest degree, for as fire diffolves and disintereth, so doth this in milk diffinguish the airy part from the watery, and the watery from the earthy: Wherefore when one talleth an old Rennet, he shall think he talleth an old purifiied Chese, but as leaven is to bread, which hardneth, joyneth, and feafoneth the fame, fo is Rennet to Chese: and therefore both of them have the fame qualities of diffolving and binding: Galen affirmeth that he cured one of Gowty tumours and swellings, by applying thereunto old and strong purifiied Chese beaten in a morter, and mixed with the salted fat or leg of a Swine. If a Man drinks of the Bloudy flux drink therein a receipt, two scruples for two days togethere, it will procure him remedy.

For pacifying the Colic, drink the Rennet of a Hare: the fame mingled with Goose grease, lay- eth the incontinence of Urine, it also retaineth womens flowers. If it be drunk with Vinegar it helpeith the seconds and being applied with Saffron and the joyce of Leeks, driveth a dead childe out of the womb. If it be drunk three or four days together after child-birth, it cauleth barrennes. There are (faith Pliny) a kind of Wormes which being bound to Women before the Sun rising in a Harts skin, caufe them that they cannot conceive: this power is called Apocon.

Mefarius faith, that if a Woman drink this Rennet to her meat before the conceive with childe, she should be delivered of a Male child: and such is the foolish opinion of them which affirn at this day, that if men eat parfly or white buds of black ivi, it maketh them unable to carnall co- pulation.

The Rennet of a Hare easeth and diffiperseth all tumors and swellings in Womens breasts: the Lights of a Hare powderd with salt, with Frankincence, and white wine, helpeith him that is vexed with the Falling ficknes, if he receive it thirty days together. Sextius acribeth the fame remedy to the Hart, and Pliny commendeth the Lights to heal the pain in the eyes. Being drunk in powder, it cereth the seceres. If the heels be troubled with Kibes, they are healed with the fat of Bears: but if they be wrung with a cold, they are healed with the duft of a Hares hair, or the powder of the Lights: Likewise when the foot is hurt with straw shoes, it hath the fame operation. The ancient Magi took the skin of an Ox in powder, with the Urine of Boyes, and sprinkled it on the toes of their feet, binding the heart of a Hare to the hands of him that hath a Quartain Ague: and some cure it by hanging the heart of a young Hare or Leveret to the neck or arme, in the beginning of the fit of him that is so visiteth. The heart of a Hare dried mixed with Frankincence or Manna in white wine drunk thirty days together, cureth the Falling sicke.

For the pain in the belly take the fame medicine, and drunk with water mingled with Samia, cereth the fluxes of womens: also if a man that hath the flux eat the Liver of a Hare dipped in sharp Vinegar it helpeith him if he be Liver sick: or if one have the Falling sicke, eat the quan- tity of an ounce thereof, and it helpeith him. The Gall of a Hare, the Heart, Lungs, Lights and Liver
Of the Hedge-bog.

of a Weasel, mixed together, three drams, one dram of Cafflowen, four drams of Myrrha, a dram of Vinegar and Honey beat together, cureth him that hath a swimming or dizziness in his Brain. The gall newly taken forth mingled with a like portion of honey, and warm in the skin of an onion, and put into the ear, giveth remedy to him that can hear nothing.

If the that is sick in the milt, that is, if it be over hard, swallow down the milk of a Hare not touching it with his teech, or seeing it with his eyes, it cureth him. The belly of a Hare with the entrails toiled and burned in a frying-pan mixed with Oil, and anointed upon the head, relieve where the hair. The reins of a Hare inveterately and drunk in Wine, expel the stone, and being fed, cot and the white loins, Albertus other stones, the stones of a Hare roasted and drunk in Wine, lyeth the incontinency of Urine. In the pain of the reins, and of the hip bones, they have the same operation. The secrets and stones of Hares are given to Men and Women to make them aper to copulation and conception, but this opinion hath no other ground beside the fecundity of the beast that beareth them. Which they carry about with them the ankle bone of a Hare, shall never be pained in the belly (as Pliny faith) So likewitse Sexv: and Marcellus.

Take the ankle bone out of a live Hare, and hairs from her belly, therewithal make a thread and bind the said bone to him that hath the Colick, and it shall ease him. The said bone also beaten to powder is reckoned among the chief remedies against the stone. When Women have hard travel, put it into Creteick-wine with the liquor of Penyroyal, and it procureth speedy delivery, being bound to the benummed joynts of a man leg bringerth great ease: so also do the feet being bruited and drunk in warm Wine, relieve the arteries and shortness of breath; and some belive that by the foot of a Hare cut off alive, the Gout is eas'd.

The time of a Hare cureth forcorked members, and whereas it was no small honour to Virgins in ancient time, to have their breasts continually standing out; every one was preferced to drink in Wine or such other things, nine grains of Hares dung: the same drunk in Wine in the evening lyeth Coughing in the night; in a potion of warm wine it is given to them that have the Blody flux, likewise if a man be fick of the Colick, and drink three pies thereof in sweet Wine, it procureth him much ease: being decocted with honey and eaten every day, the quantity of a Bean in desperate cafes, mendeth Ruptures in the bowels.

Afcipades in his medicine whereby he procured fruitfulness to Noble Women, he gave them four drams of Myrrha, two drams of Flower-delice, two of Hares dung, confused with Collyrial water, & so put up into their bellies after caesing of the flowers, before they lay with their Husbands. Alinew and Raphae prescrib this medicine to help a woman that wanteth milk in her breasts, Crystall, white Mustard-seed, and Hares dung put into broth made with Fennel.

Of the HEDGE-HOG.

Of the kinds of Hedge-hogs.

As much as there be two forts of Hedge-hogs, one of the Sea, and another of the Land, our purpose in this place is only to discourse of the Land Hedge-hog, the Hebrews call him Kipol which in the 14. of Is. and Zepha. 2. is so translated by the Sepiemonis; though that some of the Hebrews would have it to signifie, a ravening bird, but seeing that I find the word Kipol in moth Hebrew dictionaries to signifie Claudere and Contrahere, and that is most proper to shew up and draw together, I do rather believe that the proper meaning thereof is a Hedge-hog, because this beast so draweth it self together, when it is in danger, as we shall hear more at large afterwards, according to the old Verie.

Pristumque fumusfis corporis eorum.

The Arabians call him Cozufd, or Cozufed; the Grecians, Caucida; the Sepiamento, Mugale. Silvaticus calleth it Agityum, Avice, Adulius, and Alberba signifieth a great Mountain Hedge-hog: the Grecians, Cher, and Aecaneincensi, or Echimos, by reason of the prickles upon his back. The Latins, Ebimus, Eritrus, Ricinus, Heris, and Ebimnsa, the Italians, Riccio, and Ricce, the Spaniards, Eriza, the Portingals, Uìris, or Oriz, Cacile, because of hiding themselves; the French, Herisse; the Germans, Fial, as in lower Germany; in Holland, Een Tieren Verehen; in English a Hedge-hog, or an Urchin; by which name we call a Man that holdeth his neck in his boosome: the Italian, Gius, Malux: and the Illrians, Ancuinet, Zabo, and Ozejebux. So then for the entrance of our discourse, we take it for granted, that Herinas and Echinos signifie one thing, except one of them signifie that kind which is like to a Hog, and the other that kind which is like to a Dog, for they differ in place, or in habitacion: some of them keep in the Mountains, and in the Woods or hollow trees, and other about Barnes and Housfe; in the Summer time they keep near Vineyards and Buffie places, and gather fruit, laying it up against Winter.

It is about the bignes of a Cony, but more like to a Hog, being belet and compassed all over with sharp thorny hairs, as well on the face as on the feet: and those thorny prickles are covered with a kind of soft moss, but when she is angred or gathereth her food, she striketh them up by an admirable instinct of nature, as sharp as pins or needles: there are hair at the beginning, but afterwards grow

The paws.

Hermolax
The History of Four-footed Beasts.

grow to be prickles, which is the least to be marvilled at, because there be Mice in Egypt (as Pliny saith) which have hair like Hedge-hogs. It hath none of these prickles on the belly, and therefore, when the skin is off, it is in all parts like a Hog.

His stones are inward and cleave to his loins like as a birds, he hath two holes under his tail, to eject his excrements, which no creature living hath besides him. His meat is Apples, Wormes, or Grapes; When he findeth apples or grapes on the earth, he rolleth himself upon them, until he have filled all his prickles, and then carryeth them home to his den, never bearing above one in his mouth.

And if it fortune that one of them fall off by the way, he likewise shaketh off all the residue, and walloweth upon them a while, until they be all fetted upon his back again, so forth he goeth, making a noife like a cart wheel. And if he have any young ones in his nest, they pull off his load wherewithal he is loaded, eating thereof what they please, and laying up the residue for the time to come.

When they are nourished at home in houses and brought up tame, they drink both milk and Wine: But there is an Herb (called Potomagion) whereof if they taint, they die presently.

When they are in carnall copulation they stand upright, and are not joyned like other beasts, for they imbrace one another, standing belly to belly: but the prickly thornes upon their backs will not suffer them to have copulation like Dogs or Swine, and for this cause they are a very little while in copulation, because they cannot stand long together upon their hinder legs. When the female is to bring forth her young ones, and feeleth the natural pain of her delivery, the pricketh her own belly, to delay and put off her misery, to her further pain, whereupon came the proverb (as Erasmi saith) Echinius partum differs, the Hedge-hog putteth off the littering of her young; which is also applied against them which put off and defer those necessary works, which God and nature hath provided them
them to undergo; as when a poor man defere the payment of his debt, until the value and sum grow to be far more great then the principal.

The inward disposition of this beast, appeareth to be very crafty and full of subtility, by this, because (Lycophran faith) that Nautilus had a cunning crooked wit, and was called by him a Hedge-hog. When they hide themselves in their den, they have a natural understanding of the turning of the wind, the South and North, and that they are nourished tame in houles, immediately before that change remove from one wall to another; the wilde ones have two holes in their cave, the one North, the other South, observing to flop the mouth against the winde, as the skilful mariner to steer and turn the rudder or sails, for which occasion Aristotle, that some have held opinion, that they do naturally foreknow the change of weather.

There is mortal hatred betwixt the Serpent and the Hedge, the Serpent seeketh out the Hedge-hogs den, and falleth upon her to kill her, the Hedge-hog draweth it self up together round like a foot-ball, so that nothing appeareth on her but her thorny prickles; whereas the Serpent biteth in vain, for the more the laboureth to annoy the Hedge-hog, the more she is wounded and harmeth herself, yet notwithstanding the height of her minde, and hate of her heart, doth not suffer her to let go her hold, till one or both parties be destroyed.

The Hedge-hog roareth upon the Serpent, piercing his skin and flesh, (yes many times tearing the flesh from the bones) whereby he escapeth alive and killeth his adversary, carrying the flesh upon his spars, like an honorable banner won from his adversary in the field. The Wolf also is afraid of, and fleereth from the Hedge-hog; and there is also a story of hatred between the Hare and the Hedge-hog, for it is said, that a Hare was seen to pluck off the prickles from the Hedge-hog, and leave her bald, pieled and naked, without any defence. The Fox is also an enemy to the poor Hedge-hog, and lyeth in wait to kill it, for the proverb is true, Multa non vitat Vulpes, Echinus vero non magnum; that is to say, the Fox knoweth many devices to help himself; but the Hedge-hog knoweth but one great one, for by rowling up her self (as before said) the opposeth the thorns of her back, against the Foxes teeth; which alone were sufficient to secure her from a greater adversary; but the wily Fox perceiveth that he can no where stappen his teeth without danger of himself, pisseth upon the Hedge-hogs face and poisoneth her; wherupon the poor beast is forced to lay open himself; and to take breath against the Foxes thinking excrement: which thing the Fox epying, looth no opportunity, but presently teareth the Hedge-hog in pieces; thus the poor beast avoiding the poison, falleth into the mouth of her enemy.

The manner of Hedge-hogs is, that whensoever they are hunted by Men, they draw up their legs and put down their head to the mosch part of their belly, so as nothing of them can be taken but their prickles; and perceiving that shiff will not serue the turn, but their cape growing desperate, they render out of their own bodis certain urine hurtful to their skin and back, envying that any good thereby should ever come to mankinde; and therefore seeing they naturally know the manifold ues of their own hides, here is the cunning of her hunting, to caufe her first of all to render her urine, and afterward to take her, for the urine maketh the thorns of her back to fall off every day, and therefore they take this course for their last refuge. But in these cafes the Hunters must pourre upon the Hedge-hog warm water, for feeling warme the presently unfolds her self, and lyeth open; which the Hunter must observe, and inflantly take her by one of her hinder legs, so hanging her up till she be killed with famine; otherwife there commeth no benefit by her taking.

With the same skin flead off, brushes are made for garments, so that they complain ill which affirm, that there is no good or profitable condition coming to mankinde by this beast. Again this is to be referred and used for dreefling of flax (as Mulgarin faith) and also it is set upon a Javelin at the dore to drive away Dogs. In ancient time they did not eat the fleith of Hedge-hogs, but now a dyes men eat thereof, (of which they are of the wifmest kind.) When the skin is of their bodies, they seald it a little in Wine or Vinegar, afterward lard it and put it upon a spit, and there let it be roastted, and afterwards eaten, but if the head be not cut off at one blow, the fleith is not good.

The Epithets belonging to this beast are not many; it is called red, sharp, marine, voluble, and rough, whereupon Erasmus said,

Ex litter in Leven nunquam mutabilis Echinum.

And thus much for the natural and moral parts of this beast. Now followeth the medici-
nall. Ten sprigs of Laurel, seven grains of Pepper, and of Opnepam as big as a Peafe, the skin of the ribs of a Hedge-hog, dried and beaten caste into three cups of Water and warmed, so being drunk of one that hath the Colick, and let rest, he shall be in perfecft health; but with this exception, that for a man it must be the membrane of a male Hedge-hog, and for a woman a female.

The frame membrane or the body of all Hedge-hogs burnt to ashes, hath power in it of cleaning, diggetling, and detracting, and therefore it is used by Physicians for taking down of proud swelling wounds, and also for the cleansing of Ulcers and Boyles, but specially the powder of the skin hath that virtue; also it being roasted with the head, and afterwards beat into powder and anointed on the head with hyon, cures the Alpecion.
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The same powder reforteth hair upon a wound if it be mingled with Pech, and if you add thereunto Bears grease, it will restore unto a bald man his head of hair again, if the place be rubbed until it be ready to bleed. The same powder cureth the Fiftula, and some mingle red Snails with this dust, applying it in a plaster to Ruptures and Swellings in the cotes, and being mingled with oil by anneintment, it taketh away the burles in the face, and being drunk in wine is a remedy against the pains of the reins or the water betwixt the skin and the flesh.

A suppuration made of a Hedge-hogs skin, under them that have their Urine stopped, by Gods help (faith my Author) the stopping shall be removed, if it proceed not from the stone, nor from an impostume. The flesh salted, dried, and beat to powder, and so drunk with sweeter Vinegar, helpeth the pain in the reins, the beginning of Dropes, Convulsions, and Leprofies, and all those affections which the Grecians call Καθάρσες. The Mountain Hedge-hog is better then the domestical, having prickles like Needles points, but legs like to the other: the meat is of better taste, and doth more help to the stomach, softening the belly, and provoking the Urine more effectually, and all this which is attributed to Hedge-hogs is much more powerful in the Porcupine.

The Hedge-hog salted and eaten is good against the Leprofies, the Cramp, and all sickness in the Nerves and Pifsick and pain in the belly, rising of windines and difficulty of digestion: the powder appointed on Women with childe, alwayes keepeth them from abortion. The flesh being faile given to a mad Man, cureth him; and being eaten keepeth one from the Strangury; also being drunk in wine, expelleth the stone in the bladder, and is good against the Quotidien Fever, and the bitings of Serpents. The fat of a Hedge-hog layeth the flux of the bowels: If the fat with warm water and hony be gargarized, it amendeth a broken and hoarse voice; the left eye being feryed with O1, yeeldeth a liquor which caufeth sleep, if it be infused into the ears with a quilf. The gall with the brain of a Bat and the milk of a Dog, cureth the reins; likewise, the said gall doth not suffer uncomely hairs to grow again upon the eye-browes, where once they have been pulled up. It maketh also a good eye falve.

Warts of all forts are likewise taken away by the fame; the milft fod and eaten with meft, it healeth all pains in the milft, and the reins dryed are good against a Leprofie or Pifsick coming by Ulcers: or the difficulty of Urine, the Blandy flux and the Cough. The dung of a Hedge-hog fresh, and Sandraqua with Vinegar and liquid pitch, being layed to the head, layeth the falling away of the hair.

When a man is bitten with a mad Dog, or pricked with prickles of a Hedge-hog, his own Urine laid thereunto with a fponge or woof, is the belt cure: or if the thornes fluck in the wound of his foot, let him hold it in the warm Urine of a Man, and it shall easily flake them forth: and Albertus and Rapsus affirm, that if the right eye of a Hedge-hog be fryed with the oil of Abetone or Linseed, and put in a vefsel of red braine, and afterward anoint his eyes therewith, as with an eye-falve, he mall see as well in the dark as in the light. And thus I will conclude this discourse with one story, that a Hedge-hog of the earth was dedicated to the good God among the foolish Pagans, and the water Hedge-hog to the evil, and that once in the City of Phrygia called Asenium, when a great famine troubled the inhabitants, and no sacrifice could remove it; one Euphorbus sacrifed a Hedge-hog, whereupon the famine removed, and he was made Priest, and the City was called Triegas upon the occasion of that sacrifice.

Of the HORE.

When I confider the wonderful work of God in the creation of this Beafs, ending it with a singular body and a noble spirit, the principal whereof is a loving and dutifull inclination to the service of Man; wherein he never faileth in Peace nor War, being every way more neer unto him for labour and travel: and therefore more dear (the food of man only excepted) we must needs account it the most noble and necessary creature of all four-footed Beafs, before whom no one for multitude and generality of good qualities is to be preferred, compared or equalled, whole commendations shall appear in the whole discourse following.

It is called in Hebrew Sus, and a Mare Susofh, the which word some derive from Sin, signifying Joy; the Syriens call it Rekofh and Soufsh; the Arabians, Rancia; and the Caldeans, Ramahum, Sufahat; the Arabians, Bagel; the Persians, Abasa; the Grecians, Hippas, and at this day Algo; the Latins, Equeus, and Caballus; the Italian and Spaniards, Cavalle; the French, Cheval; the Germans, Keffe; the Bohemians, Knis; the Italiens, Kofiba; the Polonians, Konis.

It is also profitable to confider the reafon of fome of these names, both in the Latin and Greek tongue; and first of all Equus feemeth to be derived, ab equitatem,from equality; because they were firft used in Charets and draughts, and were joined together being of equal strength, legs and stature; Caballus feemeth to be derived from the Greek word Caballus, which was a common name for ordinary Hackney-horses, and Horfes of carriage, whereupon Seneca commendeth Marcus Gato, that in his triumph of Cenforthip, \textit{Uno Caballo continent et ne totu quidem, partem enim laricin ab utraque latere dependentes occupabant}; that is to fay, that he was contented with one Horfe for his own faddle, and yet not totally one neither, for the packes that hang on either side of him, poftfeft the greatest
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greatest part, and the true derivation of this word, seemeth to accord with Case, which signifyeth a manger, and An, abundance, because riding Horset are more plentifully fed, and these Horset were also used for plowing, according to the saying of Horset:

Opat ephippia bos piper, opat arare Caballus.

The Grecians call it Hippes, which seemeth to be deriv'd from flanding upon his feet, and this beast only seemeth to be one of the number of them, which are called Armente.

And besides all Histories are filled with appellative names of Horset, such as these are, Altajor, Action, Nigus, and Ortenw, the Horset of Pluto. Actha a Mare of Agamenon remembered by Homer. Action, Stario, Emas, Pheleg, Pyrovi, the Horset of the Sun: Lampos, Podargus, Xampus, Arxom, the Horset of Erymus; by whose aid Hercules is said to overcome Cygnus, the Son of Mars: Balis, Xambur, and Padaus, the Horset of Achilles, Bori), for whom Adrianus made a grave (as Dion writeth) Bromius, Carus, Calsdon, Campbaut, Cnatus, Cnixbe, and Herpius, two names of Britain Horset cited by Martial and Gillius. Cyllar, the swift Horset of Castor, Dimos, and Phoebus, the Horset of Mars. Earthlo, Cnancus, and Sibonon, the Horset of Neptune, Parthenia, and Euripba, Mares belonging to the Contours of Hippolomia, slain by Ornaronus. Harpe, another Mare. Planium, and Corax, the Horset of Elabesia. Epidaminus, who wan the prizes in the sixty sixth Olympiad, and caufed a flatte to be made in Olympiad, and his said Horset and Chariot called Pantarces, and beside these, other Cnacca and Samaus.

Also Pedarces, Rhobus, Smithon, Tagus, Theron, Thoet, Voleris, which was a Horset of Prasonium, and it is reported, that Venus the Emperor fo much affected this Horset, that he not only caufed him to be brought into his own Palace, and to have his meat alway given in his presence, but made of him a picture with a manger, wherein were Grapes and Corn, from whence came the firft Golden Horset or prizes of Chivalry;

Primus equum volucrum Maffili munera regis
Hand fpernenda tuit:

Unto these may be added the affected names of Poets in love of their favorites, as Rhobanus, Vegi-antius, Baratius, the Horset of Remolius, Rubicanius of Argalais, Hippopyrus of Ruferius, Frontinus and Pratulius of Statrapan, and Rondellius of Olivarius.

The Epithets that belong to Horset, are either general or particular, the general may be rehear- sed in this place, such as these are following; brasse-footed, continual, horn-footed, founding-footed, homing, bride-bearer, neighing, maned, duly, four-footed, fretting saddle-bearing, wate-ry, or sweating, whole-footed; and many such others both among the Greeks and Latio's, which howsoever they may contain divers Allelogenes in them, and therefore may seem to be figuratively fed down, yet I thought good being of other opinion to reckon them in the beginning, that to the Reader may consider, that I would be unwilling to omit any thing in this story, which might any way tend to the dignity of the subject we intent of, or the expressing of his nature. Wherefore we will first of all begin with the description of the natural parts of a good Horset.

The hair of a Horset fallet off every year, the neather eye lid or brow hath no hair growing upon it, and therefore Nicom that famous painter of Greece, when he had most curiously limtbeth forth a Horset perfection, and faid in no part of nature or art, but only in placing hairs under his eye, for that only fault he received a disgraceful blame.

The hair of the manes ought to be long, that part which groweth betwixt the ears, upon the Temples, hanging down betwixt the eyes, the Grecians term Frisonium, the Latiis, Caprona, and in English it may be called a fore-top, which is granted to Horset not only for ornament sake, but also for necessity to defend their eyes. The Horset are naturally proud of these locks and manes, as may appear by those Mares which are kept for procreation of Mules, by copulation with Asses, which at the first disposed to indanger with those shaveling and short haired Stalions. Wherefore their keepers shave off their manes, and their fore-tops, afterwards leading them to the waters, wherein while the Mares behold their own deformity, they grow so ashamed, defected, and discoura-ged, that ever after they admit with quietness the Asses to cover them. Therefore it is never good to cut the mane or theetter-locks, except necessity require, for the mane and fore-top is an ornament to the neck and head, and the fetter-locks to the legs and feet: and he that keepeth Horset must as well regard to have them comely for outward grace, as strong and able for necessary labour. Many use to cut the necks of their riding Horset, even as they do of their drawing Horset, which thing al- though it may seem to be done for greater encrease, and farther growth of hair, yet is it unea-ily for an honest rider: some again cut it to fland compas like a bow, and many use the Ammian fashion, cutting the Mane by rows, leaving some longer then other, as it were the batelements of a Church: but the best fashion of all is the Persian cut, whereby the one half of the thicknes is cut away on the left side, and the other on the right side smoothly turned over and combed, ac- cording to the saying of Virgil:

Denfa juba & dextro-juvata rectumbit in armo.
Of the Horse.

But if the Horse be double maned, and so the hair fall half on the one side, and half on the other, then cut all the middle hairs away, and leave both the sides whole: for such was the intention of the Pārtibus. In a Colt or young foal, the hinder part is higher then the forepart, but as he grows in years, so likewise the forepart grows higher then the hinder.

This beast hath two bones in his head, and other two descending from his forehead to the Nostrils, two inferior Gumbes, or cheek-bones, forty teeth, that is to say, four and twenty grinders, four canines, and twelve biting teeth; there are seven cross ribs in his neck, and seven from his reins to his hole, his tail hath twelve commihiures, and two Rugale in his fo-shoulders, from his shoul-lers to his legs other two, from his legs to his knees two more, in his knees there are two supporters, and from the thin to the Articles two more, there are sixteen small bones in the bottom of his hoof, and but one in his breit, in the inward parts there are six and twenty ribs, from the hinder parts to the top of his reins, the two grinding bones; and from them to the hinder part of the head there are two more, and two little ribs from the upper part of the thigh to the Gumba, and from thence to the hairs of the patterns, there are two, and the little ones to the hooves sixteen; so all the bones in number are accounted a hundred and feventy.

Now it followeth to declare the measure and number of the members; there are twelve fleps or degrees in the roof of his mouth, his tongue is half a foot long, the upper lip hath twelve inches; the under lip five, every one of the cheeks ten: from the fore-lock to the Nostrils he hath one foot in length, his two ears contain six inches, and his eyes four inches a piece. From his fore-lock to the Mercurius, there are contained eight inches, the back-bone containeth three and thirty croffe ribs. From the convolution of the reins to the top of the tail, are twelve commihiures, the length of his Segala containeth also twelve inches, from his shoul-lers to his legs fix, from his legs to his knees a foot in length, from the Articles to the hoofs four inches, in his whole length fix feet. And this is the stature of a courageous and middle Horfe, for I know there are both bigger and leffer.

The quality and the measure of the nerves or fiewes is this, from the middle nostrils through the head, neck and back-bone, is a double file or threed to the top of thefelf, which containeth twelve foot in length. The two broad fiewes in the neck do contain four-foot, from the shoul-ders to the knees, there are two fiewes, from the knee to the bottom of the foot there are four fiewes, in the fore-legs there are ten fiewes, in the hinder-legs there are other ten fiewes, from the reins to the foines there are four fiewes, so the whole number amounteth to thirty four. Consequently the number of the veins is to be declared. In the palate or roof of the mouth, there are two veins, under the eyes other two, in the breit other two, and in the legs other two, four under the patterns, two in the angles, four in the crown of the patterns, four out of the thighs, two out of the loins, two out of the Gambes, one out of the rail, and two in the womb or Matrix; so the whole number is nine and twenty.

There are certain veins above the eyes which are divided in Horfes, wherein they are let blood, by making to them small incisions, the blood also is taken out of the veins, in the palate or roof of the mouth. There was an ancient cutifome of letting Horfes blood upon Saint Stevens day, by reason of many holy days one succeeding another, but that cutifom is now grown out of life. Also some take blood out of the Matrix veins; but that is not to be admitted in Geldings, because with their ftones they lose a great part of their heat, excepting extrem necessity, but out of the palat blood may be let every moneth, and Stallions when they are kept from Mares if the vein of their mouths be opened, fall into blindness, although it is no good part of husbandry to let them bleed that year, wherein they admit copulation, for the vacuum of blood and feed, is a double charge to nature.

But the Organical vein of the neck, is the belt letting of blood, both in ftoned and gelded Horfes. The later Leaches make incifion in the great vein called Fontanelle, and in Inn Thymus or Jugula. The eyes of a Horfe are great or glaffie, and it is reported by Augufius, that his eyes were much more bright then other mens, refembling Horfes: these eyes fee perfectly in the night, yet their colour varieth as it doth in Men, according to the caprine and glaffie humour. And sometimes it falleth out, that one, and the fame Horfe hath two eyes of diflinguent colours. When the eyes of a Horfe hang outward, he is called Exoptalmos. Such fair eyes are belt, for Exoptalbe the Horfe of Alexander fhad fuch eyes, but when the eyes hang inward, they are called Calopp-Thalmos, and the Fortibus count them the belt Horfes, whose eyes are of divers colours, and are therefore called Heteroptalmos, because the breed of that Horfe was faid to take the beginning from the Pefthbius, and the reafon why the people loved not thefe Horfes was, because they were fearful, and apt to run away in wars.

The ears of a Horfe, are tokens and notes of his stomach, as a tail is to a Lion, his teethes are changed, yet they grow clofe together like a mans. It is a hard thing for a Horfe to have a good mouth, except his flallion teeth be pulled out, for when he is cheated or heated, he cannot be held back by his rider, but di McNeth the bridle therefore after they be three year and a half old, those teeth ought to be pulled forth. In old age, a Horfe's teeth grow whiter, but in other creatures blacker.

A Mare hath two udders betwixt her thighes, yet bringeth forth but one at a time: many of the Mares have no paps at all, but only which they are like their Dams. In the heart of a Horfe there
there is a little bone, like as in an Oxe, and a Mule; he hath no gall like Mules and Asses, and other whole-footed-beasts, howsoever (some say) it lyeth in his belly; and others, that it cleaveth to his liver, or to the gut-colon. The small guts of a Horfe lie near that gut, that fo one side of his belly may be free and full of passage; and from hence it cometh, that the belt Horfes, when they run or travel hard, have a nofte or rumbling in their belly. The Hip-bone of a Horfe is called by some the haunch, as the Arabian say; the tail (because therewith he driveth away flies) is called Muf-

orium, it ought to be long, and full of hairs. The legs are called Cunbe of Campo; signifying treading; the hooves of a Horfe ought neither to be high nor very low, neither ought the Horfe to reit upon his ankles, and thofe Horfes which have fraught bones in the Articles of their hinder-
knees, feel hard on the ground, and weary the Rider: but where the bones are short in the fame places, as they are in Dogs, there the Horfe also breaketh, and woundeth one leg with another; and therefore fuch Horfes are called Cympapuc. They have also quick ftehi in their hoofs, and their hoofs are fometimes called horns, upon which for their better travel, men have devised to fatten iron plates or fhoes. This hoof ought to be hard and hollow, that the Beast may not be offended, when he goeth upon ftones; they ought not to be white, nor broad, but almoft kept moift, that fo they may travel the better, having strong feet, hard and fround hoofs, for which caufe the Grecians call them Euf pades.

Forasmuch as it is requisite for every man to provide him Horfes of the belt race, and their kindes are divers in moft places of the world, fo the couriers of Horfes do many times beguile the simpler fort of buyers, by deceitful and deceitful afirmation of the wrong Countreys of the belt Horfes, which thing bringeth a confusion: for there are as many kindes of Horfes as Nations. I will therefore declare severally the Countreys breeding the Horfes, for the Region and air maketh in them much alteraction, that so the Reader may in a short view fee a mufle of Horfes made of all Nations. The Wildernes of Acrania, and Etolias is as fit for feeding Horfes as Thell-

faly. The Horfes of the Greeks, Armenians, and Trojans are fit forwar, of the Grecifb I will speak more afterward.

Alexandria was wont to take great delight in Horfes, and combates of Horfes: Apollonius writeth Lib. 5. Ethioptia (as it is reported) breedeth Horfes havinf wings and horns. Varro commendeth the Apol.n Horfes, and Polletarum writeth, that they and the Horfes of Reafo are moft fit for war: he meaneth above all the Horfes of Italy. There have been very fruitful pastures in Arcadia for cat-

tal, especially for breeding Horfes and Asses that are Stallions, for the procreation of Mules, and the breed of the Aroadan Horfes excelleth. The fame man preferreth the Horfes of Thellalia and the Grecifb Horfes, for they are found of their feet and head, but not of comely Butrocks, they have their back bone whole, great and short.

The latter two I might have referred to the whole body of the Horfe. The Horfes of Armenia are very neceffary and convenient for war, for they and the Capodoeans do breed of the Parthian Horfes, havinf their heads are somewhat bigger. Of the Hawkey or common Horfes, I will fay more afterward, where I touch the difference of Horfes, and of their pace. The Barbarian Horfes are the fame as the Lybian Horfes. Vegetius commendeth the Horfes of Torina and Burgunda, after them of Pontus. Britain breedeth little Horfes and Ambifers. Of Horfes that are celebrate of the Cyprian Mountain: See in the Spanifh. The Horfes of Capodoea and Armenia have the breed of the Parthians; but their heads are bigger, and are of a moft famous Nobility, for that Countrey before any other land, is moft commodious for the nourifhing of Horfes, according to the verfes of Nemosian:

Capadoconum notas referat genera pradegopp toprop

Armenia, & palmas super grex omnis avorum.

The Capodoeans do pay to the Persian every year, besife silver, a thoufand and five hundred Hor-

fes, &c. The Mules have the double of thefe, and they put-name the Capodoean Horfes famous and

swift; for thefe faith, that whiles thefe are young, they are accounted weak by reafon of their young

teeth, and their body feeding on milk; but the older they grow, they become the swifter they are, being

very courageous, and apt for war and hunting, for they are not afraid of weapons, neither to encoun-

ter with wild Beasts. Maceao is a City of Capodoea, fituate under the Mountain Argeus, now called

Cafereos,as Encafeh remembers in his Chronicles, and from that City cometh the Maceao Horfe, for

the Capodoean Horfe. And not only the Countrey, but the City it felf sometime was called Cap-

podoea from this City or walled Town, I suppose the Horfes of Maceao were so called, which Opill-

anus calleth Maceao, of thefe alfo and more, I will fet down thefe verfes of Nemosian:

Sit thi preterea foapis, Maceos tellus

Quam mittit, modo fignetilium fanguine firmus,

Quenque coloratus Maceae deferta per arida

Paviti, & effidus docuit tolerare labores.

Nepignt quod turpe caput, deformis & abitus

Est illis, quodque incensos, quod liber auroque,

Quadque jubis prons cerevis disberber aptus.

Nem flefs facitis, laetaveque colla fecundus

Petet in obquium lente moderamine virgus.

Verbera sunt precepta fuge, sunt verbera frenti.

Quin & promitt ipatia per aqua campi,

Curibus acquirunt commoti fanguine viris,

Paulatinum avidos comites pall terga relinquunt.

Hand fores effus Norei per carula veniens,

Cum fo Thracius Borea super occituli antro, &c.

Horum tarda venit longi fiducia cursum:

His etiam emerito viget eft juvenilis in aev.

Nam quamque suis virtus bene floruit annis,

Non prius efi animo quam corpore paffauima.

}
Of the Horse.

And peradventure nem nisius understand certain Horses of Libya, by the name of the Messian Horses, when as he joins them with the Mauritian Horses, and calls them painted Mauritian Horses, which agree not with Cappadocians; writing also, that they are ruled with a stroke of an air held of a bridle, which thing we have read in Authors writing of the Abyrusian Horses, in the Country of Libya, and whereof we will speak when we discourse of the Lyburn Horses. But the Cappadocians Horses are swift and jolly in their old age; as it is related by Oppianus. Again, if Mauritian Horses be the same that the Cappadocians are; what is the reason why Oppianus doth name them apt, unleas peradventure every Mauritian Horse is a Cappadocius, and not otherwise? The Horses of Chalambria, are so named of a place in Libya; the Chaonian Horses are the same with the Abyrusian Horses. The Cappadocians and Mauritianas do belove great labour in breeding of Horses; for the Cappadocians dwell in a plain, as I have read in a certain Greek Author. Strabo lib. 14. writeth, that the Cappadocians in times past did abound with sea-torses, and have much excelled in Horse-men; that wherefore in any Nation, there was war waged, they hired and required the aid of the Cappadocius Horse-men, and so it was made a common Proverb: Cappadocius edulidus, ferasus. The Horses of Crete are commended by Oppianus, and elsewhere. From their loins upward they are as big as the Cyrenian Horses, with well set thighs, excellent for the fouundness of their feet, and holding their breath a long time in riding, and therefore fit for single races or in Chariots.

The Epean Horses are commended of Oppianus, and the Epeans are a people of Achaia, and the Straed: Achaian Horses are commended of the same. The Lapidaneus kind of Horses is more excellent, and he preferreth the Thesalian Horses before those of Epidaurus, but the Epeian Horses are biring and stubborn: Abirus faith that the Epeian Horses, and the American and Delobonian, although they are stubborn and will not abide the bridle, and besides are base and contemptible, yet they are bold in war and combats, and therefore the Epiusian Horses and the Sicilian despitc not, if their qualities and comely parts be apparent in them, although sometime he hath run away from the enemy, as the Poet saith:

Quamuis sepe fugax ille sertis hores,
     Le patia Epius refusat.—

Ephus and Chonia, is also a part of Epius Alpeidarian, although sometimes it be taken for the whole Country of Ephus. The Horses of Chaonia are commended, as Gratius remembret, writing of the Sicilian Horses, in these verses to this effect, that no man hath preserved to strive with the Chaonians, and the Achaian hand doth not express their delights:

Quam Chonias contendere contra
     Asift, vin mentia quas signa Achaia palina.

There are people of Arabia called Eremiti, which some call Ishbaypogatos, and Tragedinent, Vegus. Oppianus, in the third place commendeth the Erysian Horses for swiftnes, and long continuance of course, after the Boeotian, Barypendians. The French Horse is the same that the Meniquinus, and S. Hierom writeth, that worldly men are delighted with the French Geldings; but Zacariah Als loored from his bands, rejoyneth good men. Lucius Apuleius hath commended the French Beasts, for if the young foale be derived of a generous kinde, it is an argument it will prove a Noble Beall.

The Grecianas Horses are a kinde of base Horses, not fit for war; whether this name proceed of a strange Contry, I have no certain knowledge thereof. There is a certain River in Sicilia called Gelas, of which Country the Horses are of great value and much fet by. And also the Gelas are a people of Sycitia, who in their flight light upon Horses, of which Lucerni writeth to this effect:

Mastigates qui fugit equs, furtifque Gelas: And Virgil,
     Bivale qui more stren, acerque Gelusme,
     Cum fugit in Rhodopin, aut in deferta Getarum,
     Et suo concreption cum janguline potat equino.

Signifying thus much, that the Mastigates & valiant Gelas fly away upon Horses like the Bifalens, when they fly into Rhoedges, or into the Wildernes of the Gelas, and drink milk mixed with Horse-blood for hunger and famine: But these fearful Horses are not meet for war. Germania hath greater Horses and hard trotters, whose pace is very hard and troublesome. The Getian Horses run most swiftly. The Horses of the Greeks have good sound broad feet, and of a great body, a comely fine head, their fore-part somewhat high of stature, straight and well compacted, and of a well fashioned body, but the joyning of their butts are not so agreeable and answerable to the rest: they are most swift and courageous, yet notwithstanding in all Greece the Thesilian Horses are most esteemed; Nemesisus writeth also of the Yorkshire Horses: Greece therefore yeeldeth choice Horses, and well bred. In Helvetia the Horses are fitted, and very great in war, and especially the Algerian Horses, which will last and continue a long time.

In Spain also the Horses are of a great stature of body, well proportioned and straight, having a fine head; the joynts of their bodies very well divided, set apart, and ready or flexible, simple and short butts, but not very strong and comely. They are strong and able to sustaine the undergoing

Of the Horse.
or compaßing of journeys; neither are they slender bodied or subject to leanness; but they are nothing nimble for course, as shall appear by the words of the Authors following, neither are they spurred when they are ridden: from their growing even to their middle age, they are pliant, and easy to be handled, afterward they wax wilde and biting. The Cappadocian Horse is renowned, the like, or the next triumph or victory have the Spaniſh Horses in running the ring. Neither doth Stella yield Horses inferior for the ring then thofe: and Africa is accustomed to bring forth the moft ſwift Horses by copulation with the Spaniſh blood to the use of the saddle.

<table>
<thead>
<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Ruelius</td>
<td>The Spaniſh Horses are deſcribed of great Princes and Peers, and the Magnates, because their opinion is, that they are ſwift and nimble; and out of Spain they are reſpected for lightneſs and elegance. The judgement of the Ancients for the general breed of Horses, was this; that the greatest Horses are bred from the third Climate, to the end of the fixt; and moft of all in Spain: yet we have ſeen stronger and bigger Horses bred in the ſeventh Climate, and those more able to endure labour than thofe that are under the third or fourth climate.</td>
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<tr>
<td>Camerarius</td>
<td>The Španiſh Horses of the Celēberiens ſomewhat a dully colour: and they change if they be transported in to the farther ſpain; and the Parthian Horses are like them in regard they excel in nimblenes and dexterity of running, whereof Martial writeth thus, Videbīt altam Liciānem Bibilīm, quīt arma noblīm: which Bibili is a City of Celtiberia. Of the Collectani and Gettanni, we will ſpeak also in the Španiſh Horses that are bred in the Calpiain Mountain, afterward, when we entreat of the diſtremes of Horses according to their degree.</td>
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<tr>
<td>Oppianus</td>
<td>The Huns bring up their Horses hardly, able to endure cold and hunger, and they have great and crooked heads, ſlanting eyes, ſtrait nostrils, broad chaps, and ſtrong and rough necks, and long manes down to their legs; great ribs, ſtraight backs, bumpy ſtands, ſtrong ſhanks or legs, small feet, full and wide hoofs, their ſhanks hollow, and their whole body full of holes. There is no nafnes in their hunch or buttocks, they have no ſtrings in their ſinews or arteries, and they exceed in length more then in height, having great bellies hanging down, big-boned, and leannes (which is a deформity in other Horses) in thefe it ſheweth their ſtatelines: their courage is moderate and wary, and there are ſome of ſwift Horses of thefe Huminian Horses elsewhere he calleth them Huminian Horses, and the fame in times past Huns: but they are called now a days Ungarian Horses.</td>
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<tr>
<td>Vegetius</td>
<td>The Companies or Armies of Huns, wandering up and down with moſt ſwift Horses, filled all things with slaughter and torment. They are ſitting and kicking Horses, as moſt Pannonians are, (for they call Pannonia at this day Hungaria) of which there is a Proverb of Malignity sprung up, Non nisi irritati spicibus aut offensae muta facient: that is to ſay; They wax not ſtern, or rage not, but either by opinion, or fear of offence, affuring that the Pannonians are very fit for War. There is not any that can hold and conſtrain or draw the bridles in, or loffe them forth, that rideth an Indian Horse when he pranſeth and runneth violently, but ſuch a one that hath been trained up from his childhood in the skill of Horses: theſe men have accuſtommed to hold them with the bridles, and alſo to break their ſtatelines by ſnaffles or bits, and thofe that are well skilled in handling Horses, do compell them from their unrulines, as reſtrain them within a ſmall circuit. Yet notwithstanding to make this circle and ſeſt it, it requireth the help of hands, and it is a great skill belonging to Horſemen.</td>
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<tr>
<td>Albinus</td>
<td>They which are moſt skilful of this Art, and cunning doers of it, know very well how to bring their course into a circle, whose compaſs is not to be regarded chiefly when it can bear but two Souldiers fighting together at one time. There are among the Indian Eſſilans (for there are also other Affrick of that name) Horses bored no bigger then Rams, and they ſay that in India there are Horses with one horn, of which horn drinking cups may be made, having this virtue in them, that if you put poynets in them, and a man drink thereof, it ſhall not hurt him, because the horn doth drive away or expell the evil or poynſon. Whereof you ſhall see more at large in the History of Monſers: and Albinus himself elsewhere, and Pilaes following him, write the ſame thunget of a cup made of the horn of an Indian Asf, having one horn.</td>
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<tr>
<td>Oppianus</td>
<td>The Itrien Horses are of goodable feet, very ſtraight, whole back and hollow, but ſwiſte of course. The Moſt Horses (faith Oppianus) are moſt excellence, as well to hold out long courses, as well to endure hard labours: the Lybian next unto these are of a moſt durable celerity: they are ſhaped alike, except that the Lybian Horses are big, and of a longer body, having thicker ribs and sides, and their brest is larger before on their creft; they can easilly abide the heat of the Sun and daily thurſt.</td>
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| Africu | Africa hath been accustomed to put the moſt ſwiſte Horses of the Spaniſh brood to the use of the saddle: (aſſiſting Lybian) in lib 23. that it was a cuſtom to the Numidas, being in battel, to lead two Horses together, and in manner of vauters oftentimes, in the moſt ſhard conflict could leap from the weary Horſe to a ftreeth, (fo great was the demerſtory of the rider, and the docility of the beaſt.) From Tunis of Africa, Maffeia, and Numida, there are also brought very ſingular Horses, palling
passing for running, which the common people call **Barbary** Horfes. The **Maffylia** (a people of **Lybia**) have very good Horfes, which they govern with a rod whithout a bridle, from whence **Virgil** in his fourth of his **Aenides**, calleth them untamed and wilde **Numides**: and **Silius** faith also, the **Numides** a Nation having no skill of the bridle, do leaup up and down, here, and there, and every where:

*Hic passum exulant Numida gens infa frenti,*
*Quix inter geminam per ludum mobilis aures*.

Also the rode rules the **Maffylia** Horfe: the fame **Nemesianus** writeth of those which he calleth **Magylians** (as I have before spoken of the **Capo-velian** Horfes) The **Dacodian** Horfes although they are of a marveufl provinci, yet they are inferior to the **Lybian** Horfes in running. The **Lybian** Mares are taken with a pipe, and by thofe alluements they are made tame and leave off all wilde qualities, and whitherfoever the pipe hall allure them, thither they follow, and the Shepheard when he flands, they leave off marching forward; and if he finge more pleafantly, they are fo delighted with it, that they cannot holde tears. The Shepheardes of thofe flocks, make their Shepheardes pipe of the tree (called **Rhododaphne**) the found whereof delighteth thofe that go before the herd. **Gratus** alfo writeth to this effect:

*Virgit eos exsultat Numida, &c.*

*Alius & paucior operum genit us ille: vigebit*.

*Centum eflis sparsis: atque etiam annis, Nec magni culus sterilis quodunque remifit.*

*Utra quidem sequentur sui prodere rite.*

Although the place be not perfect, yet that that is spoken concerning the **Numidian** and **Lybian** Horfes, is manifestly as well by the words of **Oppianus** before recited, as alfo by that which **Aelianus** setteth down: for (faith he) I have heard thofe things touching the **Lybian** Horfes of the men of that Nation, that of all other Horfes they are the swifteft, and that they have no fene of their labours, being lank by reafon of their flendernefs and thinnenes of their fhape, and are wholly of themselves fit to endure thofe matters negligence, for their matters give them no meat or fodder, neither doth any man rub or drefs them with the curry-come after they have labourd or travell’d: neither do they lay any litter or straw for them to ly on, nor pare their hoofs, but fo soon as they have ended their journeie, leaping off their backs, they turn them to fearch their food, and in like manner the men of **Lybia** worn with leannes, and all befmeared with filth, do ride on Horfes of this fort.

The Horfes and Oten of **Africa**, which dwell between **Getulid** and us, are as ours, that is, having longer lips, (the Interpreters translate it hoofs,) Their Kings take delight in troops of Horfes, fo that there are numbered to him every yeare four hundred thoufand Cotes.

The **Cotabamian** **Lybian** are before spoken of, and the **Nafvianus** we will speak of hereafter. **Barbary** breedeth very few Horfes: but the **Arabians** which inhabit in the Desert, and the people of **Lybia** do breed very many, and they do not fo much accutum them to journeys and warfare, as to hunting, and feeding them with Camel’s milk only twice a day and night, whereby they keep them fine, but very lean, and in the time of grafs they turn them out to feed in the field, but they ride not on them.

The Horfes of **Maffylia** are equal with the **Lybian**. The people of **Magnetis** have been renowned in feeding and bringing up Horfes, and they are very skilful in combat on Horfe-back (as **Lucan** faith.) The **Magnetianus** are famous for Horfes, and the Nation of **Neces** for Ours: **Magnetis** is a country of **Macedonie**, bordering upon **Thofaly**, to the City and Country of **Aflia** yeeth toward **Macedus**. **Oppianus** commendeth the **Magnetian** Horfes. The **Moares** fight often on Horfe-back with Spears, but their Horfes are naked, and their bridles made of ruthes.

The **Maffylia** following the **Lybian** (for the moft part) are furnifhed after that manner, and they reembele others, having little Horfes, both fwiwt, obedient, and easily to be ruled with a rod.

The collars of their Horfes are made of wood or hair, whereby the bridles hang. The principal Horfes of **Barbary** are not fwiwt, but in respect they live on fodder, they are more handfome and better in flefh, which they use in eminent danger, when it flandeath them upon to efcape the rage of their enemies. Thus far I have related the words of **Oppianus**, touching the nourifhing of Horfes, among the **Lybian**, where he fweath that they are all alike, both in fhape and other proportion. Touching the **Nomesian** Horfes, they are all one with the **Maurian** and **Magylians** (as **Strabo** witneffeth) calling them nimble and fwiwt kindes amongst the **Moares**.

The **Sidicins** are fwiwer then the **Moares**, and the **Moares** are of a more valiant courage then the **Sidicins**, or some fuch like other thing, who are furnifhed with yellow colour, and may to the eye moft shining and fpentand, and which is more; they only defire the roaring of a Lyon, for which when they come to other wilde Beasts by way of hunting, he commendeth them to be excellent: then he faith that the yellow is the beft colour.
The History of Four-footed Beasts.

In the Country of Mauritania are great flocks of Lyons, and of the Naxamans we have spoke before sufficiently. The Medean Horses are of exceeding greatnefs, and the men of that Country are so bewitched with the rich attire and shape of their bodies, and also their Horses being so loofe with superfluity or ranknefs, that the Horses take delight in their Makers, both in greatnefs and in fairnefs of body, and luch colly furniture upon their backs, that they seem to perceive their own nature and comelines. The Medes every year by way of cultume pay three thousand Horses. Herodotus also calleth the Nifean Horses the Medes, whereof more fhall be spoke afterwards. The Menapians amongst our Country-men, the only men which I fuppofe were once called' French of Ceafar, and the Romans, (as Warriors) for the most part are in elimination. I also finde that the Romans inhabited that Country which is now called Robertland, and that Pindar Dicosmus remembereth them, lib. 6.

Touching the affairs of Longobardie, there are that fay they departed into Machelburgia. There are the right off spring of the Germans (fith Althamnuot) they are counted as Germans, both in language and vertue. Gratius writeth of the Marchamian, laying the Marchamian (scarfe) yield their rough neck to the fword. Virgil also declareth Mycesia to be a Country of most notable Horses: and Gratius commendeth a Horfe fit for hunting highly in these veres:

Consul Perni qualis perfuntur amae
Thesalia, aut patria quem comperere Myces.
Glaucum, nempe ingenio, nempe ardua fundet in aura.
Crusa, quae Eneas poftor lubruit arenas?
No tamen locuti agnt opus, jactantur illi.
Virtus, quam filius duurnique lefferee Martem.

The Nifean Horses were once great in elimination (as Cameratus writeth) Also the Naxamians are people of Lybia, living as spoylers of the ships in the Syrias. Of all thefe Horses before faid, the Nifean Horfe is the goodlieft, and fitteft to carry the body of a King, they are of a palling good shape, an eafie pace and very sublimife to the bridle; having a little head, and a long and thick mane, with yellow or brown hairs hanging down on both fides: Armenia is very fit for feeding Horses, wherein is a certain medow called Hippobahus, by which they make their journey which pas from Persia and Babylon into the Caffian Border, in which place they feed five hundred Mares which belong unto their King.

The Nifean Horses (written with Julia and simple Sigma, as Eulathibus writeth) are the most excellent and belt; some faid that they have their generation from Germany, others out of Armenia, but they have a certain kinde of shape like the Parthians.

In India moit of their living creatures are far greater then in other places (except Horses) for the Nifean Horses, do exceed the Indian Horses, (as Herodotus writeth) in his feventh Book, describing the Perfan Horfe. Behinde the fpears (faith he) came ten Horses in moft fumptuous furniture, which were Nifean, fo called, becaufe there is a great field named Nifsus in the Country of Medes, which yeeldeth Horses of a great ftature. After these followed Jupiter's Chariot drawn with eight Horses, after which Xerxes was caried in a Chariot drawn by Nifean Horses, and by how much the greater the Lybian Elephant is then the Nifean Horfe, fo much the greater are the Nifean Horses then the Indian (as the fame man faith) in his firft Book: but the King was about to offer a white Horfe, that is of the Nifean Horses, and to give a better mark as some expounded.

There are that fay that Nifsus is a plain of Perifs, where the moft famous and notable Horfes are bred. Some interpreters think the yellow Nifean Horses, because all the Horses of Nifsus are of this colour. Between Sufamus and Bedria, there is a place where the Greek call [Nisus] in which the moft fingular fine Horses are bred. There are alfo that fuppofe they are had from the red Sea, and all thofe to be of a yellow colour. Herodotus writing of Nifsus, maketh it a part of Media, Orfeus alfo writeth, that there is a place in the red Sea called Nisus. Stephanus alfo maketh mention of [Nifsus Persica] with the Medes, of which people the Horses are fo called. Callius Redigius reprowed a certain man which translated the Iphonip Horfes for the Nifean Horses. Plutarch faith that Pyrrhus had an apperition of a Nifean Horfe armed and furnished with a Rider, that Alexander the Great was Captain thereof.

The Medes have Colts of a moft noble kinde of Horfes, which (as antient Writers do teach us, and as we ourfelves have seen) men when they begin the battle with a fierce encounter are wont to prance valiantly, which are called Nifean Horses.

Touching the Paphlogorians, about the education of their Horses, fee more among the Venetians: The Parthian Horses are of a large body, courageous of a gentle kind, and moft found of their feet. Concerning thofe Horses which have but one eye, commended among the Parthians, and of thofe which are diftinguifh'd by diversify of colours, from thofe that come forth firft, I have spoke already out of Abisius. The Armenian and Parthian Horses are of a flifer pace then the Sicilian, and the Berti twiffer then the Parthians, whereof Gratius writeth to this effect:

Scollet & Parthis inter jua milia rura
Manifi honof : venit Caudini fata Tabarni,
Garganumque trunca, aut Lignarum depefer Alpet,
Ante opus excufus cader ungubus. & tamen illi

Est animus
Of the Horse.

That is to say, among the Partbians there hath remained honour for their foit Countries; but let him come to the Rocks of Cudnum, Tabernas, and too rough Garanus, or upon the Lusitiae Alpes, then he will quickly shake off his hoofs, and make a shew of great valiantnes. The Horses of the Cumbertians are somewhat white; and if they may be brought into Spain they change their colour.

But the Partbians are alike, for they excel others in minblenes and dexterity of running: How the Partbians do make their pace easie in the trotters and hard footing Horses, after the manner of Geldings, shall be declared afterwards, for Perfa preferreth their Horses above the cencure of their patrimonyes as well to carry, (having an easie pace) and being of most excellent dignity: As for their pace it is short, and to be doth delight and lift up the Rider, being not instructed by art, but effecteth it by nature.

Amongst thee ambling Nops (called of the Latines among the common sort of Taurarii) their pace is indifferent, and whereas they are not alike, they are supposeth to have something common from both; as it hath been proved: whereof Vegetius writeth in this manner.

In a short journey they have the more comelines and grace in going, but when they travel far, they are impatient, stubborn, and unless they be tamed, will be stubborn against the Rider; and that which is a more greater marvel, when they are chafed, they are of a delightful comelines, their neck turneth in manner of a Bow, that it seemeth to ly on their breyst. The Pharsalian Mares evermore bring Foals very like their Syre, and therefore very well so named, Equus probe. We read of the Phoebus Horses which receive their name (from the mark or brand of a bird so named) else because of their excellent beauty and comelines.

The Rojetan Horses, Varro do nameth of Rojet, which Volteus ans writeth to be most fit for War; and this Rojet, otherwife Rojet, Febus faith, that it is a Country in the coasts of the Restani, so called, because the fields are laid to be moitt with that dew. The Horses of Rojet, if they happen to throw down their Rider, they forthwith stand still, that they may get up again. Vegetius having commended the Perfan Horfes faith, that the Armenians and Sapharens do follow next. This Saphaire verity is an Iland in the Arabian coast, and the people of Saphaire lybe beside Pontus. The Horses of Epista, Salmarica, and Dalmatia, although they will not abide to be bridled, yet they doth that they are warlike by their legs.

The Sardanian Horses are nimble and fair, but leffer then others. The Sarmatian kind of Horses is fast and well fashioned in this kind, very fit for running, unmixt, having a well set body, a strong head, and a comely neck. Some Horses they call Actogenes, from a certain mark which they have in their shoulders and colour, which the Sarmatians do take unto themselves as very good, with which they do contend about their cruelty, wherefore they impoy them in warlike out-rides, but those that bear the Eagles mark in their buttocks and tail, they are disallowed of them; and they report that they mark them so, because they will not use them, by reason left they should quickly be destroyed or run into some trouble.

The Sarmatians when they entend any long journeys the day before they keep them fasting, giving them a little drink, and so they will ride them a hundred and fifty miles continually going. These Horses are very fit for War, and many of them are found gelded in their tender age, and they say they never lose their teeth. It is a cullome of Scythia and Sarmatia to geld their Horses to make them more gentle: they are swift, little, and fierce, but very stubborn and untamed; neither doth Gore, (situate near Sicilia) breed Horses inferior to the Spanihs, as Vegetius writeth. The Epistaen and Sicilian Horses are not to be despised, if they were well bred and educated, they want not comelines and good qualities.

The Sicilian Horses are most swift. Libycaem is a promontory of Sicilia lying towards Lybia, which a certain verle make their most plain; but as I understand it is the Three-clitt-topt-mountain Etna, which caufeth forth fire, and covereth the carcase of Enceladus the Giant, lying there under (where of Oppianus writeth) and some others alto. But (faith he) the Armenians and Partbians, have swifter couriers by far, then the Sicilians. Now, let us hear Gratian himself, dissoucing of the Sicilian Horses, as well as of the Libycaem.

Sic. & Styronian felatis tutela Bifalae,
Post orbem Etnae stamnam se pererre arces.
Quid ludus Sicilis: quid tuum si turpis colla,
Autenum desce curvatur sinus? per illas
Camalus Gratia Agregat, Etique fragosum
Ne brochun liquere fere. O quemque in armis
Ille meus, cujus doecies pestaria fugi,
Sufficit, quem Othamius contendor contra
Austis, vicis merits qui facit Achaia palmas.

But as for Gratian, I suspect the place to be unperfect; for Agragus is a Mountain of Sicilia, having a Town situate in the top of it, bearing the same name, where their Aretelors were wont to nourish and bring up the belt Horses. There is also in Sicilia a Mountain called Nebrodas, which some think to be so called by reason of the plenty of Dear, but they have no Author for it, and
as for the printed Book of Gratius, I find it expresseth it not so well as Virgil setteth it down, laying, that Agrimus was a breeder of most courageous and notable Horses: but yet Servius faith, (according to indurs,) that the Agrimites in times past sent their Horses to the juggling or combates of Creata, returning with victory from thence, and we have also read that in Cappadocia whole troops of Horses have been destroyed. The men of Delphi by the answer of Apollo got herds and great floc of Horses from Agrimentis, and those were excellent. Aristeophanes calleth those great Athenian Horses (Cembris) either of the greatness of the Mountain, or else great Cambises are bred in it, or of the Horses of Etna, being notable for swiftness and running. The Horses that are bred in Cre't and Cappadocia are also most excellent.

In Greece there are most notable Horses of Thessaly, which Aburus faith be the best in all Greece. The words of Gratius the Poet speaking of the Thessalian Horses are before recited. The Mares of A'mius were the most excellent, but as Homer reporteth the Thessalans were before them. The Solitude or Wildernes of Arcano is as commodious to feed Horses, as Thessalia. It is certain that Thes-salia excels with Horses, from whence Xerxes is said to have made a comate, that he might try his Horses there where he understood the best breed of Greek Horses to be, and from whence this proverb arose, Doce quia Thessalia. It lett the Thessalian Mare be tryed by battail, a proof of excellent wortth, because in old time the chiefest praine was of the Thessalian Mares: which is very apparent by the Oracle that was delivered to the Aginensis. Suidas relates it (but I know not out of what Author) that Thes-salia hath excellent Horses; Tereius expert shooters; and India light armour: so hath likewise Cre't and Caria.

Eragus writeth, that Thessalia is most fit to feed Horses, who do far excel the Arcadians and Epicdares, as Strabo witnesseth, lib. B. Caesar was said (when he was Dictator) to have made the first fow among the Romans of the Horses, fighting against Buls, and killing them, whereof Lucanus writeth thus:

\[
\text{Thessalian Horses prefer Horses own.}
\]

That is to say, the Thessalian Horse is profitable for fence and deadly conflicts. There is also in Thes-salia a City (named Pelus) from whence I deem the Pellean Horses are so called of Gratius, yet there be other places called Pelis (as Macedonias and Achaia) whereof Gratius writeth thus:

\[
\begin{align*}
\text{Spadices \& Pelles valuerunt Coreuni,} \\
\text{Et tibi devote magnum pecunia Cypria.} \\
\text{Phoceae decus non magno in sacrarum tonfas.}
\end{align*}
\]

Which (Coreuni) are Mountains of Eupias, and Cyrbe is a Town of Phocis, situate at the foot of the hill Famus, where Apollo Cyreus was worshipped. The Tyrhenians being excellent warriors, are commended of Oppianus. Out of the Islands of the Tyrrenian Sea (especially Carisca and Sardinia) there be very short Horses, but they are of good courage, and gentle withall.

The Thracean Horses are foul and ill shapen, being rough all over their bodies, and having very shoulers, which in the Greek is named (Colomyten) such a one as will cut down the rider on the ground from off his back, they are crook-back, or bundled out; or else of divers kindes: and therefore they have an unsure and reeling pace, and their course is very unconfortable; Aburus faith, the Thracean Horses are the best. The Tauricinean Horses are neighbours to Heffis, which Pliny and Volaterran supposeth, are called (Medit-nenan Cimbri.)

There be somme that suppose the Venetians to defend from a people of Paphlagonia (called Venice) which after the destruction of Troy came to these places, and by these they make an argument, conjecuting it to be good, in regard they are wholly employed about breeding Horses, which at this time faileth altogether; but in former days they were very careful to follow their business about the training up of young Mules, whereof Homer writeth. And Dionysus the Tyrant of Sicilia ordained, that the breed of Horses should be fethch from hence to make hislike combates with them, that among the Graecian the excellency of the Venetian breed should remain, and that a great while after that breed of Horses got the praine. Vindobona this day is called of the Saxons a gilded Horse, and brought out of that Country, which sometimes was called Dacia. The Lycofassus and Lycophatians shall be spoken of hereafter.

Of the choice of good Horses.

The members of an eligible Horse, Pallas adviseth to observe four things in choice of a Stallion Horse, the form or outward proportion, the colour, the merit, and the beauty, which all are necessary to be observed in the choice of Colts or elder Horses, that they may be of a generous race, having loft legs, lofty paces, gently treading, such as will lead the way, and be not afraid of any water, bridge, or sudden noises; having a gentle neck, a sharp head, a short belly, a fat back, a dapple colour, nimble ears, thick mane lying on the right side, a double bone descending by his loins, a founding hoof, and legs that cannot stand hill, which Virgil expresseth in these words:

\[
\text{Ne}
Varro shewed that at the first foaling of a Colt, a man may observe by certain signs how he will prove when he is in perfection: for if he be cheerful, bold, and not terrified at any strange sight, if he run before the company, be wanton, and contend with his equals in course, and over-run them; if he leap over a ditch, go over a bridge, or through water, and being provoked appear the meek, these are the most true signs of an eligible Colt.

Also it is to be considered, whether they run quickly, being flirred from their rest, and run away speedily, if their bodies be great, long, full of muscles, and if apace, having a little head, black eyes, open and wide nostrils, sharp pricked ears, a soft and broad neck, not long, a thick mane curled, and falling on the right side, a broad and full breast, large shoulders, and shoulder-bones, round ribs, a little belly: a double back; bone, or at the least not thin, bunchy, and extended; his loins prefixed downwards, broad, and well fett, little and smooth bones, a long tail, with curled hair, high, straight and equal legs, round knees, nor great, nor bending inward; round buttocks, brawny and fleety thighs, hard, high, hollow, and round hoofs, well fet to the crown of their pattern, having veins conspicuous and apparent over all his body. That Colt, which at the time of his foaling hath the most highest legs, is likewise by common reason to prove moist and noble in his age, for of all the joynets in the body the knees and legs grow leaft, and they which have flexible joynts in their infancy, will be more nimble and flexible in their age. And thus much for the parts of a Colt. Now, in the next place we must likewise take consideration of a Horfe untamed, and ready for the saddle. For the outward parts of his body, faith Xenophon, yeeld evident significacion of his minde, before he be backed.

Plate willeth that the state of his body be straight, and articulate, his head bony, his cheeks little, his eyes standing out, and not sunk into his head, flaming like bloud looking cruely if the body be black; but black eyes if the body be white, do argue a gentler and better disposition; short and little ear, the crown of his head greater then the refidue, broad nostrils, whereby he not only looketh more terribly, but breateth more easily; for when one Horfe is angry with another, in their rage they are wont to fretch out their nostrils vehemently.

The head or snout of a Horfe, ought not to stand out like a Swines, but to bend down a little crooked, the head to be so joyned to the neck, as it may bend more commodiously, that is, if the neck be small next to the head, so will the neck stand before the rider, and his eyes appear before his feet: and although he be full of stomach, yet will he never be violent or fitlea necked. It ought also to be considered, whether his cheek bones be sharp, tender, or unequally standing one above another; for their imparity maketh the Horfes necke to be hard and stubborn.

The back-bone above his shoulders higher, commodious to set the saddle upon, and his whole body the better compacted, if the back-bone be double, and smooth; for then shall the Rider sit more easily, and the form of the Horfes appear more delectable. A large breat sheweth his come- lines and strength, making him fit to take longer reaches without doubling of his legs, because in a broad breat the legs stand further atunder; large side or ribs swelling out above the belly, for they shew the ability of the Horfe both to his food and work, a round even belly, and his loins being broad and short, caueth the fore-legs to be lifted up more easily, and the hinder-legs to follow: for the small loins do not only deform, but enfeble and opprest the Horfe, therefore the loins ought to be double, the ribs broad and facry, agreeable to the breast and sides, buttopcks solid and broad, with a long tail reaching down to the heels of his hinder-legs. Thighs full of sinews, the bones of his legs thick like posts of the whole body, but that thickness ought neither to be of veins nor flesh, for then they are quickly inflamed and wounded, when they travel in rough and sharp waves; for if the flesh be cut a little, the commifures part atunder, and caueth the Horfe to halt, and above all other things have a regard to his hoof, for being thick, it is better then being thin, likewise if they be hard, caueth the pattern to stand higher from the ground, for so in their pace the soft and hard parts of the foot do equally

Signs to chuse a good Colt.

Colo."
The History of Four-footed Beasts.

sultan one another, and the hard hoof yeildeth a found like a Cymbal for the goodnes of a Horse appeareth by the fround of his feet.

Now on the contrary fide it is good alfo to fet down the faults and fignes of reprobation in Horses, and firft of all therefore, a great and flefy head; great ears, narrow nofrils, hollow eyes, a long neck, a mane not hairy, a narrow breath, hollow shoulders, narrow fides, and little flefy sharp loins, bare ribs, hard and heavy legs, knees not apt to bend, weak thigfis, not ftroge, crooked legs, thin, full flefy, plain and low hoofs: all these things are to be avoided in the choife of your Horse.

of the choife of Stallions and breeding Mares.

Now in the next place, let us confider the choife of Horfes and Mares appointed for breed and propagation, and we have fhtewd already, that in a Stallion, we are principally to confider the colour, form, merit, and beauty. This Stallion is called in Italian, Rezzano; in French, Elton; in German, Ein Springenfah ; and in Latin, Admissarius, quia ed generandum foabum admittere, because he is fent to begat and engender. The Graecians, Anabates, or Oebuates. Firft of all therefore, to begin with the colour: that Horse is beft which is of one continued colour, alfo oftentimes (as Rufus faith) Horfes of a delineable colour prove as noble as any other.

The chief colours are thofe: bay, white, carnution, golden, ruffe, moue-colour, fleaf-bitten, spotted, pale and black: of all thofe the black or bay is to be preferred. Opponens maketh difinction of Horfes by their colour in this manner, the gray or fleyed fotted is fitteft for the hunting of the Hart, the bright bay for the Bear and Leopards, the black with flaming eyes againft the Lyons. The natural colour of the wilde Horfes are an all colour, with a blackкрае from the head along the back to the tail; but among tame Horfes there are many good ones of black white, brown, red, and fleaf-bitten colour. But yet it is to be remembered, that feldom or never Colts be foufl white, but rather of other colour, degenerating afterward by the increafe of their age, for fuch Horfes are more lively, durable, and healthy, then other of their lind, and therefore Plutarch commendeth a white Horse of Sylla for his fweetnefe of foot and focum: among all colours, firft the black, then the bay, next the white, and left the gray are moft commended.

Comarrus commendeth a certain colour called in Latinus, Varius, and may be enlighfed daple grey, becaufc of the divers in-textures of colours, which alfo many Nations do difallow, yet undoubtedly that colour (fainth) is a figne and argument of a good nature, constituted and builded upon a temperate commixture of colors. Where black, white, and yellow hairs appear, fo that the fight of one of thofe is nothing inferior to the equeftrical party coloured caparifons: Among Horfes which are divers coloured, they which have flafs in their fore-head, and one white foot, were moft commended; fuch were the Thracian Horfes not admitted in copulation, of which Virgil speaketh in this manner;

--- Thracius albi
Porta equor bicolor maculae, pelligra primi
Alba pedis, frontenique offensionis arcaum album.

Black Horfes alfo which have one ruffet or swart fpot in their faces, or elfe a black tongue are highly commended for generation, but the pale coloured Horfes are no ways to be admitted to cover Mares, becaufe their colour is of no account: and likewife it is feldom feen that the Foal proveth better then the Sire. The bay colour hath been received without exception for the bel travellers, for it is fuppofed, that Bandius (amongft the Latine) is derived of Vulnum, quia inter cetera animalia fortius vadat: becaufe among other creatures he goeth most foonly.

It is alfo befievable that in a Stallion Horse, the mane be of the fame colour with the body. Horfe-keepers have devifed to make their Mares conceive strange colours, for when the Mares would go to the Horfe, they paint a Stallion with divers colours, and fo bring him into the fight and presence of the Mare; where they fuffer him to fland a good while, until the perfectly conceive in her imagination the true Idea and full imprifon of thofe pictures, and then they fuffer him to cover her; which being performed, the conceiveth a Foal of thofe colours: In like manner, Pigeons conceive young ones of divers colours.

The Germans to mingle the colour of Horfes hairs (especialy to bring black among white) take the roots of Fearn, and of Sage, and fette them together in lee, and then wafh their Horfes all over therewith. For the making of their Horfe white, they take that fat which arifeth from the decoction of a moul in an earthen pot, and therewithall anoint the places they would have white. Also they flave off the hairs, and put upon the bald place crude Honi, and Badgers grease, which maketh the hairs to arife white: and many other means are used by Horfe-teachers, as afterward fhall be fhewen. In the old age of a Horfe his hair doth naturally change white, above all other beales that we know, and the reafon is, becaufe the brain-pan, is a more thin and flender bone, then the greatnef of his body would require, which appeareth by this, that receiving a blow in that place, his life is more endangered then by hurting any other member, according to the obervation of Homer:

Et
Of the Horse.

Et qua sorte herent ca.iti, lethaleque vulnus
Praeips it est equus.—

And thus much shall suffice for the colour of a Stallion: now followeth the form or outward proportion of the body, which ought to be great and solid, his stature answerable to his strength, his sides large, his buttocks round, his breast broad, his whole body full and rough, with knots of mufcles, his foot dry and solid, having a high hoof at the heel. The parts of his beauty are these, a little and dry head, the skin almost cleaving to the bones, short and pricked ears, great eyes, broad nostrils, a long and large mane and tail, with a solid and fixed roundness of his hoofs, and such an one, as througheth his head deep into the water when he drinketh; his ribs and loins like an Oxe's, a smooth and straight back, his hanches or hips long, broad, and fleshy, his legs large, fleshy and dry, the fines and joyntures thereof great, and not fleshy near the hoofs: that the hinder part of his body be higher then his forepart, like as in a Hart, and this beauty better appeareth in a lean body then in a fat, for fatnefs covereth many faults: the former parts are thus expressed by Dioscorides:

Regibus bionim eft ubi equus merominus, spetios
Impinniant, ne facies, ut fape decorat.
Milis tuta pede eft, emptorem indicat biamtern,
Sed pulchri cliantes, breve quod capitis, urina occoix.

If you will make trial of your Stallion, whether he be fit for procreation, Hipparchus teacheth you this experiment: press the genital member with your two fingers, and with locks of Wool draw out his seed, which being to drawn out, if it cleave and hang together, so is it not to be cut nor easily parted, it is a demonstration of a good Stallion; but if it hang not together like birdline, but easily go aunder like Milk or Whay, such a Horse is not to be admitted to cover your Mares. When Horses be old among other faults, they engender Foals lame in their feet, and therefore they The age of a Horse is to be kept, and not to be admitted to copulation nor War; for his rage is like a weak fire among Stallion, wet flubble, according to thefe verifes:

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Morbo gravis aut signior annis
Deficat, etque domo, nec turpi ignora senecta.
Frigida in venerem senior, frivolare laborem
Ingratam trahit: si quando ad praelia ventum eft,
Ut quondam in fipulis magnus sine viribus igni,
Lactam furit.---

Therefore it behoveth that a Stallion Horfe be not under three years old when he covereth a Mare, and it is beft for him to begin at five, for so he will endure in generation, not only till he be twenty year old, but also to thirty or forty years, as in Some Countries hath been often proved. They are not to be admitted to cover above fifteen in one year at the most, and a young Horfe not above ten or twelve in one year; the residue may be suffered with observation of their strength and nature.

The King of Babylon beftide his Horses for war had eight hundred Stallions, which were admitted to cover fix thousand Mares, fo that every one had twenty a piece; there is also a place in Syria near Apamea, where in one plot of ground were nourished thirty thousand Mares, and three thousand Stallions (as Calvis faith) to that every Stallion had an hundred Mares to cover (in that place) which number exceedeth the proportion of nature. It is also to be remembered, that Stallions are to be separateth from Mares all the year long, except at the time of procreation, and then alfo he must be largely fed according to these verifes:

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His animadvertit, instant sub tempus, & omnes
Impendant curas denso diftendere pinguis,
Quem legere ducem, & pecor duexere marium:
Floresque fecant herbo, flavosque miniartant,
Ferraque: ne blandos necuerant superesse laboi:
Invididique partum saperant jejunia nati:
Ipsa animum mecum sustinunt armenta solentes.
Atque ubi concubitius primos jam nata volupias
Solicitatis, frondosque regnants, & festibus arcent.
Saepe etiam curia quaquent, & Salo fatigant:
Cum graviter turris genitum area frugibus: Or cum
Surgentem ad Zephyrum palea jaciantur inanes.
Hoc faciant, nino ne luxo obfufor uffis
Sit genitali arvo, & fulos abiminetes,
Sed rapiat fient Venereum, interiusque recondat.
It is also to be observed, that the males which are designed for procreation be not over much labor
ed, for then he will be the more weak for generation, nor yet suffered to be too idle, for then a cer-
tain flanny humor is increased in them, which likewise disableth them in copulation; and thus much
for the males.

Almost all the same things which have been said of the male, belong to the female, except the belly
of the female ought to be greater; but if there be any white speckles or spots in the eyes of the fe-
male, such as are not contracted by accident, but breed in them by nature, such a one is refused for
breed; for an Horfe born of such a Mare, when he cometh to be old, will likewise be affected with
the same blindness; but if it be a female, by reason of her yearly purgation, the may peradventure
avoid that mischief.

It behooveth therefore that the Mares appointed for race, be well compacted, of a decent quaf-
ity, being fair and beautiful to look upon, the belly and loins being great, in age not under three
nor above ten years old.

Concerning their admission to generation, it is to be remembered, that the Latinus have a proper
term to signify the appetite of the female to the male, which they call, Equire, that is, Horfing, and
they continue in that lust sixty days together; the signs whereof are these. They forfake their
company, running not toward the East and West, but the contrary, to the North and South; nei-
ther permit they any body to come near them, until they either be weared or meet with the male,
and if they meet with a female like themselves, they joyne near to her, and seem to rejoice at her
society, lifting up the tail, changing of the voice, and sending forth of her secrets, a certain thin hu-
mour, somewhat like the feed of a Horfe, which is called Hyppomacis.

They also make water more often then at other times, so that among all the females in the world,
there is none, befide a Woman, that is more greedy of procreation then a Mare, because they want a
menstruous purgation, and yet eat abundance of meat, which Virg/ expresseth, setting down their
unlimitable rage, which carryeth them over Mountains and Rivers, in the time of this fury.

Also at that time, their genital handgirth more then at other times, but if their manes be
shorn off, their lust is extingunished. It is reported also by Columella that in Spain, in the Mountain Tegro
which reaceth into Fortuna upon the Ocean, there be Mares which rage so far in lust, that by their
ardent desire of copulation they conceive by the Southweft winde, without the company of a Horfe,
(even as Hens do lay egges being not tord by a Cock) which are called Hyppomacis, but those Foales
live not till they be above three year old. And it is the property of these Mares (fate Avisen) by
kicking against the winde with their hinder legs, to open their own womb, and to receive in that
decelebrable air, wherewithal they are fatisfied.

Also he faith, that he heard of an old man, which was born in the Isle of Realquha, that the Mares
thereof never ceafe running, from the one end of the Island to the other, when the rage of their lust
is upon them; which thing is elegantly described by a Poet, how they turn themselves to the Weft,
standing upon the rocks, and there draw in the cold aire, which oftentimes maketh them conceive,
wondering that they conceive not rather by the Easte sunrizing or South, then by the Westely
winde bordering upon the North; the Poets words are these:

Continuque avidis ubi subdita flamma modulatis,
Veremagis quia verecolor reddit officibus ilia
Ore omnes verfa in Zephyrum, fiant ripibus altis
Exceptantque levibus auris: & sepe fine ullis
Conjungi ventis grandia (mirable diuin
Saxa per, & foquitos, & depressis convulles
Diffingiunt, non Eure tuis neque Solis ad auras:
In borem Caurumg, aut unde nigerum asfier
Nachtur, & phuto contristat frigore calmam.

Sometimes Horfes and Mares admit copulation at two year old, but those Foales never prove ex-
cellent, but at three year old or thirty moneths, they suffer conjunction safely and with profit, because
they cease to lose their teeth. They continue in their generation, bearing every second year, the
male untill he be thirty year old, and the female as long as the liveth; but the male engendereth
yearly; And it is reported of a Horfe in Opis, that covered a Mare after he was forty year old, being
only holf up and down from the Mare.

A history of a stallion to his own dam.

The Abystus.  

The choife of Mares.  

The copulation of Horfes and Mares.  

Aristotle.  

Albenuus.  

Pliny.  

Pliny, Oppianus, Retamud, and Aristotile do confidently affirm, that when the King of Scythia had all
his generous breed of Horfes destroyed by a pellicence (except one of his bel Mares and a Stallion
which was a Foale of that Mares) being defirous to continue the breed, caufed his Horfe-keeper to put the Son and the Mother together, but the Horfe refused copulation with his

own
 OWN Parent. Afterward the Horse-keeper covered the Mare with artificial skins, and likewise dressed the Horse in such manner, as one could not know the other, whereupon being brought together the second time, the Stallion covered his own Mother; Afterward the Horse-keeper discovered them, the one to the other, whereby they knew the fraud, and grew guilty in themselves of incestuous commixtion: Whereupon they took no other revenge upon themselves, but ran to the top of a high rock, and there successively threw down themselves; one after another, so ending their miserable days, and preventing their Misters hopes; to teach all mankinde that they ought not to seek to thrive by fins against nature: the like is before rehearsed of a male Camel.  

The very like story is reported of a Horse in the coasts of Red, yet this is not held to be general; for beasts (as Aristotle faith) do promiscuously cover one another; the Father, the Daughter, the Son the Mother, the Brother the Sister, and this maketh them to be perfect beasts; and the stories before recited may be true, yet are they extraordinary: otherwise the common rule of Ovid remaineth true, That it is not a filthy thing for beasts to observe no degrees of nature.

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rout animalia nullo
Cetera decellit, nec babatur turpe juvenae
Ferre patrem tego, fit equo: ma flia conjux.

The best time of the year for the joyning of Horfes and Mares for copulation, is from the vernal aquisolstitial to the summer solstice, because then the Colts which are foasted in due time, have the green herbs and all the warm weather for the succour of their infancy: and if the Mare (after she have been once covered) refuse the male, let her rest ten days, and then bring her to the male again; if she refuse the second time, you may take it for granted, that she is filled already. Wherefore seeing it is known certainly that a Mare goeth twelve moneths with young, it is an easie matter to order the time of her copulation, that her foale may always be delivered in a warm and fafionable time of the year; for which caufe there is an invention for stirring up of the luft both in the male and female: the Hymenaeus thereds, by the sweetness of fongs upon their pipes, stirre up their Horfes and Mares to copulation, but the more affured way is, to follow the direction of Columella and Abystitus, to provoke them by natural means, like as Bulls and Kinne.

And first of all for the male, give him the tail of a Hare burnt, mingled with wine, and anoint therewith his loines and genital member, and so shall the Stallion be more prone to venery; also there is a kind of Smyrium, which they give to them in drink, or the powder of a Horfes loines: likewise if the female refuse, take shrimpes beaten soft with water (as thick as bone) therewith touch the nature of the Mare in her purgation, and afterwards hold it to her nose; or else take Hens dung mixed with Rosen and Turpentine, and anoint the secretes of the Mare, which shall far increase her luft, as it cleareth the lothomines of the then the shrimpes, and increaseth luft. But you must regard, that no lean and ill favoured Mare be anointed, because the Horfe is quickly wearied from his luft, and so delighteth only to be ticked therewith without doing any thing.  

Other again do first of all bring some vulgar Horfe to the Mare, who provoketh and stirreth her luft to, and when he is near the very fact of filling her, they lead her away to a more generous Stallion, to be covered by him: And so if none of these means do prevale with her, they do rub her secretes with a Nettle, and that caueth her to suffer the Horfe to enter.

Demeritus also faith that it is in our power to caufe our Horfes to bring forth males or females; for if we suffer them to couple when the North wind bloweth, or the third day before the full Moon, or bind his left loine, he shall get a male; but if when the South wind bloweth, or three days after the full Moon, or bind the right loine of the Horfe, it will prove a female.  

Alfo at the time of copulation, the Horfe leap off from the Mare on the right side, it is a token it will be a male, but if on the left side, it will be a female. Carnal copulation is most acceptable to Horfes, and leffe grievous unto them then to Neat, for there is no kind (min only excepted) that is so venereous and nimble in generation is as a Horse or Mare.  

The males know their females with whom they live, although they have been but a few days together; and if strange females fall into their company, they expel them away by biting, feeding single and alone with their female by themselves; but if any male or other loine Horfe come within their walke, then presently they make force at him; if their female fir from them, they restrain her by biting: and in this time of their rage, they neither regard the rider, nor their adversary, nor the bridle, nor cruel stripes, nor steep hills, nor rocks, nor caves of the earth, if they winde the amorous favour of their fellows; according to the saying of Virgil in these Verdes;  

Nomen viridi, ut toa temor portentet equorum
Corpora, si tantum notas odor attulit aura f
As noque eum jen freva virum, nec verbera sona,
Nan spoalt, expel; earn, atque obieeta retardation
Flamina, corrupit unde torquentia montes.
The History of Four-footed Beasts.

It hath been also received, that a barren Mare shall conceive if you take a bunch of leeks bruised final and put into a cup of Wine and twelve French flies called Cephalotes in water, put them two dayes together into the genital of a Mare, like a Gryffer, and afterwards put her to a Horse anointing her secrtes with the said ointment two several times, when the Horfe leaps down from her; or else they take Niter, Sparrows dung, Rozen, and Turnbulling, thrilling the fame into the Mares genital, whereby it hath been proved, that fecondity oftentimes followed.

Also some use Silur of the Mountains to procure conception in Mares and Cowes, and the true sign of conception is, when their nature (that is) the fluent humour out of their secretes ceaseeth for a moneth, or two, or three: and Pliny faith, that when a Mare is filled, she changeth her colour, and looketh more red, which is to understand not of her hair, but of her skin, lips and eyes, her hair flaming more full then before. Then let them be separarated from the males, exempting them from moist places, cold and labour, for all these are enemies to her foaling, and caule abortion.

Likewise they must not have too much meat nor too little, but only a temperate diet, and soft lodging, their better ordering is elegantly described in Virgil, by these Veres.

Non illis gravisit, qui questam jugo diceat plusfris,
Non saltu superare sanam fit passa et e locri
Carpe praed jugo:-flaviesque in mare raptes.
Dolius in vacuo pensant: et plena securdum
Flamia, mensus ubi er viridis fumes graminertips,
Splen estque tandem: & facta procubet umbra.

This is most certain, that if a Woman in her flowers, touch a Mare with foal (or sometime do but see her) it caueth to call her foal, if that purgation be the first after her Virginity. In like manner if they smell of the juice of a Candle, or eat Buck-mast or Gentian. The Egyptians when they will describe a Woman suffering abortion, they picture a Mare treading upon a Wolf, for if a Mare kick at a Wolf, or tread where a Wolf hath trod, the calfeth her foale: if an Asse cover a Mare which a Horfe hath formerly filled, there followeth abortion; but if a Horfe cover a Mare which an Asse hath formerly filled, there followeth no abortion, because the Horses feed is hotter then the Asses. If a Mare be sick of abortion or foaling, Sulphur mingled with warm water given her in a horn, is a present remedy.

The Systeni when they perceive their Mares to be quick with foale, they ride upon them, holding opinion that thereby they call forth their foales with leffe pain and difficulty. They carry their young one in their wombs, as hath been already said, twelve moneths, but sometimes they come at eleven moneths and ten dayes, and those are commonly males, for the males are sooner perfected in the womb: then the females, and commonly the females are foaled at twelve moneths and ten days: and those which tarry longer are unprofitable and not worth education. A Mare is most easilly delivered of her young among other beasts, and beareth most commonly but one at a time; yet it hath been seen that twins hath proceeded from her. At the time of her delivery, the lefe purgation of bloud then so great a molde of body can afford, and when the hath foaled, the devoureth her seconds, and also a thing that cleaveth to her foales forehead, being a piece of black flesh called Hippomenes, neither doth the suffer her young one to suck until the have eaten that, for by smelling thereunto, the young and old Horses, or other of that kind would fall mad: and this thing have the imposter of the world, used for a Philtre or amorous cup, to draw women to love them, Virgil speaketh thus of it:

Queritur & nascencia Equi de fronde resulis
Et matris praecepit amor.

And again:

Hinc demum Hippomenes vero quod nomine deuent,
Paverse, lentum disstitat et ingurgit virus
Hippomenes, quod sese muliebremque, noverce,
Misfueruntique herbis & non innovaxi verba.

This poison made into a Candle (Anexilaut) in the burning thereof, there shall be a prentention of many monstrons Horfes-heads. There is very great poison contained in this Hippomenes, for the Arcadian Phorin made a Horf of brasse at Olympia, & put Hippomenes into the same, and if the Horfes at any time see this Braunen Horfe, they were so far irraied with heat, that no halters or bands could hold them, but breakeing all, run and leaped upon the said Braunen Horfe, and as hough it wanted a tail, yet would they fortake any beautiful Mare, and run to cover it; neither when they came unto it, and found it by their heels to be founding and hard, would not they deprize the copulation, but more and more, with noise of mouth, rage and endeavor of body, labour to leap upon the same, although the flippery brasse gave them no admission or stay of abode upon the back of that substance, neither could they be drawn from the said Braunen Image, untill by the great strength and cruel stripes of the riders they were forcibly driven away.

Some
Some think this little piece of flesh to cleave to the forehead, others to the loins, and many to the genitals: but howsoever it is an unspreakable part of God's providence, to make the Mares belly a sepulchre for that potion; for it should remain in the males as in the females, the whole race of Horses would utterly perish and be destroyed through rage of lust, for which cause the keepers and breeders of Horses do diligently observe the time of their Mares foaling, and instantly cut off the same from the Colt, referring it in the hoof of a Mare, to procure the Stallions to carnal copulation, and the Colt from which they cut this piece of flesh, they sacrificed it, for it is manifest that the Mare will never love that foal, from whence the hath not eaten and consumed this piece of flesh.

And this potion is not only powerful in brute beasts, but also in reasonable men, for if at any time by chance or ignorantly they take thereof, they likewise fall to be so mad and precipitate in lust, raging both with gullions and voice, that they cast their lustful eyes upon every kind of Women, attempting wherever they meet them to ravish or ingender with him: and besides because of this oppression of their mind, their body consumeth and fadeth away: for three days after the Colt is foaled he can hardly touch the ground with his head. It is not good to touch them, for they are harmed by often handling, only it is profitable, that it be suffered with the dam in some warm and large stable, so as neither it be vexed with cold, nor in danger to be oppressed by the Mare through want of room. Also their hooves must be looked unto, lest their dung sticking unto them burn them, afterward when it waxeth stronger, turn him out into the field with his dam, left the Mare over-mourn her feif for want of her foal, for such beasts love their young ones exceedingly.

After three days let the Mare be exercised and rid up and down, but with such a pace as the foal may follow her, for that shall amend and encrease her milk. If the Colt have soft hoofs, it will make him run more speedily upon the hard ground, or else lay little flones under their feet, for by such means their hoofs are hardened, and if that prevail not, take Swines grease, and Brimstone never burned, and the flanks of Garlick bruised and mingled all together, and therewithanoint the hoofs.

The Mountains also are good for the breeding of Colts, for two causes, first for that in those places their hoofs are hardened; and secondly by their continual ascending and descending, their bodies are better prepared for enduring of labour. And thus much may suffice for the educating and nursing of foals.

For their weaning observe this rule, first separate them from their dams twenty four hours together, in the next morning let them be admitted to fuckle their belly full, and then removed to be never more suckled; at five moneths old begin to teach them to eat bread or hay, and at a year old give them Barly and Bran, and at two years old, wean them utterly.

Of handling, taming, or breaking of Horses.

They which are appointed to break Horses are called by the Grecians, Equoide, Equuiden, Hipposon, and Hipposoma; the Latins, Equitatus, Aratuulatores, and Cociones, in Italiano fo Razzoni. Allfyrus is of opinion that foals are to be used to hand, and to be begun to be tamed at 18 moneths old, not to be backed but only tyed by the head in a halter to a rack or manger, so that it may not be terrifyed for any extraordinary noise, for which cause they use them to brakes, but the best time is at three years old, as Ceretetensis teacheth in many Chapters, wherefore when they begin to be handled, let him touch the rough parts of his body, as the mane and other places, wherein the Horse taketh delight to be handled: neither let him be over fevered and Tyrannous, and seek to overcome the beast by stripes, but as Ceres faith, by fair means, or by hunger and famine.

Some have used to handle them fucking, and to hang up in their presence bits and bridles, that so by the sight and hearing the glinging thereof in their ears, they might grow more familiar. And when they came to hand to lay upon their backs a little boy flat on his belly; and afterward to make him fit upon him formally, holding him by the head, and this they do at three year old, but commit him to no labour untill he be four year old, yet doth well to and small Horses for ordinary use are tamed at two year old, and the belt time for the effecting hereof, is in the moneth of March.

It is also good in riding of a young Horse to light often, and to get up again, then let him bring him home and use him to the stable, the bottom whereof, is good to be paved with round flones, or else planks of Oak, stirring litter upon it when he lyeth down, that so he may lie fast and stand hard. It is also good to be regarded, that the planks be so laid, as the Urine may continually run off from them, having a little close ditch to receive it, that so the Horses feet may not be hurt thereby, and a good Miller of Horses must oftentimes go into his stable, that so he may observe the usage of this beast. The manger also ought to be kept continually clean for the receiving of his provender, that so no filth or noisome thing be mingled therewith: there ought alfo to be partitions in it, that so every beast may eat his own allowance, for greedy Horses do not generally raven upon one's own meat, but alfo rob their fellows. Others again have such weak stomachs that they are offended with the breath of their fellows, and will not eat except they eat alone.

The
The rack also is to be placed according to their stature, that fo their throat may not be too much extended, by reaching high, nor their eyes or head troubled, because it is placed too low. There ought also to be much light in the flable, left the beast accustomed to darkness, be offended at the Sun light, and wink over much, being not able to inure the beams when he is led abroad; but yet the flable must be warm and not hot; for although he do preserve fatness, yet it bringeth indigestion and hurreth a Horfes nature, therefore in the Winter time the flable must be fo ordered, as the beast may not be offended or fall into diseases by overmuch heat or fuddain cold. In the Summer time let them lodge both night and day in the open air.

This also in flabling of your Horfes must be avoided, namely, the flies of Swine; for the flink, the breath, the grunting of Hogs, is abominable for Horfes, and nature hath framed no sympathy or concord betwixt the noble and courageous spirit of a Horfe, and the beatilly sluggish condition of a Swine. Remove also far away from your Horfes flables all kindes of fowl, which were wont to haunt those places to gather up the remnant grains of their provender, leaving behind them their little feathers, which if the Horfe lick up in his meat, flick in his throat, or else their excrements which procureth the loofeness of his belly.

It muft also be regarded, that the flable must be kept neat, sweet, and clean, fo as in abfence of the Horfe, it may not lie like a place for Swine. The infruments also, and implements thereof, such as are the Horfe cloathes, the Curry-combs, the Mane-combs, Saddles and Bridles, be difposed and hung up in order behind the Horfe, fo as it may neither trouble him eating or lying, nor yet give him occasion to gnaw, eat, and devour them to their own damage or hurt, for fuch is the nature of fome Swine, to pull affunder and deftroy whatsoever they can reach.

They are therefore oftentimes to be exercised and backed, and principally to be kept in a good diet, for want of food defectiont the spirit of the noblest Horfe, and also maketh the mean Horfe to be of no ufe; but on the contrary a good diet doth not only make a mean Horfe to be servicable, but also continue the worth and value of the beft: which thing Poets confidered, when they fain that Arian the Horfe of Neptune and fome others were made by Ceres the Goddes of Corn, which any mean witted man may interpret to signify, that by abundance of provender the nature of Horfes was fo far advanced above ordinary, that like the Sons of the Gods they perform incredible things: whether therefore they eat chaffe, or hay, or graffe, or grain, according to the diversities of Countries, let it be wholefome, clean, frefh, and sweet, without dust, gravel, multines, or evil finell.

In the morning give them Barly or provender, a little at a time in diftinct or feveral portions, twice or thrice one after another, fo as he may chew and eke digeft it thoroughlie, otherwise if he raven it in, as he will do having much at a time, he rendreth it in his dung whole and not digested. About three hours after, he hath eaten his provender, give him a little of hay, and three hours after that, his dinners allowance of grain, as in the morning, and afterwards about two or three a clock hay again, and then fome drink; left of all give him his allowance of provender for supper, with a bottle or two of hay, which ought to be more plentiful then the former fervings: and yet these rules are not to be underflood as though they might not be altered, for the times prefixed may be prevented if occa fion require. Their f mell provender is Oats and Barley, yet Barly in gerdeth the thinner and better blowd, and therefore it is to be preferred, only the meafure of the provender is left to the defcretion of the Horfe-keeper, and there is no meat more wholefome for a Horfe, then Barly and Chaffe, becaufe it will make him full of life, and alfo able to indure labour, yet not over fat.

In England in many places they give their Horfes bread made of Fitches, Beans, and Peafe. When one is to make a journey on horfeback, let him not give his Horfe too much provender the noon before, but fo much the more hay, and bread deeped in wine, and alfo let him ferve him fooner at night then ordinary, that fo the beft may take the more refl. There be which refufe to give Horfes wet provender or deeped bread, becaufe they conceive that it will breed in them loathfome nefs of meat; but the truth is, a reafonable Horfe-keeper preventeth that mischiefe; and besides, the meaf of a Horfe is altogether fo dry, that the beft himfelf is indangered to be fick of that difafe; and therefore it is as fafe to give him moistened food fometimes, as well as to give him bread mingled with falt.

When a Horfe is weary or sweateth, let him not drink nor eat provender, but after he is walked a little while, give him hay, firft of all covering him with a large clothe, and remember, that hay is not to be call before a Horfe, as it is out of the reek, but firft of all it muft be pulled, and shaken betwixt the hands, for the avoiding of dust and other filth. Reftrain the Horfe as much as you may from eating the litter under his feet, for even the beft meat fo defiled is unlewhome. It is alfo good fomentes to fuffer him to pick up his meat on the ground betwixt his forelegs, that will make his neck to grow thinner, leaner and more comeby. Let his neck be fall bound in the flable with a Leathern collar, and bind with a manacle his fore-leg to the hinder-leg on the contrary fide, and fo shall his be preferved in more health, becaufe they cannot move out of their place but with difficulty.

Concerning the drink of Horfes, nothing more is to be added in this place, and namely backfifh and troubled water, such as runneth foily, as in great ponds, is fiftteth for Horfes, because that water, being hot and thick nourifheth better, but the fiftw Water is colder, and therefore more unlewhome, but in hot times (as in Summer) the sweet and clearer water is more conve-
ment, if custom be not against it. And because a Horse (except he drink freely) can never be fat, let his mouth oftentimes be washed within with Salt and Wine, and that will make him eat and drink more liberally: and yet the running water is more wholesome for Horses, because whatsoever is moveably fluent, is left subject to poison then that which standeth still; but if a Horse sweat or be weary, it is not safe to let him drink any thing, except he first rule, for in such cases followeth dilution. And it is better to turn or lead forth your Horse to water, then to bring it unto them. And if at any time necessity cause this to be done, then let the Water be very clear and fresh.

His stable or lodging ought to be ordered, as neither it offend him by cold in Winter, nor yet through heat in Summer, for both these extremities are pernicious: and therefore when the weather is extreme cold, then must the Horses back and belly be covered with a cloth: and when on the contrary it exceedeth in heat, then must his litter be taken away. Also in heat he must be covered with linen to avoid flies, and in cold with woollen to help nature: likewise it is good toward night to pick, cleanse, and open his hoofs, with some artificial instrument, and to thrust into the hollow Cow-dung, or in defect thereof Horse-dung with a little straw, that so he may not shake it out again: but this is not good to be done every day, but rather every second day, and it is good to mingle therewith fewest or grease, or else a new laid Egg with warm ashes. In ancient time they used not to shooe their Horses with iron, until the days of Catulus, who remembred this custom, saying,

Ferream a solem tenaee in voragine muda:

So that it seemeth that this devise was first of all invented for Mules. The Horse-shooes ought to be round like his feet, and not heaviest; let the Horses nimbleness be thereby hindered; and great care must be had in nailing or setting them on, let the tender and fleathie part of the foot be there-by pierced.

Another charge of a Horse-keeper is to keep his Horses lips soft, tender, and gentle, so as he Pollaris may more sensibly feel his bit: and for this cause let him often rub them with his hands and warm water, and if need require with oil also: and in handling of a Horse this must be observed for a general rule, That neither he come to the Horse right before his face, nor behind his tail, because both these are dangerous to the rider: let by his heels or mouth he harm him, but on his side he may safely set upon him or handle his Horse, and when he leadeth him, he must likewise go on his side.

Likewise good and painful dressing of Horses is no small means to retain him in sound and perfect health; and therefore he must often be touched with the Curry-comb, and afterward with a handful of straw, so as the hand may follow the broke to lay the hair smooth: and their fashion was in old time to brush over their Horses with a little linen instrument made like a sword, where by they excusse all dust from the beast: and herein it is wisdom to begin at the head and mane, and so to defend to other parts, and to touch the Horses back gently: he may wash the head and mane because it being fo bony, it is dangerous lest the comb offend and grieve the beast, except it be layed on very tenderly, but it is not good to wash the legs, because daily washing lootheth the hoof by flooding down of the water, and therefore it is sufficient only to broke them down with his hands.

The nearest part also of the belly is not to be kept over clean, for the more it is cleansed with water, the more is the Horse pained therein: when a Horse is drest, it is good to bring him out of the stable, that so in the open air he may be tyed in a longer halter, and seem to be at liberty, whereby he shall be brought to more cleannesses and tasteful gentleness, standing upon some smooth stones, till all the dust and loose hairs both by the Comb and Brush be driven away, and in the mean time the stable be emptied, and this is to be performed before the Horses watering. You must also regard the skin wherein the Horses yard runneth he keep clean, for it if be stopped it hindereth urine, and maketh the Horse sick, and when your Horse is in drest, let him have before him no manner of meat either of hay or provender.

Let them be led to the Water twice a day, and wash therein both legs and belly, except in the Winter time, wherein it is not safe to wet the Beafi fo often: and if there be in them any appearance of sicknes and infirmity, or if you have any purposer to give unto them any kind of medicin, then must you altogether forbear to water them. Some use to wash their Horses legs with warm wine-kegs to refresh their joints and sinews after hard journeys, which custom seemeth very allowable: other use in stead thereof warme dmf-water out of the kitchin, and the backes they wash with cold water and falt.

Underneath their tails,and near their yards, you shall find them in the Summer time to be much annoyed with flies, and therefore it is a needful part of the Horse-keepers watchfulness to look in those places and drive them away, for so his charge will take the better reit.

And evermore there must be nourished a mutual benevolence betwixt the Horse and Horfe-keeper, so as the Beafi may delight in the presence and person of his attendent: and for this cause he may be kept from hunger, wet litter, cold in the Winter, and flies in the Summer: and furthermore a diligent caution must be had, that the Beafi be not provokd through overmuch severity, for if the Horfie by his keepers violence be often driven to his rack and menage to avoid
The furniture of a Horse and his trimming.

The History of Four-footed Beasts.

The furniture of a Horse and his trimming, either he hurceth his shoulders or legs by his own weight or force, or else groweth into a trembling at the presence of a man, and to never yeeldeth any loving obedience; or else falleth into some furious and unreclaimable evil qualities. The Matter therefore ought often to enter into his stable, and take a view of his Horses usage, whereby the Beast will quickly take notice of him, especially if he have but one, for it is a great lolly and piece of his husbandry to train Servants and not to overlee them. Cato was wont to say, Evanscripta prior: that is, as the forehead is before the nape of the neck; meaning thereby that nature hath fitted him highest andormost, which should not hide himself, but take his place upon him and discharge it, for it is not safe or any part of wildom, to see by another mans eyes, or work altogether by Deputies.

Men must also be afraid of lending their Horses, for the Germans have a pretty proverb, that they will not trust their wives at great feats out of their sight, for commonly they learn some evil fashion or other more then they had before; and so much more Horses (after lending) return home again to their Makers with alteration of strength and quality.

of adorning and furnishing Horses.

I Cannot approve them that cut off their Horses tail or foretop; one received beginning from an ignorant perversion of increasing the strength of the Horses back, and the other from an imagined comelines, by trimming it with ribbon or some devised knot, or that it hindered the Horses flight. In the first the Beast is wronged and deprived of his help against the flies, and decency of his hinder parts; and in the second nature accursed, for not adorning the Horses forehead with more gaudy and variable coloured hairs, and providing a bunch of hair to weaken his eyes; but neither of these are tolerable, for a wife man once to imagine, and therefore I will not spend any more time to confute this vain adorning of Horses.

Let the horse-keeper take heed that he harm not the Beast when he puteth on his Bridle, for a little negligence quickly bringeth a great offence, by touching, wringing, and oppressling any tender part in the Horses head or mouth. He must alway put on his Bridle on the left side, and if the Horse of his own accord do not open his mouth to the bit, then must he gently open his mouth with one finger, and fo put it upon him; and if by that means he open not his mouth, then preffe or wring his lip upon his great canine tooth, which thing caueth any Horse to open his mouth.

Alfo it must be regarded that the Horse in leading be not drawn after you, for so will he be made hard headed, unwilling to follow. Again his Cheeks must not be pinched by the Bridle, left the skin grow fenfeles; alfo it must not hang long or loose in his mouth, for fo he will be alway biting his bit, and give lefse obedience to his Rider.

Congenatus writeth that he hath seen some put Salt upon their bits, whereof the Horse licking or tasting, became more willing to take it into his mouth; and for the better performance hereof, it is necessary to observe by often trial, what kind or fashioned bit best becometh and fitteth the Horses mouth, and finding it, keep him thereunto continually: and when it is put on, neither wring his Cheeks, or let him rovel it betwixt his teeth.

The Saddle also must be so fastened to his back, as that it may not turn or rovel upon the same; wherefore he which layeth it thereupon, must come on the left side, and gently without violence or noise, fet it upon the Beast; fo that neither girths, peytir, furrops, trapping, or crupyard, fall betwixt the Back and Saddle, neither covering therewith the Horses wither, nor yet touching his hips or loins.

Firft of all let the peytirrill on the breast be buckled, then the girths in order near the forelegs, not upon the belly, for upon the belly they will be fiding off, and that is againft the rules of riding; for Bene equitum qui bene cingunt; that is to say, they ride well which bind fast; and this ought to be done in an open place, where both the Rider and the Horse may have more liberty: wherewith a generous and great stomached Beast is much delighted: neither must he be tyed or drawn too hard till the Rider be seated. Look alfo often to the girths, that they wring not the fides, or pull off the skin.

Of Riding and sitting on Horseback.

When you are to get up and mount on Horseback, take hold on the lower part of the Bridle near the Bit, with the left hand, with such a distance as may both keep him from fying, nor give him offence, if you take advantage to get into the Saddle, and with the right hand take the reins on the top of the shoulders and the mane, and so hold them, as you give no check to the Horses mouth in mounting; there are other rules for this among Riders, whereother I will not meddle, only it is good to use your Horse to backing both falled and bare, as well from the plain ground, as from blocks, and risings invented for the case of man.

Therefore before you go to Horseback, firft broke your Horfe, and make much of him with gentle words, or other convenient sound which the Horse understandeth, and so will he stand more willingly till you be on his back: for this thing there is in Plutarch an excellent story of Alesander the great, when Eucrathmus was firft of all presented to his Father King Philip, by a Thesalian called Philonix: For when the King was perswaded to go forth into the field to try the qualities of this Beast,
beaft, which was so highly commend'd for rare parts, and valued at such a price, as none but a King might yeild for him, then the Horfe began to snort, and kick, and to admit no man to come unto him within the length of the rains, but kept aloft like a wilde and untamed Horfe; yielding no obedience to voice or other signes of the Riders: whereat the King fell exceeding angry, and bad them lend away the unruly and untamed Horfe: Alexander being present, complained of the ignorance and fearfulness of the Riders, and that they were the caufe why such a generous and gallant beaft was no better manned. At the hearing whereof, King Philip smil'd, and yet so carried himself as though he had not heard the words of his Son, till Alexander repeated his saying the second time; whereunto his Father reply'd, What (far Boy) will you make your self more skillful than thefe old cunning Riders? will you lay on them an imputation of fear and ignorance? Yes, said Alexander. I will adventure to handle this Horfe better then any other: Ye but (said Philip) what punishment the King will doth undergo if thou fail and perform not what thou haft said? What punishment? (said Alexander) why I will give them the price of the Horfe: Whereat the King laughed and fluck up the wagers, and so bad Alexander the rains of the Horfe delivered to him, who prefently turn'd him about against the Sun-rising, that so he might not be terrifi'd with the shadow of the beholders, and so led him up and down softly two or three turns, and at laft wan the Horfe to hand, which he gently stroked and applaud'd: and when he had gotten perfect intelligence and understanding of the Horfe's fomach, he caft off his cloak, and addressed himself to mount on his back, so holding the rains and bearing his hand and whole body as he did not check or pinch the Horfe's mouth: so he inclined him firft of all to lay away his firred and angry minde, and afterward paced him to and fro gently, which the Horfe endured: At laft he put Spurs unto him, and made him run, leap, career, and curve, to the terrour, at the firft, of all the beholders, and afterward to the singulur admiration and praife of himself: which cau'd the company or train to applaud this fact, and forced the old man his Father, to fend forth tears for joy; and when Alexander defended from his Horfe, he cou'd not contain himself, but he muft needs go offifie and embrace such a Son; whereby it is manifiest, that when a Man is to ride on a generous spirited Horfe, he fhall bend him to endure the burthen by gentlenefs and familiarity, fo as the Beait may still know and love his Rider.

Likewise when the Master mounteth, it is requisite that the fervant be on the other side of the Horfe to hold the firrop, for so fhall he get up more surely, and let himself more softly. Some farfes are taught to bend their hands to tak'e up their aged and fick farfes, that so they may be the leafe offended in ascending to their back, and this custom (laith Pallas) did firft of all begin a mong the Persians.

The ancient Germans were fo singularly exercis'd in Horsmanship, that standing upon the ground and holding a Spear or Lance in their hands, they mount'd without other firrop or vantage upon their Horfes backs; and not only when they were ordinary attired in common garments, but then also when they were arm'd, (though Julius Ceafar take from them all glory of Chivalry) yet now adayes the invention of Saddles with firrops, is most easily both for Horfe and Horsmen, being then better the Peleborian invention time.

When the Rider is in his Saddle, and is well ftead, he muft not fit as in a Chair or Chariot, bended together, but rather keep his body upright, only bowing outward his knees, for so fhall he be better able to defend himself, or offend his adversary; for he muft rather seem to fland then to fit on horfeback.

The Rider or Master of Horfes muft bare his Horfe in the heat of Summer, (about Dog-days) and in the cold of Winter, and never at any time to Ride palt the twylight of the evening. The Horfe being empty, is most prone to make water then being full, and therefore muft not be hinder'd in that desire: and alway after his riding, ride him not too faft, until his nerves which were extended to let forth the Urine be contracted, fetled and drawn together again.

In the Winter time a Horfe be to paffe over a foord of water (which will ascend up above his belly) let him itale firft, let he fall into the Straggury, and also be a little eaf'd of his load.

There is no beaft that rejoyneth more in celebritie and swiftnesse then a Horfe, because fo soon as he is turned out of hand, he instantly runneth away speedily, and doth walke softly as at other times: and this is a pleasure to them: except when they are provoked above their defires: and the coufell of Xenophon when you are to Ride falt or for a wager, is this, bend the upper part of the body forward, stretching out the hand which carryeth the rains; now drawing it in, and then letting it at length again; and therefore it is good in fuch cafes to ufe short rains, and if the Horfe in his courfe ftrretch for the rains of his own accord, then is it a sign of an unskillful Rider, or of a weak and tireable Horfe. Add not Spurs but in great necellity, but guide and provoke him with voice and riding rod, for quick and good mettled Horfes are by the Spur made fierce; and gentle natured Beaits made fliughter as Afles, which by often beating leem to neglect and cepiphe stripes.

You muft also fhorten and lengthen your journies and times of Ridings, fo as they may neither be certain to the Beait, nor yet over long; and specially after a long journey, take a fhort ar if you Ride upon the fame Horfe.

First of all let him be ufed to plain and equal ways, and if he be to leap or go up a hill, it was a precept of the old Grecians, that then the Rider muft lay the rains in his neck.
The History of Four-footed Beasts.

If the Horse at any time be either more fierce or sluggish then ordinary, he may be helped by these means. Wildenes and fierceness of Horses, is like to anger and rage in men; and therefore occasions of offence in word and deed must be avoided: therefore as soon as the Rider is upon his back, let him rest a little before he set forward, and then also let the Horse move but his own pace: for as men are offended with sudden violence and imperious gestures, so also are Horses: but if the Horse being spurred to his race, be more forward and hot then ordinary, he must be gently restrained by the bridle; and it is better to qualify their rage in long and spacious direct journeys, than in often windings and turnings.

But if any man be so simple as to think that by length of journey or race, his Horse will be more meek, because he may be tired, he deceiveth himself; for as rage in man inventeth hurtful revenge, and turneth into malice by continuance, so also in Horses it procureth a headlong ruine (if it be not prevented) both to Horse and Rider: and therefore if your Horse be of a generous spirit, never provoke him to ferocity, for as they are wilde and fierce, so are they wicked and harmful.

It is also better to use light and gentle bridles then heavy and sharp, except the Rider can by his art frame the sharp as the gentle bit: and also the Rider must so frame himself in his art of riding, that in the commotion of his Horse, he may not touch any member or part of him, but only his back whereupon he sitteth.

He must also learn his different terms, to incite and stir up his Horse to run forward, which the Greeks call Chlamys, or else to restrain him and keep him in, which they call Pappismus, the one cloeth the lips, and the other toucheth the palt.

If the Horse be fearful of any thing, you must shew the thing to him plainly, that so by custom he may learn not to be skittish, and let him smell thereunto, till he learn not to be afraid; but if men beat them, they do but fear them more; for while they are so ill handled, they suspect that the things whereof they are afraid are the cause of their stripes. In like sort when they go on the one side, or turn back again, it is good to use the Spurs, because they encreas their terrour and perseverance; and therefore as peaceable encouragement and friendly persuasion is the best means to perwade a man in his fear, the like course must be taken with a Horse, that so he may go straight on without doubt or trembling; and learn not to account any thing horrible to his nature.

When a Horse is so tyred and wearied in his journey that a man would judge him unfit for any labour, take off his saddle and burthen, and put him into some stabe or green field, where he may tumble and rowle over and over, and he shall easily recover. In ancient time, if Horses were to be travelled through snow, they made them boots of sackcloth to wear in their journey.

Of the disposition of Horses in general.

Among the flocks or heards of Horses, there is not a Captain or leader going before or governing the residue, as among Oxen, Sheep, and Elephants; because the nature of these is more inflable and moveable it being a swift and high spirited Beast, and therefore hath received a body furnished with such members as are apt to be bewayed by such spirit: for Laertes truly observeth in them a defire of glory, because after victory, the conquerors exult and rejoice, but the conquered or overcome, mourn and hang down their heads; which thing Virgil expresseth in this Verse:

Infultare solo, & gressus glomerare superbos.

But more plainly Ovid, the triumph of the conquering Horse; saying,

His generosus bonus & gloria major equorum;
Nam captivat animis palmam, gaudiente triumphus,
Sex septem flavis circa meruere coronam.
Numa widis victor quanta sublimius altum
Attollit caput, & vulgi se venditet aura,
Cellore cum cepo decoratur terga bove,
Quam tamidus, quantque venit spectabilis ait a
Compulque folum, generoso concita pulso,
Ungula sub ppolis graviter redeuntis optimis.

And Pliny affirmeth that when they are joyned together in Chariots, they understand their encouragements of glory and commendation: and therefore there is not any beast of so high a stomach as a Horse.
Of the natural disposition of Horses.

They love wet places and bathe, for which cause they are called Philolures, they also love musick, as hath been already declared, and the whole host of Army or the Sybarites, taught their Horses to dance at the sound of a Pipe: and Cæsar writeth hereof in this manner, So great (faith he) was the riot and wantonness of the Sybarites, that at their common feals they brought in Horses to dance before men; which thing being known by the Cretians, they offered them War, and agreed upon the sight: whereupon in the day of battle, the Cretians brought with them divers Pipers and Minstrels, who upon a sign given to them, founded their instruments, whereupon the Sybaritian Horses came running and dancing among their adversaries, and so betrayed themselves and their Riders to the enemy.

The like story is reported by Athenaeus, of the people called Cardini, for they also taught their Horses to dance upon their hinder legs, and to work many strange feats with their fore-feet, at the hearing of certain measures played upon Pipes.

The Bifaltians waged War against the Cardians, and they had to their Captain a certain man called Otaris, who when he was a Boy was told to Cardis, and there he served with a Barber: In the time of his service he oftentimes heard, that the Oracle had foretold, how the Cardians should be overcome by the Bifaltians, and therefore he to prevent the worst, ran away from his Master, and came home safe to Bifalis his own Countrey, and was by his Country-men created Captain of all their warlike forces: he understanding what tricks the Cardians taught their Horses in dancing, brought out of Cardis certain Pipes, and taught divers Bifaltians to found and play the measures upon them, which the Cardians taught their Horses: whereupon when as they joined battle with the Cardian Horses (for all the force of the Cardians lay in their Horses) he commanded his Piping Bifaltians to found their musick, which the Horses understood, who presently stood up upon their hinder legs, and would not fight any more, or go any further, so as they were overthrown by their adversaries.

They have also a singular pleasure in publick spectacles, and therefore have been observed to be provoked not only by pipes, but such instrumenall musick, but also by Songs or vocall harmony, by variety of colours, and by burning Torches. Dion also writeth that he saw a Horse taught to know and to do reverence to a King.

And Tacitus affirmeth that he saw a Horse at Paris at the triumphs, Tilt, and Turnament made for the marriage of Nero the twelfth to Maria, a Lady of Britain, which being commanded by his Rider to fallen as the Queen, presently did bend both his knees unto her, and then rofe again running away as fast as a bird could fly.

Homer feemeth also to affirm that there are in Horses divine qualities, understanding things to come, for being tied to their mangers they mourned for the death of Paterculus, and also foreshewed Achillus what should happen unto him: for which cause Pliny faith of them, that they lament their dead Masters with tears, and foreknow battles, Virgil writeth thus of the Horse of Pallas:

Post bellum equus, postis infignibus, Robat
It laebrymanis, guatique humat grandibus ara.

Accursius affirmeth, that Caesar three days before he died, found his ambling Nag weeping in the stable, which was a token of his ensuing death, which thing I should not believe, except Tranquillus in the life of Caesar, had of the same thing, and he addeth moreover, that the Horses which were consecrated to Mars, for palling over Rubicon, being let to run wild abroad without their Masters, because no man might meddle with the Horses of the Gods, were found to weep abundantly, and to abstain from all eat. Whereof there could be no cause given, but the love of their former Masters. It is also reported of Rodatus, a Captain to Charles the great, who after the death of the Emperor was made a Monk, his Horse would never suffer any to come on his back except his Master, who likewise had abstained from riding many years: But it happeneth that certain Pagans brake in upon the said Monastery, whereupon poor Rodatus went unto his Horse, who after many days did not stir, willingly took up his aged Master upon his back, and so carried him until he triumphed over his adversaries; and no marvel, for Dogs and Horses are most loving to men, if they be brought up carefully, and liberally, they recompence the good turns with their benefactors. It is observed in the nature of Horses, that they seldom hurt a man or child, except in their madness, yet are there malicious Horses as well as men. It is reported by Pliny and Tertull, that when a foal hath lost his dam, the refuse of the Mares which give suck, bring it up, and that they are seldom found at variance, except the barren Mares pull away the foals from the natural dams. For there is no creature so loving to their young ones, as are Mares, neither any so dearful of young: for which cause, when they are barren themselves, they labour to steal them away from others.

They which were wont to races, would perform it upon Mares newly delivered of foals they tied up the foals at home, and led the Mares to the beginning of the race, making the end thereof at the foals fable: and so putting the Beall forward, the runneth homewards more speedily for the remembrance of her foal.
The History of Four-footed Beasts.

Of the fear of Horses, and their enemies in nature.

Horses are afraid of Elephants in battle, and likewise of a Camel; for which cause when Cyrus fought against Croesus, he overthrew his Horse by the sight of Camels, for a Horse cannot abide to look upon a Camel. If a Horse tread in the foot-path of a Wolfe, he presently falleth to be astonished: Likewise if two or more drawing a Chariot, come into the place where a Wolf hath trod, they fland fo still as if the Chariot and they were frozen to the earth, faith Eathanus and Pliny. Eathanus also affirmeth the same thing of a Horse treading in a Bears foot-steps, and aligneth the reaon to be in some secret, betwixt the feet of both Beasts.

We have shewed already, that if a Mare strike a Wolf, or tread in the foot-steps thereof, she presently calleth her Foal; and therefore the Egyptians, when they signifie a Woman suffering abortion, paint a Mare kicking a Wolf. The Dextanian Horses being not Gelded, dare fight with Lions, but being gelded, like all other Horses, they are so afraid of Lions, that no Itripes, or Ipuris, is able to bring them in their presence, the Carthagian Horses excepted.

All kind of Swine are enemies to Horses; the Elbridge also is so feared of a Horse, that he the Horse dares not appear in his presence. The like difference also is betwixt a Horse and a Bear. There is a Bird which is called Aenurus, which neyeth like a Horse, flying about, the Horse doth many times drive it away, but because it is somewhat blind, and cannot see perfectly, therefore the Horse doth oftentimes catch it, and devour it, hating his own voice in a creature so unlike himself.

It is reported by Aristotle, that the Buffard loveth a Horse exceedingly, for seeing other Beasts feeding in the Patures, delpeth and abhorreth them, but as soon as ever it seeth a Horse, it flyeth unto him for joy, although the Horse run away from it; and therefore the Egyptians, when they see a weak man driving away a stronger, they picture a Buffard flying to a Horse. Horses are also taught to leap, if a Man take him by the rains, and go over the ditch before him, holding him fast, and pulling him to him. But if he be unwilling, then let another come behind him and strike him with a whip, or with a rod, so will he leap over without delay; and thus when you have used him to leap empty, likewise accustom him loaded. First over smaller, and then over greater heights. But at the beginning let him leap in soft ground, and being well practised in harder; and when he beginneth to leap, let the Rider put Ipuris unto him, for so will he perform his leap with more safety to himself and the Rider; and by custom he may leap and run as well down the hill as up hill; and therefore the Persians, and Neditians use and accustom their Horses to run both down hill, and up hill.

These Epithets following, do serve and express the nature of Horses; full of stomach, generous, magnanimous, strong, ardent, sharp, covetous, fierce, bolde, threatening, terrible, foaming; such were the Horses of Acetanias, Argos, Mycena, Asia, Elba, Epid, Spain, Thesalae, Farulias, of which Country was Bucephalus, the Horse of Alexander. Bulbula, a Province addicted to Mahomet, hath many of these excellent, great and swift Horses, whose hoofs are so hard, that they need no iron shoes, although they travel over rocks and mountains.

The Arabians also have such Horses, and in the Kingdom of Senega, they have no breed of Horses at all, by reason of the heat of their Country, which doth not only burn up all pasture, but also cause Horses to fall into the Strangey; for which cause they do buy Horses very dear, using in stead of Hay, the flakeles of Pease dried and cut asunder, and Millet feed in head of Oats, wherewithal they grow exceeding fat; and the love of that people is so great to Horses, that they give for a Horse furnished nine bond-blaves, or if it please them well, fourteen; but when they have bought their Horses, they fend for Witches, and observe therein this ceremony.

They make a burning fire with s扶les, putting therein certain fuming herbs, afterwards they take the Horse by the bridle, and let him over the smoaking fire, asointing him with a very thin ointment, muttering secretly certain charms, and afterwards hanging other charms about their Neck in a red skin, thus them up close for fifteen days together: then did they bring them forth, affirming that by this means they are made more valiant and courageous in war.

The love and knowledge of Horses to men.

And to this discourse of Horses belongeth their nature, either of loving or killing men. Of the nature of Alexander, Horses before spoked of, called Bucephalus, is sufficiently said, except this may be added, that so long as he was naked and without furniture, he would suffer any man to come on his back; but afterwards being faided and furnished, he could endure none but Alexander his Master: For if any other had offered to come near him, for to ride him, he shrit of all terrified him with his neighing voice, and afterwards trod him under foot if he ran not away. When Alexander was in the Indian Wars, and riding upon this Horse in a certain battle, performed many valiant acts, and through his own improvidence, fell into an ambulf of his foes, from which he had never been delivered alive, but for the puiffancy of his Horse, who seeing his Master betimes with so many enemies, received the Darts into his own body; and so with violence pressed through the midst
Of the Horse.

midst of his enemies, having loft much bloud, and received many wounds, ready to die for pain, not once stayed his courtle till he brought his Matter the King, safe out of the battle, and let him on the ground; which being performed, in the same place he gave up the glowt and dyed, (as it were comforting himself with this service) that by his own death he had saved the life of such a King; for which cause, after Alexander had gotten victory, in the very place where his Horse even, he build a Curie and called it Circumambulation.

It is also reported that when Lucius the Emperor would have had his Horses to tear in the Daughter, because she was a Christian, he himself was by one of them bitten to death. Noctis the Son of Themistocles perished by the biting of a Horse; neither herein only is the nature of Horses terrible, because also they have been taught to tear men in pieces: for it is said that Etrusco and Dionysios did feed their Horses with mans flesh, and therefore Herodotus took the like revenge of Diomede; for he gave him to his Horses to be eaten: so Diomedes were these Horses made.

U quà terríllae prœstámen hajentíllis herbis, Impias humánu vijecore pæceth quaesit.

The like also is reported of Glaucus (the Son of Syphius) who fed Horses with mans flesh at, Pompus a City of Eretria, and afterward when he could make no more provision for them, they devoured their Matter: whereof Virgil writeth thus:

Et mentem Venus ipi dedit, quo tempore Glaucus
Petrítur idús membra abjumphere quadráge.

But this is thought a fiction, to express them which by feeding and keeping of Horses, consume their wealth and substance. And thus much for the natural inclination of Horses.

Of several kinds of Horses.

Here be several kinds of Horses which require a particular treatise by themselves, and first of all the Martial or great warlike Horse, which for profit the Poet coupled with Sheep:

Lulphæa prædus & equum bellica proles.

The parts of this Horse are already described in the Stallion, the residue may be supplied out of Xenophon and Oppianus. He must be of a singular courage and docility, without name, fear, or other such infirmity.

He must be able to run up and down the steepest hills, to leap, and bite, and fight in battle, but with the direction of his Rider: for by these is both the strength of his body and minde disovered; and above all, such a one as will never refuse to labour, though the day bespent: wherefore the Rider must first look to the institution and first instruction of his Horse, for knowledge in martial affairs is not natural in Men or Horses, and therefore except information and practice adorns nature, it cannot be, but either by fear or heady stubbornnes, they will overthrow themselves and their Riders. First of all they must not be Gelidings, because they are fearful, but they must be such as will rejoice and gather stomach at the noise of Mutick, or Trumpets; and at the ringing of Armour: they must not be afraid of other Horses, and refuse to combat, but be able to leap high and far, and run into the battle, fighting, (as is said) with heels and mouth.

The principal things which he must learn are these: first to have a lofty and flexible neck, and also to be free, not needing the spur; for if he be sluggish and need occasion to and fro by the hand of the Rider, or else if he be full of stomach and fullen, so as he will do nothing but by flattery and fair speech, he must trouble the minde of the Rider: but if he run into the battle with the same outward aspect of body, as he doth unto a flock or company of Mares, with loud voice, high neck, willing mind, and great force, so shall he be both terrible to look upon, and valiantly prudent in his combate. Wherefore the Rider must so carry his horse, as the rains may draw in the Horses neck, and not to easily, as in a common travelling Gelidings, but rather sharply to his girths, a little, by which he will be taught as it were by ligines and tokens to fight, stand still, or run away.

The manner of his institution may be this; after the dressing and furnishing of your Horse as aforesaid, and likewise the backing, first of all move, fir or walk your Horse gently, until he be well acquainted with the charge of your hand and whole body, and afterward accustom him to greater and speedier pace or exercise, use him also to run longer races, and also by drawing in your hand to lay or stop suddenly; for there are Horses so instructed, that they can stay themselves in their speediest course upon an instant, without any circumspection, flying off the violence of their course, like an ordinary trottling Nag, by mounting up a little with their forefeet.

And always it is to be remembered that after the mounting on horse-back, you must first of all begin on the left hand, bending your hand that way, and also to the right hand when you would have your Horse to run on that side. And above all other things Horses are delighted with crooked;
Men have perished by rattles in riding.

The honour of Horsemanship.

The Athenian Orders.

Aristophanes.

Calici.

Suidas.

Of Horfe-men, and the orders of Chivalry and Knighthood.

The principal Horfe-men of the world celebrated in stories, for training, ruling, and guiding their Horfes according to the art of War, may for the dignity of Knighthood (wherewith they are honoured) and from whom that Equeftrial order is derived, be recited in this place. It is manifest by Sipontinus, that the Roman Equeftrial order, was in the middle between the Senators and the common people, for on the first there was no difference betwixt Equites and Judices, for both of them had for a badge, cognizance, or note of their honour, power to wear a ring of gold, and in the Consulship of Marcus Cicero the title was turned to Equeftrial, or name of a Knight, or man at Arms, by that means reconciling himself to the Senate, and affirming that he was derived from that order, and from that time came the Equesfer ordo being, as is said before, the people, and recorded after the people, because of the latter creation thereof: yet had they not their beginning at this time, but only now they first came into the orders of the Common-wealth; for they were called Celeres under Romanus, of one Celer who at the command of Romanus flew Remus; and he was made the chief Judge of three hundred. They were afterward called Feaxisemete, either because they swayed the minds of them whom they judged, or else which is more probable because of martalling and instructing their Horfes for war: afterward because they took a great company of horse-men, without all aid of footmen, at the City Trosfylam in Illyria, they were called Trosyllam, and Trofylli, and yet some ignorant persons honoured with the title of Trofylli in remembrance of that victory, were esteemed thereof as unworthy their dignities.

They were forbidden to wear purple like as were the Senators, and their golden Ring was a badge both of Peace and War. The Master of the Horfe among the Romans, called by the Greeks, Hipparchos, and by the Latins, Magnus Equitas, was a degree of honour next to the Dilurator, and Marcus the Dilurator made the first Master of horse-men, who was called Spartus, and set him in place next to himself. Tho Equeftrial men or Knights of State were wont to be at the feast, and it was ordained that no man should be called into that order, except both he, his Father, and Grandfather were free men, and were worth in value twenty thousand pounds: Turon and Tiberius made this law, but afterward it grew remisse and not observed; whereby both Bondmen and Scribes were rewarded with this dignity from the Emperour, for Orations and pleasing speeches: yet were the Decurial Judges chosen out of this rank; for indeed by primary institution, they were the flower and民营企业 of the Roman Gentry. Pliny complained that this dignity which was wont to be a reward for Military men, who had adventured their lives for the honour of their Country, was now belowed corruptly, and for money upon mean bribing perons. It should seem they had every one a Horfe of honour given to him for his note, for if one of them had grown fat and unweddy, not able to manage and govern this Horfe, it was taken from him. And Cato took away the Horfe from Speto Afafticus, because he had intercepted money; and from hence came the terms of their allowance, as Equiure et, that for money which was paid for a Horfe to one Knight, and Pararium et, for a double fee to an Equeftrial man.

Among the Athenians, the highest order was of them which were called Pentacofomedymi, which had plowed so much land as had sowed an 1200 bushels of Corn; and the next degree were their Equites, Knights, or Horfe-men, because for the defence of their City, they were able every one to nourish a Horfe of war. There were of these in ancient time but 600, and afterward they were increased unto 1200, and the sacrifices which were made for their poms and triumphs, were called Hippades: and they had liberty to nourish their long hair which was forbidden to other men, and their tax to the sacrifice was at the least half a talent (which is at the least 500 Crowns) and this sacrifice was made for the health of their Horfes. There were two Masters created over these, to wage and order war, and ten inferior Governors or Wardens to look to the provision and nourishing of Horfes.

Among the Lacedemonians they had four Governments; the Monarchy for the Kings, the Aristocracy for the Old-men, the Oligarchy for their Ephors or Commissioniers, the Democracy for their Young-men, which governed, managed, and instructed Horfes. Nefor that ancient Knight was commended for his skill, and had therefore given him the title of Hippotes.

Among the Catillians there was not a rich man but they took him into this Order, and the Civilians likewise did ever highly account hereof, and made it their highest degree of honour, for even the Romans did sometime govern whole Provinces with no other then these; and Egypt had this in peculiar, that no other Order, no not a Senator might be President or Govern among them. The Addams had this degree in high esteem, like as the Germans their Batavis or States. The Citizens of Capua were and are disguised with a perpetuity of this honour, because in the Latin war, they did not revolt from the Romans; and among all other, the Gadditan were most honoured herewith,
but thus came the Teleiota, and were the admiration. There were several places wherein these games of Horaces and Chariots were wont to be observed and kept, and they were called after these places, Olympia, Pythia, Nemesis, and Il ADHDU and of all these the Olympiads were the chief, whereof all stories are full, for they were celebrated in Olympia every fifth year inclusively, that is, after the end of every fourth year.

There was one Amicitia a Cyprian most skilful in this practice, and according to the vain humors of men, was not a little proud hereof, and for his love to Plato would needs in the Academy him and his Scholars his skill, and therefore joining his Horaces and Chariot together, made many courses with such an even and delineate proportion, that his Horaces and wheels never wandered a hair breadth from the circle or place limited, but alway kept the same road and footsteps, whereat every one marvelled: but Plato reproved the double diligence and vain practice of the man, saying to him in this manner, It cannot be, that a man which hath travelled and laboured so much in an art or skill of no worth or use in the Common-wealth, that ever he can addict his mind to grave, serious and profitable businesse, for while he applyeth all his parts and powers of body and soul to this, he is the lefleable and more unapt to those things which are alone more worthy of admiration.

The ancient custom was, to use other mens Horaces in this comitate, and therefore in the funeral of Tactoclus, Homer bringeth in Minelau, using the Horse of Agamemnon. There were four several places wherein these games of Horaces and Chariots were wont to be observed and kept, and they were called after these places, Olympia, Pythia, Nemesis, and Il ADHDU and of all these the Olympiads were the chief, whereof all stories are full, for they were celebrated in Olympia every fifth year inclusively, that is, after the end of every fourth year.

The writers of Chronicles do agree that the games of Olympia were first instituted by Hercules in the 2752. year of the world, beginning the world from Noahs flood, and they begin to record and number the first Olympiad to be about the 3185. year of the world, about seventeen years before the building of Rome.

There were of these Olympiads 328. and the list of these by computation or account fell about the year of our Lord 534. after the birth of Jesus Christ the blessed Saviour of the world.

The perfection of these games began the twenty five Olympiads, at what time Pausanas the Theban was pronounced victor: for then were swift Horaces brought into the games, and were called Teleiotes, that is, perfect in agility and growth; and these are called by Pindarus, Manampycia; afterward came in Synesius with two Horaces, and in succeffion both Coles, Maries, and Mules: their courses are thus expressed by Virgil:

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End animos avumque notabiles,  
Et quia cuncte alior vidiss, qua gloriam palme,  
Nome videris cum praelippit cernatne campo  
Curriperes, ruatque seffis carercur cursor.  
Cum pors arceo incernum, excutiantique baurit  
Corde pavor pulsant, illi infamet utero toto,  
Et proni dext lora: volat vi servidus axis.  
Jamque humiles, jamque elati subline videmus  
Aera per vacuam ferri atque affurgere in auras,  
Nec more, nec requiris; at fulote tumulti arcanum  
Talitum: bumeuari spumis, fintaque sequentem:  
Tantus amor laudum, fante est victoria cune.  
Sin ad bella maie studium turmacque feroces,  
Aut Alphaburus praelabi flumina Pise,  
Et Jove in loco currum aghare volantes:  
Primus equi labor est, animos arque arma videre  
Bullamund, lusosque pati, trahend; gementem  
Ferre rotam, & sintulo freno audire sonantes.
And Horace expresseth it in this manner:

Sunt quos curricula yvteram Olympicum
Civilisque juncto metuque servos
Evinita, rarum, paene nobilis
Terram dominus vobis ad deos.

Women were wont to be excluded from these games, until Cornelia, the daughter of Achaeanus King of the Spartans, first of all other women nourished and trained Horaces for those curule and Chariot games, and when she brought her Horaces to Olympus, she obtained the prize; therefore her Horaces were consecrated to Jupiter Olympus; and their figures remained in Braies in his temple.

It is also said that Ecbartacus a Thessalian overcame in the Olympian games with a Mare great with foal: And it is also reported that Miltiades, the son of Cimon Stesagoras (one of the ten Captains of Athens) ran away from Pisistratus the Tyrant, and in the time of his absence, he was twice victor at Olympus by four Mares, the first time he bestowed the glory upon his countryman German Miltiades, his mothers brothers, and the second time he took it to himself, for which cause he was slain by the sons of Pisistratus; his Mares were also buried over against him, with an inscription, that they had won four games in Olympus, so that it appeared, he ran divers times and never missed victory. As Athens they observed these courses with Horaces in honour of Theseus, and called the place of the running, Hippodromus.

The Latines call it Stadium, and Curriculum, and it was appointed in some plain valley, according to the proverb, Equus in planis, in the midst whereof was a building called Circus, wherein the beholders stood to look upon the paltime, and there were also places to contain the Horaces and Chariots, till they were turned out to run, (called Carreter) according to the verses of Silius:

Sic ubi prostrat pie se de carrere praceps
Ante suis it vidit Equus.

And Horace also,

Ut cum carrebus missus raips angula currit,
Infatis equis antiqua saus vincitibus illum
Praetituum tumultus extremos inter eumem.

And hereof came the proverb (A. carerebus ad talum) signifying from beginning of the race to the latter end. Eriuchonius invented a Chariot called Heracles, and was the first that ever ran in Olympus with four Horse in the same; of whom Virgil speaketh thus:

Prima Eriuchonius currit & quatuor equos
Jungere Equo rapidissimo insinisse vidit.

And from hence came the term Quadriga, for a Chariot with four Horaces. There was a Chariot in Athens drawn by one Horse, and the games thereof were called Polemperia. Likewise at Rome in the Confal-feals celebrated for the honour of Neptune, they ran with Horaces both joyed and single.

There were likewise games at Rome, called Equitata, and Equitaria, celebrated every year, the twelfth of the Calends of May, wherein after the Horaces they coursed Foxes tied to pieces of wood set on fire; this is called in Latine allo Turnamentum; and in Italian by Scopa, Hagiopera; and in French Formierem. There is also a play with Horaces for children cal'd Troo, first invented by Aenetus, when he besieged Alba, and by him brought and taught to the Romans, of which which Virgil speaketh, saying:

Incedunt pieuri, pariterque ante ora parentum
Frenatis locum in equis.
Cornea bina ferunt prefixa haetilla ferre:
Pars levis humero pharetras.
Tris equitum numero turmes, tertique sagittar
Dulciter; pieuri bisfenti quemque pecte.
——— Signum clarame paratis
Abytides longe dedit, infinitumque flagella.
Oili disferrre partes, aequo egmina vent
Dulcita solere obrit, sursumque vocati
Converte vias, iniustaque tela turtere.
Inde alio incursus curas, atque arcus transus
Adversit spatiius, alteriusque orbibus sider
Impediment, pugnque cedit simulacrum sub armis
Et tunc vaga fuga vadunt, nunc seclorum vertunt
Infensit; falla partiter nunc pace ferantur.
Hinc maxem curas, atque haec oportunam primus
Aequas, longam munis cum tingeat Albam.
of the greatest Horfe-masters and nourishers of Horses.

It is reported of King Solomon, that he had forty thousand stable of Horses for Chariots, and twelve thousand for war. The Libyans when they went to war, did fight out of their Chariots, and therefore they were said to fight upon two Horses. The Centaurs were the first that ever taught men to fight on Horse-back, and the Roman Turma confifted of two and thirty Horse-men, the Captain whereof was called Bersenio. The people of Nomads called Sargatti, bought eight thousand Horse-men at one time into the field, which neither used armour, nor bridles, nor iron, except only their dangers, and a rope of leather thongs, wherewithall they entered the battall, and joyning with their enemy, they made certain trials, or loops thereupon, which they call upon the necks of Horses and men, and so with multitudes drew them unto them, in which draught they strangled them.

The Indians use the very self same Armour on Horse-back that they do on foot, but yet they lead empty Horses and Chariots to leap up and down upon, and to refresh their fighting Horses; and the number of their Horse-men were at one time fourscore thousand.

When Pharaohs the Artaxerxes, was riding on Horse-back, there was a Dog ran betwixt his Horses legs, wherewithall the Horse being amazed, suddenly leaped upright, and cast off his Rider, who being bruised with the fall, fell into a Consumption: whereupon the Servants sent the commandment of their Master, brought the said Horse into the place where he cast his Rider, and there cut off his legs about the knees. There was also a fashion for Horses to fight in battalls without bridles: For Pharnaces the Romans, when the Romans overthrew the Celtiberians in Spain, caused them to pull off their bridles from their Horses, that so they might run with all violence, without restraint of Riders upon their enemies; whereupon followed victory: for many times it fallet out that the Horse hath more courage then his Rider, wherefore a good Horse-mans must have skill to annoy his enemy, and defend himself; and likewise, to make his Horse to come off and on without fear or dread, according to necessity.

There is a proverb in Greek, (C. Millipon) that is, (Seocon equites) the Horsemens are afunder, whereof the Suidas giveth this reason: when Darius invaded the territory of the Athenians ranging and destroying at their pleasure, no man daring to abide his forces, at his departure, the Indians climbed up into trees, and signified unto the Athenians, that the Horse-men had broken rank and were a sunder. Whereupon Multides set upon the scattered company, and obtained a noble victory.

of fighting in War upon Horses.

The most cruel and fearful kind of fight, is the arming of Horses, which were called in ancient time Cataphracti, and Clibanarii, and Acutafarilii, and Perentatii, fighting first of all with spear, and afterwards with sword and shield, calling sometimes also darts at one another, and bearing bows to shoot arrows, their Horses making room for them, which way ever they went: for with sharp pipes and other crooked-keen-cutting-instruments, fastened to their Armour or Chariot-wheels, in the violence of their course, they wounded, killed, over-turned, or cut aunder whatsoever flesh came in their reach.

The ancient Horsemens of the Romans had no breast-plates, (as Polybius affirmeth) and therefore they were naked in their fore-parts, providing for the danger that was behind them, and defending their breast, by their own celerity: their shields were made of Oxe skins plighted and pasted together, being a little round in compass like the fashion of a mans belly.

There was also great use of swift Horses in War, for the Roman Souldiers carried with them two Horses a piece, being taught and exercised like Indians, when they had need to flee, to leap upon their empty Horse, for their sparing of the other: and they were therefore called Amphippis, being apt to carry their Mailers out of danger, and from hence (Aelianus saith) the Roman took the pattern of their Phalans, (called Aciformium) with which they used to terrifie the Barbarians, setting their Horses in a double front, so as they appeared headed both ways: and this was also the custom of all the Germans, when the number of their Horse-men was not equal, they mingled the Foot-men, with their Light-horses, who being experienced to run suddenly with the Horse-men, leaped into the battall, and surprized the enemies flying away: and the same fashion did the Spaniards also use (Strabo saith) for the terrifying of their enemies, making the Foot-men to fall into the battall among the Horse-men.

Those which did shoot Darts on Horse-back, were called Hipponotes, and therefore Aristoboleus in his discours of Birds, calleth Hawks by that name, for the resemblance between them and Horses, bearing these Riders. The Hawks are so called in swiftness of their course; and because the talons of the Hawk are crooked like bows, Aristoboleus writeth that the Horse-men of Alexander carried fpear in their hands fourteen cubits long, whereunto I cannot confent; for eight cubits is a common size, as much as any Souldier on Horse-back is able to use.
In battail there are wings of Horfe-men, which are so called, becaufe like wings they cover and protect the Army. And there were also Legionary Horfe-men, because they were joyned to the Legions of Souldiers, and the company of Elephants, Foot-men, and Horfe-men which were wont to go before the King, were called Agema. A company of Horfes fet like a Tower in a Quadrangular form in a field, was called Perug. The Armour of Horfes on his front or fore-part, is called Prometopidia, upon the ears Paritia, upon the cheeks Paris, upon the breath Profermindia, upon the sides Parapleurdia, upon the loins Parameridia, and the time of arm- 
ing a Horfe is known of every Souldier.

Of Riding.

The Medes, Persians, and Armenians, were the first that invented the art of riding and shooting, (as Strabo faith) Pauflanius calleth Neptune Hippens for no other caufe, but that it was fuppoltd he was the first invented the art of riding. Polyboris aſcribeth it to Bellerophon. Lyfias the Orator faith, that the Amazons' women were the first of all mortal creatures that first advertis'd to back Horfes. Others aſcribe it to the Centaurs: But to leave the Invention, and come to the Art. Da- mie in the life of Apollinius, fetteth down the sum of the Art of riding, which briefly is this: To fit right upon his Horfe, to rule him valiantly, to turn him with the bridle which way foever he pleifteth, to beat him when he is flubborn, to avoid Ditches, Gulfs, and Whirlpools when he rideth through waters; going up a hill, to lengthen the rains, and to refrain and draw them in going down the hill; now and then to ftrike his hair, and not always to ufe stripes. 

Martial hath an excellent Epigram upon one Prifius a rath-headed-hunter, who neither feared Hedges, Hils, Dales, Ditches, Rocks, Rivers, nor other perils; uing a bridle to his Horfe, but none to his aſfections; and therefore he teller him, that he may sooner break a Hunters neck, then take away a Hares life: for there are deceits in the Rocks, Hils, and plain Fields, to shake the Rider from Horfe-back to the earth. Thus followeth the Epigram;

Percius utaris nones rapiente vere,
Prifos, nec in lepores tam violentus eair.
Sepe fatia fecit praece venator, & acri
Deedit excussus nec rediturus equo.
Insidias & campus habet: nec fissa, nee agger,
Nec sit saxa lectus, fallere plana plana.
Non dearent qui tantâ tibi spectacula praefent;
Insidens sait fed leviter cadunt.
Si te delegat animosa pericula, Thufcis
(Titur et virtus) influemus apiis.
Quid te frena juvant temeraria? Septius illis
Fretus damnum eii equitum rumpe, quam leporem.

The best place for riding, is a barren and plain Country. It is reported of Claudius, that when he had road a great way in the Country upon his enemies, and met no body, he returned back again into his own Camp, and blamed the slownehefs of his enemies, because no one of them was left abroad.

It is reported by Arifftole, that the further a man rideth, the more apt he shall be to weep; and the reafon is, because of all the motions of the body, riding is the wholemoft, both for the stomacch and for the hips: for a man must not fit on Horfe-back, as if he were carried in a Coach; but rather keep his back-bone upright, not only to be moved by his Horfe that beareth him, but also by himself; and there he must fit close to the Horfes hips, extending his legs to the uttermoft, uing not only his eyes to look before him, but alfo lifting up his neck to help his fight: fo for the fole pace of the Horfe doth corroborate the spirit above all other exercises; likewise, the body and stomacch: alfo it purgeth the feuces, and make them sharp: yet sometimes by the violent courfe of a Horfe, the break of a Man, or some other part about the reins receive damage, (as fome have ob- 
 served:) yet is it not fo much to be aſcrib'd to the motion of riding, as to the uneafie pace, or rather to the uneafie feat of the Rider.

The Sythians above all other Nations have the looffeft and broadeft bodies: and the reafon is, be- cause they wrap not their children in swaddling cloaths as other people, and likewise becaufe they have no regard unto their fitting upon Horfe-back; and laftly, for their continual ftoath and eafe: for the men ufe much to ride in Chariots, and Litters, before they get on Horfe-back; but after they are accustomed thereunto, they ride fo much, that their hips and bones fall full of ach, and they are alfo thereby made unfit for generation, becaufe in a journey of an hundred miles, they never light to ease themselves and their Beasts.

These men hereafter named, were excellent Riders and tamers of Horfes. Automedon, fervant of Achilles; Iearus, fervant to Paramius; Mesipus, fervant to to Tharmus; Myrthus, fervant to Oenomus; Cebere, fervant to Darus; Atenarcrus, fervant to Cyrenius; Pius to Mesipus; and Laufus Silus remembrith Cyntas, Durius, Atius, and Burus.
The Instruments of Riding appertaining to a Horse.

A good Rider must consider the hardnecs or softnecs of his Horse's mouth, that so he may temper his bit; for a flincke-necked Horse, is not so much to be guided by rod and Spur, as by bit, and bridle: wherefore it must sometime be hard, and sometimes gentle. The hard bits are called Lupati, because they are unequal, and indented to a Wolves teeth, whereunto the Horse being accustomed, growth more tractable and obedient to a gentle bit. According to the saying of Ovid:

Tempore partis equus lentes animo fucubaet,
Et placido duros arcifit ore lupus.

And Virgil again speaketh to like effect:

Presa fronsque a gabano,
Verbera lenta patris, & duris parere lupatis
After equus, duris contumuli ora lupatis.

And Silius faith:

Quadrupedem stecci non sedens virga lupatis.

There is also another instrument made of Iron or Wood (called Psalmonis) and English, Barntacles; which is to be put upon the Horse's nose, to restrain his tenacious fury from biting and kicking, especially at such time, as he is to be fed or dressed. The Indians were wont to use no bridles, like the Germans and Celts, but only put upon their Horse's mouth a piece of a raw Ox skin, fattened round about, containing in it certain iron pricks flanting to the Horifes lips, putting a long round trench through his mouth, to the edge whereof they falten the rains, wherewithall they guide the beast. The Turkihs Horises, and Spaniards' Jennets have bits, with open circles in the middle, confulting of Leather, or Iron, to restrain the Horse's fury. The rains are called Habena, because they make the Horises, Habiles, that is, tractable, and rulable, to be turned, restrained, or put forward, at our pleasure, according to the saying of Silius:

Ferrato calce, atque effusa largus habena,
Confidens impellat equum.

And Virgil:

Ispe ter adducta circum caput etit habena.

Neither is there any Horfe swift, or slow, noble, or un noble, that can be guided without these, which must be held continually in the hand of the Rider, they must not be unequal, one longer then another, neither thick, neither weak, nor briddle.

There was a certain golden chain (called Ampix) wherewithal the fore-tops of Horises were wont to be bound or tied up, and therefore Homer calleth the Horse of Mars, Clysompe; and from hence that custom of women frontlets, to be adorned with gold and precious Horices. There are also other ornaments of Horises called trappings; and in Latin, Pabula, derived from Phulon in Greek, signifying bright, because they were wont to put a great deal of gold and silver upon them, (as Livius faith) which Horises so trapped, were presents for great Princes: And there is a kind of Abyssus fonne, wherewithal the Indians do adorn their Horise-trappings: and it was apparent in Honor's time, that they used little Belts, or founding pieces of Bras to be fattened to their Horises bridles and trappings; they hanged likewise Jewels and Pearls to the breadth of their Horises, which Virgil expresseth in this manner:

Infratur asio alipede, pellisque tapetis
Aurea pelloribus, demissa monilia pendent.
T. Ilii aure, fulsum mandant sub demibus aurum.

A good Horfe-man must alfo have a paring knife, wherewithal to purge and open his Horises feet: this is called by Rofius, Roffinata, and by others Scutrum. There is a kind of Mangle for the poftern of Horises, (called Numella.) Moreover a good Rider must provide him flirrops, (called Subflaves and Stephe) which although it be but a new devife, yet are they fo necessary for every Rider, as without them they cannot long continue. They must not be made too straight for the foot, because that then they do not only hinder motion in that part, and so make it bemumened and cold, but also give occasion of great hurt to the Rider in case the Horfe fall; except he can so temper himself to put but a very little part of his foot therein.

There are also Spirs requisite to a Rider (called Calcaria) because they are fastened to the heel of a man, wherewithal he pricketh his dull Horfe when he would have him haften the journey, and the Greeks derive it from Mops, signifying a prickint fly, from imimation of which it may seem they took this invention: but this must be remembred, that they are prepared for the dull and slung-
gish Horfe, and not for the free and full of life; for such a Horfe being pricked therewith, runneth forth rather with rage and disdain; then for love of the journey, and many times the torment thereof of maketh him by kicking out his heels to call off his Rider.

Lastly, he must have regard to his Saddle, whereon he must sit; for the Barbarians did use to ride upon bare Horfes backs; but since that time, the wiser sort of Horfe-men have invented a fet for their own security. *Martialis* writeth hereof thus:

Stragula fuscithi venator, fome veredis.
Nam solat a nudo furgere ficut equo.

of Hunting Horfes.

Hunting Horfes because of their swiftnefs, were wont to be called V eredis; according to the saying: *Sum & veredus, cura pennisce*: Although they ufe this kinde alfo for pofts, and performance of speedy journeys. The males are much better then the females, and therefore they feldom ufe Mares in hunting, becaufc they are not fo well able to leap, or endure the Woods, for which caufe Gratius writeth in this manner of them;

Reflat equos finire notis, quis arma Dianae
Admittant: non omne mea genus audet in aren.
Ft sitium ex animo: sunt quos imbellis fallant
Corpora: praevertent quaedam aest incumma virtus.

Optimus in his discourse of hunting Horfes, (as we have said already) adviseth to make choice of them by the colour, unto whom Gratius confenteth, faying:

*Venator meius pugnatur color, optimae nigri.*

They that are of bleeuifh colour, having variable specks of legs (he faith) are fitteth to hunt Harts; they that are of a bright gray, to hunt Bears, and Leopards; *they that are bay, or of a reddifh colour, to hunt the Soars: they that are black, having glazed eyes, are good againft Lyons: and thus much for the hunting Horfes.

Of Courfers, or Swift light-running Horfes.

After the ufe of Wagons, and Chariots, which men had invented for their eafe in travel, and growing to be weary thereof, by reafon of many difcommodities, they came alfo to the ufe of fingle Horfes, which therefore they called Courfers, and now a days a Horfe for Saddle, whereupon men perform their journeys; and the Poets fay, the inventor hereof was Bellerophon the fon of Neptun, to whom his father gave Pegafus the flying Horfe, which therefore they describe with wings, and place for a fcar in Heaven like an Angel, becaufe of his incredible celerity; others attribute it to the invention of Sefibris, otherwife called Seleucobofis, a King of Egypt; some to Oroes, when he waged war againft his brother Typhon. For these Horfes, are no les profitable in war, then in peace; although none ufe them in these days, but common Souldiers; yet in antient time the greatest Nobles rode upon them. The Emperor Probus had one of these Horfes, which was nothing common, nor very high; yet would he endure ordinary journeys, to run a hundred mile a day, whereupon his Master was wont to fly merril; that he was better for a flying, then a lighting Souldier. The Horfes of Spain are of this kinde, which they call Jennets, of Genibaru their knees; becaufe when the Rider is on their backs, he muft hold his knees close to the Saddle and fides, for his better eafe. Like unto thefe are the Barbary Horfes, whom they geld, to keep them from the hardness of the Nerves, which happeneth unto them in their heat and travel. There are a kinde of Horfes called Lycaefcalis, and the reafon of this name is, as some fay; becaufe when they were Foals, they escaped the teeth of Wolves, being fet on by them; and therefore they run the more speedily to their dying day, for the wounds of Wolves make a Horfe light footed; but this is not likely, for fear cannot put that into which is not bred of nature; even as we fay, that Ulfcer by avoiding G ides cup, or Cyclops, was therefore made wife; but rather on the contrary; becaufe he was wife, therefore he did avoid Ceres cup; fo likewise we fay, that thefe Horfes are not lighter of foot, nor fuller of courage, becaufe they were fet upon by Wolves, and delivered by fear; but because nature hath framed them, nimble, valiant, and courageous; therefore they did avoid the Wolf.

*Adelus* alfo faith, that thefe Horfes had a wonderful knowledge, and sagacity, to difcern between Gratians and other Nations; for when a Gratian came unto them, they loved them, flood hill, and took meat at their hands; but if a Barbarian, or stranger came unto them, they disdained them by their nofe, as a Dog doth the foot-steps of a Beall, lifting up their voyce, they ran as fast away from them as they would from any raving Beall. These loved not only their famillars, but above all other things to be neat, fine, and cleanly in Chariots: For if at any time they came through water, drawing of a Chariot, they took a pride in cleaning themselves from all dust and filthines, cleaving to their legs or face. And that which is more strange, they were unwilling in race, to be
Of the Horse.

Hayed or taken out thereof, as appeared by this story, related by Feller. There is faith he in Rome a great gate called Katenuma, which took his name from the death of a young man, an Hebraian, who perished there in a race of Chariots, being conqueror, because his Horse would not fly until they came into the Capitol, and saw the framed earthen Chariots, which were placed in the porch of Jupiter Temple by the Romans, and were appointed to be fashioned in earth by the hand of a cunning Potter, the which being wrought in earth, and put into the furnace, they grew so great that they could not be taken out whole: at the sight of these, the Horse of Katenuma stood still, but first of all, their matter was lain in the course by falling off.

The Horses of Tartaries are so incredibly swift, that they will go twenty German miles in one day. There was a race of Horses at Venice (called Luporse) which were exceeding swift, and the common fame is, that they came upon this occasion. There was a certain merry fellow, which would become surety for every man, for which he was commonly jollet at in the whole City. It fortuned on a day, as he travelled abroad in the Woods, that he met with certain Hunters that had taken a Wolf, they seeing him, asked him merrily, if he would be surety for the Wolf, and make good all his damages that he had done to their flocks, and foals, who instantly confessed he would undertake for the Wolf, it they would let him at liberty; the Hunters took his word, and gave the Wolf his life, where-upon he departed without thanks to the Hunters.

Afterward in remembrance of this good turn, he brought to the house of his surety a great company of Mares without mark or brand, which he received, and branded them with the Image of a Wolf, and they were therefore called Luporse, from whom descended that gallant race of swift Horses among the Venetians: upon these ride the pofts, carrying the letters of Kings and Emperors to the appointed places, and these are said to refuse copulation with any other Horses that are not of their own kind and lineage.

The Perisan Horses are also exceeding swift, which indeed have given name unto all others. The messengers of the great King of Tartarius, have their poits so appointed at every five and twenty miles end, of these running light Horses, that they ride upon them, two or three hundred miles a day: And the Pegusarian couriers of France, by the like change of Horses, run from Lyons to Rome in five or six days.

The Epithets of a swift running courier are these, winged or wing-bearing, Lark-footed, breathing, speedy, light, flitted, covetable or race, flying, sweating, not dew, victorious, rash, violent, and Pegusaeum. Virgil also describeth a swift and fliglful Horfe most excellently in these verses; sending one of them to the King, and victory of running, without respect of Country or food, they are to be praised for enriching his matter, and the other for his dilies to the mill, the verses are these following.

---Nempe volucrum
Sti laudosum equum, facilis et plurima palma
Seros, et exultat raus victoris Circe.
Nobilis hic, quacumque vivit de gremine, suis
Clara fuga ate alios, & primus in squere pulvis,
Se venales pecus Coritiae, pectoris &

One of these swift light Horses is not to be admitted to race or course until he be past three year old, and then may he be safely brought to the ring, and put to the stretching of his legs in a composed or violent pace, as Virgil saith:

Caeperi mos gyrum incipiat gradibusque sonare
Compositis,奋etque altera volumina cum.

Plink affirmeth, that if the teeth of Wolves be tyed to these Horses, it will make them never to give over in race, and when the Sarmedians were to take long journeys, the day before they gave their Horses very little drink, and no meat at all, and so would they ride them an hundred and fifty miles out right.

The Arabians also in many regions use to ride upon Mares, upon whom they perform great journeys, and King Darius did also fight his battails upon Mares which had foals; for if at any time their affairs went to rack, and they in danger, the Mares in remembrance of their foals at home would carry them away more speedily then any other Horse: and thus much for the light or swift Horses.

Of the Gelding.

They have used to lib their Horses, and take away their flones, and such an one is called in Latins, Canonem, or Cantarem, which is drove of Catarem, because they were feared with hot irons, or else from the stronger bought or branches of Vines, so called, because they were pruned. In French, Chotal Ore, Cantier, Chureau, and Suppe doth interpret the Spanis, funette, to be a Gelding. It is said of Cato Centius, that he was carried and rode upon a Gelding; and of thee the Turkis Horses receive the greatest commendations.
Forasmuch as many Horfes by their feed and rites are made very fierce, turbulent, and unruly, by taking away of them, they are made serviceable and quiet, which before yeelded unto man very little profit: and this invention may feem first of all to be taken from them which fed divers together in one herd, being taught the intolerable rage of their ftoned Horfes towards their Colleagues and guides; for abating whereof they took from them their male parts.

Of the manner hereof you may read plentifully in Rufius, and he affirmeth that the Scythians and Sarmatians, who keep all their Horfes in herds, were the first divelers thereof: for these people ufing to rob and forrage, were many times by the neighing of their unruly Horfes discovered; for their property is to neigh not only at Mares, but also at every STRANGER that they fee or wiende, and for males they were fo head-ftrong, that they would divers times carry away the Rider perfcorfe, and against his will, to his own diftroyal, in the rage of their natural lust.

If they be gelded under their dams when they lack, it is reported by some, that from such their teeth never fall away; and before, in the heat of their course their nerves are not hardned, for which cause they are the bell of all to run withall.

They use to geld them in March, in the beginning of the Spring, afterward being well nourished, they are no lefs strong, able and courageous then other unliued; also there is a pretty proverb, Cau therius in Pfeus, a Gelding in a Ditch, which is then to be used; when a man undertaketh a business which he is not able to manage; for a Horfe can do much in a plain, but nothing at all in a Ditch. It is reported that Jubilius Tauraeus, and Cafflius, fought a combat on Horfe-back near the City Ca- pua, and when one had provok'd another a while in the plain fields, Tuerca defendeth into a hollow way, telling his tellow combatant, that except he came down unto him, it would be a fight of Horfes, and not of Horfe-men; whereunto Afellius yeelded, and came down unto the Ditch: at whom his adversary jelel, asking him, if he did not know, that a Gelding could do nothing in a ditch, from whence came the common proverb aforesaid.

There is also another proverb (Cau therius in Pfeus) A Gelding in the gate, to significie a man who after he had undertaken the performance of a great exploit, his heart faileth in the very entrance, for it is reported of one Sulpicius Galba, who riding out of the City, his Horfe tyred in the gate.

There is likewise another adage in Plautus, which is this; Crete lac mulier Camberino rim offrons familias. That is to say, this Woman sleeps flanding like a new dress'd Horfe, and is applied against them which in a kind of foolish jeuire flutt their eyes when they talk or work: and thus much for the Gelding.

Of Careering Horfes for Pomp or Triumph.

The nature of these Horfes is to lift up themselves and ride before, standing upon their hinder legs, which is not possible for any to do without a generous and gallant spirit, and also nimble and strong loins to bear up the hinder legs, for it is not as many suppose, that this power of rising before from the softness of his legs, but rather from his loins and hips betwixt his hinder legs, for when his mouth is a little check'd with the bridle he presently bendeth his hinder patterns and ankles, and so lifteth up his fore-parts, that his belly and yard do appear, and in doing hereof the Rider must not bear his hands hard; but giue him the bridie, that so he may do it willingly and with greater grace of the beholders.

There are some which teach Horfes to lift up themseles by knockinge their patterns with a rod, which the Horfe understandeth as well as he doth his race, when he is stroke on the back by the Rider. And in teaching of a Horfe this feat, it must be obserued, that he never have rest until he have learned it, and that at certain signs and tokens, he be taught of his own accord to perform divers and sundry gestures; but if after long riding and copious labour, he begin to understand his Master's pleasure, and ride twice or thrice together, then you may giue him the rains, nothing doubting but that he understandeth and will be obedient to the pleasure of the Rider. And in this kind he is accounted the belte careering Horfe, which will ride high and offnest together; neither is there any quality so commendable in a Horfe as this, or that to draweth and (as it were) to imprisoneth the eyes of old and young, and other beholders, for which cause Martial Horfes for service of War, are to be instructed herein; and thus much for this Horfe.

Of load or Pack-horses.

Where they keep Horfes in herds and flocks, they have some which are not fit for the faddle, nor for the wars, and therefore are to be employed for the carrying of burthen, or to the Cart; although (as Fefius fayth) Mules were first used for carrying and draught; but forasmuch as all Nations have not Mules, they are therefore inforced to use Horfes, and for this purpose the Geldings are much better then the ftoned Horfes; wherefore the Country-men of molt Nations take Horfes, for this purpose, after they be old, past breeding, or have some other blemish in wiende or limb, whereby they are disabled to travel under a man: for so great is the greedines of our age, that Horfes are not spared so long as they be able to live; according to the common proverb, (Afians equis, Molis ferie mule) Horfes, Mules, and Asfes, keep no Holy-days: where the Law of God concerning the Sabbath is not obserued; for the nourishing of Horfes doth counterbalance the charges.
Of the Horse.

In days of Gordianus there were brought to Rome forty wild horses, and in the map of Gordianus Wood, there were pictured three hundred. They are called in Latin, Equus ferus; and in Greek, Hippelaphus, they abound in Spain, and in the Alps, and in the Deserts of Ethiopia, there are many of them; which have two long venomous teeth standing out of their mouths: they differ also in their hoofs from other Horses, for they are cloven-footed like Harts, and they have a long mane growing all along their back to their tail: And if at any time the Inhabitants take them by gins and other snares, they fall so fallen, that they abtain from meat and drink, disdaining to be kept in any servitude or bondage; the Wild Horses of India have but one horn: In the Alps they are of an ash-colour, with a black lift down their backs. The wild Horses of Syria live in Rocks and herds together; and in every herd they have one Captain or Master over the residue, and if it fortune that any of the younger Horses leap upon a Mare, this Captain horse runneth after him, never giving over till he hath bit off his flones.

There are wild Horses in Syria and Asia which are like to other Horses in all parts, excepting their backs, which are so soft and weak, that they cannot endure to be sat upon, neither are they easily tamed, and the people of the Countrey eat their flesh: In Focasia there is a kind of wild Horse which hath horns like a Hart, and therefore I take it to be the same which is called Hippelaphus, whole picture is here described as it was taken here in England, by that learned Physician Doctor Cey.

The figure of Hippelaphus.
They

The History of Four-footed Beasts.

This beast was brought out of Norway, having a mixt form, betwixt a Hart and a Horfe, having a well compacted body, a long and lean leg, a cloven hoof, a short tail; and in all parts you would judge him to be a Hart, but in his head and ears you would judge him to be a Mule, and in his horns a Roe, the upper lip hanging over the neither almost as much as an Elk; his mane like a Horfes, but thinner and hanging more upright, without other alteration from their shoulder to their tail, they have a like brilling mane growing on the back-bone, as long as their other hair; a bunch under their chaps, upon that a bunch or fluffy hair, the hair about their shoulders is more longer then ordinary, but their necks fo short, that they can neither drink their drink, nor eat their meat upon the ground, except they bend down upon their knees. The males in this kind do only bear horns, and such as do not grow out of the Crowns of their head, but as it were out of the middle on either side, a little above the eyes, and so bend to the fides: They are sharp, and full of bunches like Harts, and where smooth but in the tops of the speers, and where the veins run to carry nutriment to their whole length, which is covered with a hairy skin: they are not so rough at the beginning, or at the first profiles, especially in the fore-part, as they are in the fecond, for that only is full of wrinkes: from the bottom to the middle they grow straight, but from thence they are a little recurved; they have only three speers or proffes, the two lower turn away, but the uppermoft growth upright to heaven; yet sometimes it falleth out (as the Keepers of the said Beaf confirmed) that either by sicknes, or elfe through want of food, the lef horn hath but two branches: In length they are one Roman foot and a half, and one finger and a half in breadth, at the root two Roman palms. The top of one of the horns is diftant from the top of the other three Roman feet and three fingers, and the lower fper of one horn is diftant from the lower of the other, two Roman feet measured from the roots: in fhuffance and colour they are like to Harts horns, they weighed together with the dry broken spongy bone of the fore-head, five pound, and half an ounce, (I mean fifteen ounces to the pound:) they fall off every year in the month of April, like to Harts, and they are not hollow. The breadth of their fore-heads betwixt the horns is two Roman palms and a half, the top of the crown betwixt the horns is hollow on the hinder part, and in that fciel lyth the brain which defcendeth down to the middle region of the eyes.

Their teeth are like Harts, and inwardly in their cheeks they grow like furrows, bigger then in a Horfe; the tooth rising out sharp above the throat, as it should feme that none of his meat should fall thereinto unbruised. This Beaf in young age is of a Mouf or Afe colour; but in his older age it is more yellowish, especially in the extrem part of his body: the hair smooth, but molt of all on his legs, but under his belly, in the inner part of his knee, the top of his neck, breast, shoulders, and back-bone, not fo smooth: In height it was about twenty two handfuls and three fingers, being much fwifter then any Horfe; the female beareth every year, as the Keeper faid in Norway, two, or at a time; but in England it brought forth but one.

The fleth of it is black, and the frides broad like an Oxes: but being dressed like Harts flesh and baked in an Oven, it faled much fweeter. It eateth commonly grafs; but in England seldom after the fashion of Horses, which forbear hay when they may have bread; but leaves, rindes of trees, bread and oats, are moft acceptable unto it. It reacheth naturally thirty hand breadths high, but if any thing be higher which it doth affect; it flandeath upon the hinder-legs, and with the fore-legs there iranbracet or leant to the tree, and with his mouth biteth off his defire.

It drinketh water, and alfo English Ale in great plenty, yet without drunkenness: and there were that gave it Wine, but if it drink plentifully it became drunk. It is a molt pleafant creature being tamed: but being wilde, is very fierce, and an enemy to mankinde, percuting men, not only when he feeth them by the eye, but alfo by the fagacity of his nose following by foot more certainly then any Horfe, for which cafe they which kept them near the high ways, did every year cut off their horns with a faw: It fetteth both upon Horfe and Foot-men; trampling and treading them under foot whom he did over-match, when he fleneth a man before he feeth him, he uttereth a voice like the grunting of a Swine being without his female: it doth moft naturally affect a woman, thrilling out his genital (which is like a Harts) as if it dierenfed sexes. In Norway they call it an Elk, or Leland, but it is plain they are deceived in so calling it, because it hath not the legs of an Elk, which never bend, nor yet the horns, as by conference may appeare. Much less can I believe it to be the Hippodarius, because the female wanteth horns, and the head is like a Mules; but yet it may be that it is a kind of Elk, for the horns are not always alike, or rather the Elk is a kind of Horse-hart, which Arifotle calleth Arceobosus of Arreus a region of Affa, and herein I leave every man to his judgement; referring the Reader unto the former discouries of an Elk, and the Tragelaphus.

Of the Sea-horse.

The Sea-horfe, called in Greek, Hippotamos; and in Latine, Equus Fluviatili: It is a molt ugly and filthy Beaf, so called because in his voyce and mane he resembleth a Horfe, but in his head an Oxe or a Calf; in the residue of his body a Swine, for which caufe some Greeks call him sometimes a Sea-horfe, and sometimes a Sea-oxe, which thing hath moved many learned men in our time to affirm, that a Sea-horfe was never feen; whereunto I would easily subfcribe (faie Bellinius) were it not that the antient figures of a Sea-horfe, altogether resembeld that which is here exprefled; and was lately to be seen at Constantinople, from whom this picture was taken.
taken. It liveth for the most part in Nilus; yet is it of a doubtful life, for it brings forth and breedeth on the land, and by the proportion of the legs, it seemeth rather to be made for going, than for swimming: for in the night time it eateth both hay and fruits, forraging into corn fields, and devouring whatsoever cometh in the way; and therefore I thought it fit to be inserted into this history. As for the Sea-calf, which cometh sometimes to land only to take sleep: I did not judge it to belong to this discourse, because it feedeth only in the waters.

This picture was taken out of the Cæsars in the Vatican at Rome, representing the River Nilus, and eating of a Crocodile: and thus I reserve the farther discourse of this beast unto the History of Fifies, adding only thus much, that it ought to be no wonder, to consider such monsters to come out of the Sea, which re semble Horses in their heads, seeing therein are also creatures like unto Grapes and Swords.

The Orfitan Indians do hunt a Beast with one horn, having the body of a Horse, and the head of a Hart. The Biboisians likewise have a Beaul in the neck like unto a Horse, and the feet and legs like unto an Ox. The Rhinoceros hath a neck like a Horse, and also the other parts of his body, but it is said to breath out air which killeth men. Paufianus writeith, that in the Temple of Cabalas, there is the picture of a Horse, which from his breast backwards is like a Whale. Lampsacinius writeith, that in the Scythian Ocean, there are Islands wherein the people are called Hippocrates, having the bodies of men, but the feet of Horses; and Lamia hereafter to be declared, hath the feet of a Horse, but in other things the members of a Goat: and thus much for the several kinds of Horses, both for them that are properly so called, and also for any other, which like haftards retain any resemblance of nature with this Noble and profitable kinde of Beast.

Of the Diet of Horses, and their length of life.

Having thus discoursed of the kindes of Horses, and their several accidents, and uses both for War, and Peace, pleasure, and necessity; now likewise it followeth, that we should proceed to their diet, and manner of feeding: wherein we are first of all to consider, that the natural constitution of a Horse is hot and temperate. Hot, because of his Leuitie, and Velocity, and length of life; temperate, because he is docile, plesant, and gentle towards his Mutter and Keeper. He therefore that will keep Horses, must provide for them abundance of meat; for all other Cattel may be piached without any great danger, only Horses can endure no penury. Varto faith, that in feeding of Horses, we must consider three things; First of all, what food the Country wherein we live doth yeeld; Secondly, when it must be given: Thirdly, by whom, but specially the place of feeding Horses is to be considered; for although Goats can live in the Mountains, better than in the green fields, yet Horses live better in the green fields, then they can in the Mountains. For which cause when we chuse pastures for Horses, we must see that it be fat, such as groweth in Meddows, in the Winter time it may be Sunny, and in the Summer it may be open and cold, neither for loft under-foot, but that the Horses hooles may feel some hardnels, for Horses, Mules, and Asses, do love well green greas, and fruits, yet principally they grow fat with drinking; when they are in the stables, let them have dry Hay. A Mare when she hath foaled give her Barly, and generally at all times in the Winter seaon bullimiage, or a mixture of all kinds of grain is fit for them in the house, according to these versies of Nemeian:

- Inde uti pubenter coelos duravert asias,
  Latentique uncin herbis ficavert iunem
  Menisius humorem, caunctique armavit arifias,
  Oriet tlos, palefque livres, praebere meminit.
  Pulvere quinellan, puis secentere fruges

- Cura sit, anque toto manibus percorrer equestrum,
  Gazeat ut plana, sonitas letumque relaxat
  Corpus, et auras rapit per virosa succus,
  Id current famului, comitunique animosa juventus.
We have shewed already, that they must have straw, or litter to ly upon, and *Pollux* doth set down the kinds of meats for Horfes, as barley, hay, or *Fenno* wheat, rice, and hay; for hard and dry meat is fitteth for Horfes, because it doth not fill them with winde; but all green meat is the les approved, by reason of inflammation. Three-leaved grafs is alfo good for Horfes, efpccially if they be young, for chaffe, hay, grazes, and oats, are their natural and pleaing food: and although grafs be moift, yet in the young age of a Horfe, he delights in moist meats, for they ftreth out his belly, and encrease his growth, but when he is elder, then ought he to be nourifhed with dryer food; as chaffe, Barley, Oats, and fuch things. For although chaffe, by reason of their dryness, make not a Horfe fat, yet do they preferveth him in perfect strength, for all hard things which are diffolved with difficulty, do retain their force of nutriment longer, but fofter meats do not fo; therefore the dyet dyer or habitue for Horfes, is, to retain the mean between fames and leanefles. For fames minIFtreth many humors to the nourishment of fickness, and leanefles diminifheth natural strength, maketh the body deformed. In fome Countrieys they give their Horfes Vine branches in the Autumn, to move their bellies, and inereace their strength.

_The Herb Medics_, which aboundeth in _Melis_, is very nourifhable to Horfes, but the firft flaks are refufl, faith _Arifalle_, the refidue being watered with finking water, is molt commodious. In _Italy_ they fat their Horfes with _Trifoy_; in _Calabria_ with _Sulla_, or _Arbritica_; and the _Thracians_, near the River _Strymon_, with a green Thistle.

In the Spring time give your younger Horfes _Bullimang_ for many daies together, for that will not only make them fat, but alfo purge their bellies: for this purgation is molt neceffary for Horfes, which is called foiling, and ought to continue ten daies together, without any other meate, giving them the eleventh day a little Barley, and fo forward to the fourteenth; after which day, continue them in that dyet ten daies longer, and then bring them forth to exercife a little, and when as they fweat, anoint them with Oyl; and if the weather be cold, keep a fire in the flable: And you muft remember when the Horfe beginneth to purge, that he be kept from Barley and drink, and give him green meat, or _Bullimang_, whereof that is belt that groweth near the Sea fide.

But if the Horfe go to foy in _April_, after five daies, bring him forth, and wash him all over with water, then wiping his hair from all wet and filth, and loofe hairs, pour upon him Wine and Oyl, preffing it fmoother upon his back, down to his skin; fo let him be wiped all over again, and carried into the flable, to be deted with _Maifine_, or _Bullimang_ as before, except he be troubled with the Glanders, and then he muft not feed on it in the day time, let the breath of the Sun, he fall into the magpie, or into madness.

It is alfo requisite, that while we feed our Horfes with green Corn, they be let bleed in the veins of the breaf, and alfo cut in the roof of their mouths, that fo thole places being emppoyred which were difflued with corruption, the vacuity may be replenifhed with better blood; a Horfe thus dyed, fhall not only live in more health, and free from fickness, but alfo be more strong to undergo his labour.

With the blood that cometh out of him, mingled with Nitre, Vinegar, and Oyl, you fhall anoint him all over, if fo be he be subject to the Glanders, or to the Magpie; and then keep him in the flable five daies together, fuffering no Curri or fumm to come upon him, untill the firft day, feeding him in the mean time with green Corn or _Bullimang_; and then bring him forth again, washing him all over with water, and rubbing him with a hard whifp, untill the humor or moithures be wholly wiped off, and he fed as before fourteen daies together.

If you pleafe not to keep him in the flable, then in the Spring time, turn him out in some medow, or green pature, and there let him feed at his own pleafure; for it hath been often proved, that fuch a dyet hath recovered may fick Horfes.

It is reported of the Horfes, and _Gedii_, and men of _Freeeland_, the _Macedonians_, and _Lydians_, do feed their Horfes with fifies: Likewise the _Peonians_ which inhabit about _Phrazis_ near the Mountain _Orbeus_, do feed their Horfes, and all _Cattel_ which they yock with fifies.

Concerning the drink of Horfes we have spoken elsewhere, and therefore we fhall not need to fay any thing of it here, except that the drinking much, and the Horfe thrulling his head in deep into the troubled water, is an unfaluble fign of his goodnes; and the culm of fome is, for to give their Horfes fames made of water and corn fed together, or _Elf_ Bear, Ale or Wine, by drinking whereof, they encrease their spirits and fomack.

_Aberius_ faith, that fome to make their Horfes fat, take Snails, and beat them in pieces, to putting them into their meats, whereby they grow to a falle fatneffe, which is eafily difolved. By eating of black Hellebor, Oxen, Horfes and _Swine_ are killed: and thus much for the food of Horfes.

Concerning the voice of Horfes, the _Latiis_ call it _Hinnium_, and the _Greeians_, _Phrauma_, and _Phumatisia_; but this is certain, that from their very foaling, the females have a thrall and sharper voice then the males, which is fuller and broader, untill they be two year old, and after copulation their voice encreafeth, fo continuing until they be twenty year old, after which time, it falleth and decreafeth again.

The length of a Horfes life (according to _Arifalle_) is eighteen or twenty years, and if they be well tended and regarded in their youth, it hath been found, that fome have lived unto five and twenty, or thirty year old. The females live longer then the males, because of their generation, for
Of the Horse.

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for the immoderate lust of Horfes, shortened their days. And it hath been found that a Mare hath lived to forty or fifty years, and a Horse to three and thirty: wherefor I do leave the relation of Pliny and Athenaeus, to be cenured by the Reader, who affirm, that Horfes in their time, lived threecore or seventy years.

Athenaeus also affirmenteth, that a Souddier told him for a certain truth, that he knew a Horse which lived till he was threescore years old, and at that age did service in the field. And Augus.

Niphus also affirmenteth, that the Riders of Ferdinand the first, told him there was a Horse in their Malters stable of seventy year old. The age of a Horse may be known by his teeth, and the Persians, Bactrians, Ephrians, and Sicilian Horfes, live longer than the Spanish or Numidians. In their years, the female never groweth after five, nor the male after fix in height or length, so as the males are sooner perfired in the wound then the females, on the contrary the females do sooner grow to their perfection after their foaling then the Males.

The males have more teeth then the females, and in each fex they which have fewes teeth, live not fo long, and in their old age their teeth grow white. Now their age is discerned by their teeth on this manner, the first four, that is two above and two beneath, be changed after they be thirty year old, and a year after the four next are changed in like manner, again after another year four more are changed, fo that after four year and fix moneths, he loofeth no teeth, except canine, which cometh again in the fift and fixt year; fo that afterwards their age cannot be differenc'd, because in the leaveneth year, they are all filled. Another unaligned note of their age, is the hollownes of their temples, and their eye-lids beginning to wax gray, and their teeth hanging out of their mouths. They have also little blacks in the middle of their teeth. Some try the age of their Horfes, as a wife and learned man wrieth, by considering twelve teeth, fix above, and fix beneath, for the old Horfes have longer and thinner teeth, which are black at the top, and there are certain broaches or wrinkles in their teeth, which being filled, the mark is laid to be out of their mouth.

Some try the age of their Horfes by their cheeks, for they pull up the skin from the bones, and if it will quickly fall back again into his former place, they take it for an assured token of the Horfes youth: but if it stand out and fall slowly down, then on the contrary, they judge the Horse to be old, and thus much for the age and diet of Horfes.

Of the uses of Horse-flefh, Mares-milk, and other parts.

There are certain people in Sycitia, which were called Hippophagi, because they lived upon Horfes-flefh; fuch also were the Sarmatians and the Vandalos: likewise in Sycitia the Leffe, near Thauria Chersonesus, the people do not only eat the flefh of Horfes, but alfo their milk, and make Cheefe thereof.

Athenaeus also affirmenteth, that the manner of the ancient Persians was, upon the featts of their nativities to roafe an Ox, an Afe, a Horfe, and a Camel whole, and so let them before their guests.

In like fort, they eat Horfes-flefh and Camels-flefh at Damascus; and in Spania wilde Horfes, especially that part which groweth under the mane. The Sarmatians made meaft of Millet-fleef, and mingle it with Mares milk, or with blood taken out of the veins of their legs, wherewithal they make puddings, and this is their chief food. So wrieth the Tartauros, who having a Horfe feck, cut off his Ueer or wound, and fo kill him, and eat his flefh. The Gobiers also in the daies of Virgil did drink the blood of Horfes, as appareth in thefe Verfes;

Profit intenfus aftus avertiere, & inter
Ina ferte pedis, falienem fanguine venam:
Bifalae, quum more silent, acerque Gelenus,
Cum fugit in Rhodelae, atque in defere Getarum,
Et leo concretum cum sanguine potat equino.

The Poets do alfo fain, that Pelias the Son of Tirm and Neptune, was educated by a Mare, and Metebul brought up his Daughter Camilla with Mares milk, because she was born wilde, he alfo bred her among the bufhes, according to thofe Verfes;

Hic natam in damis, interque horrenda lustra
Armentalis eque marnnis, & latte ferino
Nutravit, teneris immulgens ubera labris.

The Tartariouns drinke Mares milke, which they dreffe like white wine, and call it Conunia, whereof Paulus Venetus rehearfeith this story: The King of Tartar, faith he, nourfeth above ten thoufand milk-white Horfes and Mares, and every year, upon the eight and twenty day of August, they obferue a folemn feast, wherein the milk of thofe white Mares is dreffed and fet forthe in comely veffels.

Afterward the King taketh a bowl full thereof, and powreth it on the ground round about him, being fo taught by his Magians, to offer Sacrifice to the gods of his Countrey: For they perfwade him,
him that the Gods lick up that milk split on the ground, and afterwards the King drank it up the residue, and besides him no body that day, except it be of the Kings lineage, or of the Countrey of Hottach (for the people of that Countrey have liberty to talk thereof that day) because of a battle which once they obtained for the great Cam.

The property of this milk is to loosen the belly, and because it is thin and hath no fat in it, therefore it easily descended, and doth not curdle in the stomack, and is said, that the Scythians can keep it twelve dayes together, therewithal satisfying their hunger, and quenching their thirst. And thus much shall satifie for the natural discourses of Horfes: hereafter followeth the moral.

The moral discourse of Horfes, concerning Fictions, Pictures, and other devises.

And first of all for the moral dignity of Horfes, there is a celestiall constellation called Hippus, according to thefe Verifes of Arianus thus translated;

Hic Equus ille jambum quartum fulgere miscuit
Sumnum contingit equus aut multoque jungens
Una.

The Lanius call this flat Pegusus, and they say that he is the Son of Neptune and Medusa; who with striking his foot upon a Rock in Helicon a mountain of Boeotia, opened a Fountain, which after his name was called Hippocrene. Others tell the tale in this fort, at what time Bellerophon came to Pegasus the Son of Aius the King of the Argives, Antius the Kings wife fell in love with his guef, and making it known unto him, promised him half her husbands Kingdom if he would lie with her, but he like an honeft man abhorring so foul a fact, utterly refused to accomplish the desire and dishonesty of the luftful Queen; whereupon she being afraid left he should disclose it unto the King, prevented him by her own complaint, informing the King that he would have ravished her: when the King heard this accuation (because he loved Bellerophon well) would not give punishment himself, but sent him to Scheherew the Father of Queen Antias, that he in defence of his Daughters chastity might take revenge upon him, who presently call him to Chimera, which at that time depopulated all the coast of Lydian: but Bellerophon by the help of the Horfe Pegasus did both overcome and avoid the monster, and being weary of his life, perceiving that there was no good nor truth upon the earth, determined to forfake the world and flee to heaven: who coming neer to heaven, calling down his eyes to the earth, trembled to see how far he was distant from it, and fo his heart fainting for fear, fell down backward and perished, but his Horfe kept on his flight to heaven, and was there placed among the Stars by Jupiter. Euripides tellett the tale otherwise, for he feath that Chiron the Centaur had a Daughter nourished in the mountain Pelion which was called These and afterward Hippus, because of her exceeding hunting on horfe-back, she was perfwaded by Alenus (the Son of Hellen, a Nephew of Jupiter) to let him lie with her, whereupon she conceived with childe, and when the time of her deliverance came, she fled from her Father into the woods, for fear the los of her Virginity should be known unto him; but he followed her to see what was the caufe of his Daughters departure, whereupon the defired of the Gods that her father might not see her in travel, her prayer was granted, and the after her delivery, was turned into a Mare, and placed among the Stars.

Others fay that she was a Propheteffe, and because she revealed the counsells of the Gods, was therefore metamorphozed in that shape in the place aforesaid Others fay, that because the gave over to worship Diana, she lost her first preience. But to return to the firit tale of Bellerophon, who after the death of Chimera, growing proud for his valor attempted to flie to heaven, but Jupiter troubled his Horfe with a Fury, and fo he ftooke off his Rider, who perished in the field, Alenus upo the felle, becaufe of his erreur: and Pegasus was placed in heaven.

But to come nearer to the defcription of the Poetical Horfe, Alcibiad Magnus and some others fay, that it is a Beast bred in Egiptus, having the head and feet of a Horfe, but horned, and wings much greater then the wings of an Eagle, which he doth not lift up into the air like a bird, but only fettheth them out when he runneth, whereby his only preience is terrible to all creatures, unto whom he is enemy, but especiallly to Men. But for the truth hereof (although Piny and some others feem to affirm as much) yet will I fet down nothing for truth and certainty, because as the Poets call every swift Horfe Volucres, and Alipes: so the erreur of that figure, hath rather given occaion to the framing of this new Monfer Pegasus, than any other reasonable Allegory.

Likewise I know no caufe why the Poets shoulde fain that Ceres was turned into a Mare, and hid her felf in the herds of Oncins:Neptune falling in love with her, followed her to those fields, and perceiving that he was deceived, turned himself also into a Horfe, and fo had to do with her, whereas Ceres was griefoufly offended, and fell into a great fury, for which caufe she was called Erinys: yet afterwards she washed her felf in the River Ladan, laying aside all her rage and fury, at the fulnes of time she brought forth Aietus.
And the Arcadians also had a certain Den, wherein they had a great remembrance of this ravishment of Ceres, sitting in a Den, wherein they say she hid her self from all creatures, and whereunto they offer divine worship. They picture her in a Colts skin, sitting like a woman in all parts, with a long garment down to her ankles, but the head of a Horse with the pictures of many Dragons, and other such wild beasts, holding in one of her hands a Dolphin, and in the other a Dove.

By all which it is not uneasie for every man to know & conceive their meaning, that plenty of food signified by Ceris, doth not only maintain Men, Fowls, Beasts and Fishes, but also the immoderate use thereof draweth men to inordinate lust and concupiscence, and that the Gods of the Heathen were more rather to be accounted Beasts then Men.

Diana also among the Arcadians was called Errippa, for the finding out of those Mares which Ulisses had left: which Ulisses erected a Flature for Neptune the great Rider, and they say that Hippocystis being torn in pieces by Horaces, the horse of the beloved of Diana, and in the canoe of Eancipatus, by the vertue of certain herbs he was restored unto life again: Whereupon Jupiter being sore vexed and angry with Eancipatus for such an invention, concluding as it were the fury of the Gods, killed him with lightning, and thrust him down into hell, because no wretched man would fear death if such devies might take place: which fact Virgil describeth in the Book Verdes:

At Trivis Hippocystis secretis alma recensit
Sedibus, & nymphis Aegeria nemisque velxati,
Sulis ubi in fidiis Idae ignatilia etun
Exigeret, verfque ubi nominat Vivibus effet.

Unte etiam Trivee templo lucente sacratis
Carnipes adventer equi, good histore carmin
Et juventum mensis posuere effedere maris.

The Poets also do attribute unto the night, black Horses, and unto the day white. Homer faith, that the names of the day Horses are Lampus and Planebon; to the Moon they ascribe two Horses, one black and another white: the reason of these inventions for the day and the night is, to signify their speedy course or revolution by the swiftness of Horaces, and of the darkenes of the night by the black Horses, and the light of the day by the white; and the Moon which for the most part is hid and covered with earth, both increasung and decreasing, they had the same reason to signify her shadowed part like a black Horde, and her bright part by a white one.

The like Fiction they had of Hecate, whom Antonius calleth Teremina, because she is described with the head of a Horse, a Dog, and a wilde Man, the Horse on the right hand, the Dog on the left hand, and the wilde Man in the middle: whereby they declared how vulgar, illiterate, and uncivilized men, do participate in their conditions, the labours and envie of brute beasts.

We may also read in the Annales of Tacitus, that in his time there was a Temple raised to Equeftrial fortune, that is, for the honour of them which managed Horaces to their own profit, and the good of their Countrie, and that Eulius the Prætor in Spain, because he obtained the victory against the Celtiberians, by the valour and diligence of his Horace-men, was the first that builded that Temple. Likewise, there was another Temple in Basilia for the same cause deputed unto Hercules.

The ancient Pagans call the God of Horaces Hippa, as the God of Oxen Babona. It is also apparent, that many Nations use to Sacrifice Horaces, for at Saluminum a Horace was cast alive into the fire and offered to Jupiter. Likewise the Lacedemonians sacrificed a Horace to the winds. At Rome also they sacrificed a Horse to Mars, and thereof came the term of Equus October, which was sacrificed every year in October, in Campus Martius. This Horace was often take out of a Chariot, which was a Conqueror in race, and flood on the right hand; as soon as he was killed, some one carried his tail to a place called Regia, and for his head there was a continual combate betwixt the inhabitants of the streets, Saburres, and Sacravus, which of them should posses it; for the Suburrians would have fastened it to the wall of Regia, and the Sacravians to the Tower Mamilla.

The reason why they Sacrificed a Horce, some have conjectured because the Romans were the off-spring of the Trojans, and they being deceived by a Horace, their pollerty made that Sacrifice for punishment of Horaces: but it is more reasonable, that because they Sacrificed a conquering Horace, they did it only for the honour of Mars (the God of victory) or else because they would signify, that flying away in battle was to be punished by the example of Sacrificing of a swift Horace.

The Carvans did also worship Mars, and because they had no Horaces to use in War, they were forced to use Affes, for which cause they Sacrificed an Ass unto him. There is another fable amongst the Poets, that the Mathimants were commanded by the Oracle to call a Virgin into the Sea to Neptune, which they performed: now there was a young man whose name was Euanlus, which was in love with the said Virgin, and seeing her in the Waters, swam after her to fave her, but both of them were covered with the waters of the Sea; yet after a certain space Euanlus returned back again, and brought news that the Virgin lived among the Pharies of the Sea, and that he after that he had kept Neptunes Horaces, by the help of a great wave escaped away by swimming, for the Poets fain that Neptunes Chariot was drawn by Horaces of the Sea, according to these Veres of Gillius;
They also signify that the Sun is drawn with two swift white Horses, from whence came that
abomination, that the Kings of Judea had erected Horses and Chariots in honour of the
Sun, which were set at the entrance of the Temple of the Lord; which Horses were destroyed by
Josias, as we read in holy Scripture. And the manner of their abomination was, that when they
did worship to the Sun, they rode upon those Horses from the entrance of the Temple to the
chamber of Nebuchadnezzar. The Persians also sacrificed a Horse to Apollo according to their
Verfes of Ovid:

Placat equo Persis, radiis Hyperionis cirillum,
Ne de tur seleti victima tarda dieo.

And for this cause the Magistrates sacrificed a Horse (the swiftest of all Beasts) unto the Sun, the swiftest
of all the Gods. Piledesstratus also recorded, that Palamedes gave charge to the Grecians to Sacrifice
to the Sun riling a white Horse. The Rhodians in honor of the Sun did cast yearly away into the Sea,
the Chariots dedicated to the Sun, in imagination that the Sun was carried about the World in
a Chariot, drawn by six Horses.

The ceremony
of the Persians
going to War

As the Army of the Persians did proceed forward on their journey; the fire (which they did
call Holy and Eternal) was lifted up on silver Altars; presently after this, there followed the
Women; and after those Women came 165 young men, being clothed with as many red
little garments as there are days in the year: Infantly upon the fame, came the holy
Chariots of Jupiter, which was drawn by white Horses; after which, with a repinident magni-
citude the Horse of the Sun was seen to appear (for so it was called) and this was the manner of their
Sacrifices.

The King of Indians also (as is said) when the days began to wax long, he descended down
to the River Indus, and thereunto sacrificed black Horses and Bulls; for the Bulls in ancient time
were consecrated to the Rivers, and Horses also were thrown thereinto alive, as the Trojans did in
to Xanths.

Varrinus.

The Veneti (which worshiped Diodetes with singular honour) did Sacrifice to him a white Horse:
when the Thebans made war on the Macedonians, it is said that Cesareus appeared in a vision to Pho-
pidas, one of the Theban Captains, and told him that now the Macedonians were at Leuctra, and
would take vengeance upon the Thebans, and their Daughters: Whereupon P得到了 to avert that
mischief, caused a young foal to be gallantly attired, and the day before they joined battle, to be
led to a Sepulcher of their Virgins, and there to be killed and sacrificed.

The Thessalians observed this custom at their marriages and nuptial Sacrifices, the man took a
Horse of War armed and furnished, which he led into the Temple; after the Sacrifice ended he de-
livered the reins of the Bridle into the hands of his Wife, who led the same Horse home again; but
for what figuration or cause this was observed, poets which relate the story thereunto, not
but faith he referreth himself to the Thessalians to declare their own reasons of this observation.
And thus much shall suffice concerning the Sacrificing of Horses.

The burial of
Horses.

Another moral-honourю done unto them was their burial; For we have learned already that
Vulcan the Horse of Venus the Emperor was honourably buried, the Mares of Cimon which had
won three games at Olympus, were likewise interred near his own body. The Seythians at the burial
of their Kings used for to strangle one of his harlots, his cupbearer, his Cook, his Horse-keeper, his
Messenger, and also Horses and other Cattle; and after a year they do this the second time; tak-
ing fifty of his dearest servants which were natural Seythians and strangled them: likewise fifty of
his best Horses, out of whose bellies they pull out their bowels and guts, and filling ther bellies up
again with chaffe, they bow them up: then make they half an arch upon two posts standing up-
right, and likewise the other half upon two other posts over the Kings grave; likewise fastening
in the earth divers other sharp posts upon which they put the fifty Horses, so fastening them
with thick pieces of timber all along their neck and back, so that the shoulders of the Horses rest
upon the fore-arch and their bellies on the hinder, their legs standing upward, then bridled they
the Horses, and stretch forth the reins of their bridles unto the posts of the earth, afterwards up-
on every one of the dead Horses they lay a dead man, putting a slate through his back out of his
neck, and the other part of the said slate they fasten in the post, which pierceeth and goeth through
the Horse; and thus having compassed about the grave of their King, with such Horses and Horse-
men, they depart, leaving both the one and the other to the consummation of nature, and after this
manner did they bury all their Kings.

Adrian buried his Hunting Horse, Eumenes his Mares, Panteria and Erithra. Like
wife Mithridates, Evagoras, and Augustus the Emperour. At Aegyptus also there are many
Pyramids erected upon the Sepulchres of Horses. And thus much shall suffice for the burial of
Horses.
We have shewed you already how Men and Women have been transformed into Horfes, according to the fiction of the Poets, as of Saturn, Jupiter, Neptune, Ceres, Hesper, and Ogygites the Daughters of Chiron. In like sort there have been predictions or omenations of things to come, taken from a Wolf, a Fox, a Serpent, and a Horfe, which were called Ansia, Fetal, or Auguri(m). Things without delivery was the Horfe, according to the lake of Jupiter, that they watched for the safety of the Roman Empire, and their Temple which was joyed to the same fountain being fast locked, upon a suddain flew open without the hand of man.

Eneas also in Virgil faith, that he knew war would follow by the appearance of four Horfes, which in a green field set upon a whole Campe, whereupon in Virgil, he speake ths to Archiata.

Quatuor bis, primam omne, Equis in gramine vidi
Toucutres cunphu late, cantores navali.
Hesper Anchesfit, Bellum Oterre bosista portas;
Bello armatur equi, Bellum has armenta minatur.

Lucan also speake to the same purpose that Horfes presage war;

Primum ab aquores percussit enside saxis
Thebasius janipes bellum feralibus omne

Alexander also writeth, that the Germans were wont to bring up white Horfes which were never used to labour, by whose neighing they were forewarned of wars, and of other strange events. It is vulgarly known how Darieu came to the Kingdom of Per fixtures, after it was agreed amongst the seven Princes, that he whole Horfe did first neigh in the morning in a place appointed, should be salted King. Ekehor his ruder in the night time took one of the Mares which he knew his Masters Horfe loved, and led her into the Suburbs, and there tied her, afterward he brought thither Darieu his Horfe, and led him about her two or three times, and at length suffered him to cover her, and so led them both away together. In the next morning the Princes met as soon as day brake, and rode up and down the Suburbs, until at last they came to the place where the Mare of Darieu was tyled the night before, whereunto the Horfe of Darieu ran neighing strongly, and presently it stamped and lightened in a clear day: whereupon the residue of the Princes alighted from their Horfes, and did reverence to King Darieu, who by divine appointment was thus advanced to the Scepter.

Although there be some that say Ekehor by handling of a Mares genital and keeping his hand warm, until they came to the place aforefaid, there stroking the Nostrils of his Masters Horfe, caufed him thus to neigh and win the Kingdom; yet I rather incline to the former opinion which was related by Herodotus in his Thesuba.

There have also been Horfes of strange fashions, for as we have shewed already, that a Mare did bring forth a Hare. so also (Livie faith) an Ox did bring forth a Foal. Nero did shew certain Hermaphrodit Mares, wheresithal his Chariot was drawn, which was a thing worth the fight, that the Monarch of the world should fit upon Monfets.

Julius Caesar had a Horfe which had cloven hoofs like a Mans fingers, and because he was foaled at that time when the Sooth-sayers had pronounced that he should have the government of the world, therefore he nourished him carefully, and never permitted any man to back him himself, which afterwards he dedicated in the Temple of Venus, for he conceived that such a strange beast bred in his own flock, was a prediction unto him of great honour. The Palatine of Vero had a Horfe foaled with five legs, and Henry the Count Palatine had likewise a Horfe with six legs. Thus Cellini, much may suffice for the monfer Horfes.

In the next place it is good to enquire what the Centaures are, who are described by the Poets to have their forepart like Men, and their hinder part like Horfes, the occasion whereof is thus related by Pindarus: that Centaurus the Son of Ilion, committed buggerly with the Mares of Magnesia, under the mountain Pelus, from whence came that monstrous birth in the upper part resembling the Father and in the nearer the mother. Thesue faith he posseffed the Mountains and Delfet places of the land, being given to all manner of Latrocin and Depradation. They were called also Hippocentaurs: And some faie that they were fril of all nourished by the Nymphes in the mountain Pelus, who afterwards being the first that tamed Horfes, were thought to be half Men, and half Horfes, because they were seen backward, and from hence came the tule that they were tamed by Hercules.
The History of Four-footed Beasts.

Hercules, which was one of his greatest labours; but yet that no man may wonder or think it impossible that such monstrous creatures should have existence in nature, these authorities following may perforce sufficiently.

Plutarch in his Banket of Wifemen, affirmeth, there was a Horse-keeper which brought into the house of Persius an Infant or rather a Moniter which he had got upon a Mare, which had the head, neck, hands and voice of a child, and the other parts like a Horse, Diceles pretently judged it to be a Moniter, and signified contentions and strifes in the world. But Teles told Persius he was of another opinion, namely, that it was no Moniter, but a meer natural birth from such a copulation, and therefore advised Persius, that either he should keep no Riders, or else let them have Wives.

Claudius Cæsar also writeth, that in the time of his reign there was such a one born in Thrace, which dyed the same day it was born: and Pindarus that he afterwards saw was feaoned in hony, brought out of Egypt to be shewed to the Emperor. These Centaures, Homer calleth Eres, that is, Eres, wilde persons. The Lapithes and the Centaures are said to be very like the one to the other, and were also once very loving, but they fell afterwards to deadly war, by reason the Centaures in a banket being drunk, offered to ravish the females of the Lapithes, for which cause the Lapithes slew them in their jealousie, whereon fell a mortal war: whereby the Poets signifie how intemperance in Men and Beasts doth not only bring with it other sins, but also caueth much slaughter. And so I conclude the story of Centaures, holding it impossible that such should be generated by unclean and natural copulation, but unpossible that they should live long after birth, and therefore the Centaures of the Poets are nothing else but men sitting on Horseback, mistaken for one entire creature which were divided, and so conclude with the Verse of Horace:

Humana Capitis curvicem pilar Equinam
Jungere si velit.—
Hoc monstrum furo Centaurs forst.

of the statues and figures of Horses.

Pollio.

It was no small dignity that the ancient Cephalenes did stamp their money with the picture of a Horse, for surely from them it came, that coin was first of ail called current, because of the image of a speedy Horse, wherewithal it was imprinted. Teuctor also writeth, that amongst the ancients there was a custom to make the Charfet of a Horse in the forehead of a bondlifve; there was also images of Horfemen and Horses renowned in many Countries for the honour of both, such were the statues of the Amazon (said Hippestes) who by Lips the Orator are said to be the first that ever backed Horses; such was the statue of Cleopatra, Quirinas Martius, Tremulla, Dominianus, and many other both Men and Women: for the Romans had the Equellus statues in great reverence and ceremony, no doubt in imitation of the Grecians, but with this difference, that they pictured none but the swift Horses, but the Roman, Horses and Chariots, and from hence came the custome to have Chariots in triumph.

But this custome to have fix Horses in a Chariot was brought in lat of all by Augustus. Altidusius pictured the Chariots and Wagoner. Picaturae the woman Pith, with a Wagon. Furbates the Son of Lyppus expressed the Equeftral combate at the Oracle of Teufonium with fingular art, also many Chariots of Medea, the Horse and his carriage. There were also earthen Chariots at Rome in the porch of Jupiter Temple, as we have shewed before in the discourse of Chariots.

When Conflantius the great took a view of the City of Rome, and passing from place to place, came at length to Forum Traiani, the most exquisite building of all the world, he stood amazed at the admirable frame of Giants which were linearly deciphered therein, whereof despairing to imitate any part of that work, he chose only to erect the picture of such a Horse and Prince, as in the middle of the same was erected in remembrance of Trajan, so much he intimated to his followers: close by him stood that Princeful Hormida (a Pefian) who made the Emperor this answer, Ante imperator stabulum tale consili juheto si viiaes: Equei quem fabracare dolopis ista late succedat ut ipse quern videmus: O Noble Emperor before you make such a Horse, first of all build such a stable: that your work in all parts may be correspondent to this which you propone unto your self to imitate.

Metellus the Macedonia raised two porches which were compasse about with two Horses, without inscription or dedication, which now are compasse with the porches of Oldania, and the row of Equeftral statues in the front of the said buildings, now the greatest ornament of that place, he also brought out of Macedonia. And it is said that Alexander the great canfled Lyppus (that singular work man) to frame the pictures of all those Knights which in his company were blind at the River Grascalos, and alfo to place his own picture among them.

In the City of Rome there are two mountains called Equilini, in one of them are the baths of Ptolemao, and the great Marble Horfes, with two men half naked, holding their reins, being most singular workmanship, whereof one hath this inscription in Latin letters, Opus Fraxinetis, the work of Fraxinetis; the other Opus Phidias, the work of Phidias: and it is clear, that they were brought thither.
thither by Tyrrhenus King of Armenia, for whose entertainment Nero caused the Theatre of Pompey to be covered all over with gold in the space of one day. The story of the Trojan Horse is vulgarly known, which is also called Equus Duratus, or Durens, wherein the Grecians hid themselves, when they took Troy, according to these Verles:

Nor cam dura teus Trojana Pergamo partu
I stam maeit Equi nolturn Grajgenerium.

The truth whereof standeth thus, The Grecians making them that they had vowed a vow unto Pallas, framed a Horse of so great bigness, that it could not be taken into Troy, except the gates were pulled down; and this they placed hard to the walls of Troy: Simon (the counterfeit runnagat) being then within the walls among the Trojans, persuaded them to pull down their walls and pull in that wooden Horse, affirming that if they could get it, Pallas would stand fo friendly to them that the Grecians should never be able to move war against them: wherefore they pull down their gates; and part of their wall, and by that means do bring the Horse into the City: while the Trojans were thus revelling and making merry with themselves, and not thinking of any harm might ensue upon them, the leaders of the Grecian Army who by deceit all this while kept themselves close hid, (ever since which time the Grecians are termed of all Nations deceitful) on a sudden rase out of their lurking places, and so going forward invaded the City, being delusive of any defence, and by this means subdued it.

Others are of opinion, that the Poets fiction of the Trojan Horse, was no other but this, that there was a mountain near Troy called Equus, and by advantage thereof Troy was taken, whereunto Virgil seemeth to allude, saying;

Infat montis Equo divina Palladis atque Adesicem.

For they say that Pallas and Eurus made the Horse, and therefore I conjecture, that the Trojan Horse was nothing else but an engine of War, like unto that which is called Aries: For Panthias faith, that Eurus was the inventor thereof. And Higinius faith, that the Trojan Horse was Machina oppugnatoria, a devile of war, to overthrow the walls.

Of this Horse there was a brazen image at Athens in Acropolis, with this inscription, Charidemus, Evanxis filius celenatus dicitur. When Alexander looked upon his own picture at Ephesus which Apelles had drawn with all his skill, the King did not commend it according to the worth thereof: It fortuned that a Horse was brought into the room, who pretently neighed at the picture of Alexander Horse, smelling unto it as to a living Horse, whereat Apelles spake thus to the King;

Hoe men Hippo elice fou graphioteros cata polu.

That is to say, The Horse is a better discernere of truth than you.

There was one Parnias which went from Manalis in Arcadia into Sicilia, to serve Gelon the Son of Dimeenes, under whom and his brother Hiero he arose to great estate of wealth, and therefore he gave many gifts to Apollo at Delphi, and made two brazen Horses with their riders at Olympia, setting Dismantled the Grecians upon one, and Simon Eugenius upon the other.

Aemilius Caesarinus (a cruel Tyrant in Sicilia) bellowed great gifts upon such as could invent new kind of torments; there was one Aemilius Paterculus, hoping to receive from him some great reward, made a brazen Horse, and presented it to the Tyrant: to include therein such as he should condemn to death: at the receipt whereof Aemilius which was never full before, first of all put the Author into it that he might take experience how curst a thing it was to minister unto cruelty. Apelles also painted Cytus on Horse-back hathening to war, and his Armour-bearer reaching his helmet unto him, so lively, that other dumb beasts were afraid of his Horse. And excellent was the skill of Neatler, who had so pictured a Horse foaming, that the beholders were wont to take their handkerchiefs to wipe it from his mouth. And thus much for the moral uses of Horfes.

Of the several diseases of Horses and their cures.

Seeing in this discourse I have principally aimed at the pleasure, delight, and profit of Englishmen, I have thought good to discours of the diseases of Horses and their cures in the words of our own Courtyreman, M. Blundevile, and M. Markham, whose works of these matters are to be recorded like the Heads of Homer in many places and several Monuments, to the intent that envy or Barbarism may never be able to bury them in oblivion, or neglect to root them out of the world, without the loss of other memorable labours.
Of causes and kinds thereof.

Blundevile.

The causes of sickness be unnatural affects, or evil dispositions preceding sickness; and provoking the same, which of themselves do not hinder the actions of the body, but by means of sickness coming betwixt. Of causes, some be called internal, and some external. Internal be those that breed within the body of the Beast, as evil juice. External be those that chance outwardly to the body, as heat, cold, or the hissing of a Serpent, and such like. In knowing the cause of every disease, consider the chief skill of the Farriar. For unless he knoweth the cause of the disease, it is impossible for him to cure it well and skillfully. And therefore I with all Farriers to be diligent in seeking to know the causes of all diseases, as well in the parts similar, as instrumental, and to know whether such causes be simple, or compound; for as they be simple or compound, so do they engender simple or compound diseases.

Of sickness, what it is, and how many general kinds there be; also with what order the diseases of Horses are herein declared. And finally, of the four times, belonging to every sickness.

Sickness is an evil affect contrary to nature, hindering of it self, some action of the body. Of sickness there be three general kinds, whereof the first consisteth in the parts similar; the second in the parts instrumental; and the third in both parts together. The first kind is called of the Latinis Intemperies, that is to say, evil temperature, which is either simple or compound. It is simple, when one quality only doth abound or exceed too much, as to be too hot, or too cold; it is compound, as when many qualities do exceed, as when the body is too hot and too dry, or too cold and too moist. The second kind is called Mala constringitio, that is to say, an evil state or composition, which is to be considered, either by the shape, number, quantity, or right of the member, or part evil affected or diseased. The third kind is called Unitas soluto, that is to say, the loosening or division of the unity, which as it may chance diversely, so hath divers names accordingly; for if such solution or division be in a bone, then it is called a fracture; if it be in any fleshie part, then it is called a Wound or Ulcer; in the veins, a Rupture; in the sinews, a Convulsion or Cramp; and in the skin, an Excoration.

Again, of diseases, some be called long, and some sharp and short, called of the Latinis, Morbi acuti, which be perillous and do quickly kill the body. The long, do tarry longer by it. Yet moreover, there is sickness by it self, and sickness by content: Sickness by it self, is that which being in some member hindereth the action thereof by it self. Sickness by content, is derived out of one member into another, through the neighbourhhood and community that is betwixt them: as the pain of the head which cometh from the stomach.

Thus the learned Physitians which write of Mans body, do divide sicknesses. But Abiturim writing of Horse-leach craft, faith of that sickness, or rather malady (for he termeth it using that word as a general name to all manner of diseases that be in a Horse) there be four kinds, that is to say, the moist malady, the dry malady, the malady of the joints, and the malady betwixt the flesh and the skin. The moist malady is that which we call the Glanders. The dry malady is an incurable consumptio, which some perhaps would call, the mourning of the chein, but not rightly, as shall appear unto you hereafter. The malady of the joints comprehendeth all griefs and torments that be in the joints. And the malady betwixt the flesh and the skin, is that which we call the Scab. Unto which four kinds of maladies, Vegetim addeth three others, that is, the Farces, the paine of the Reins or Kidneys, and the cankered Mangines, most commonly called of the old writers the Leprosie; and to maketh seven kinds of maladies, under which all other particular diseases are comprehended.
Of the Horse.

Again, Laurentius Rufin, ut in ather kind of division of sicknes. Of Horses diseaues, faith he, some be natural, and some accidental. The natural be thoae that do come either through the ex-
cesse, or lack of engendering seed, or by error of nature, in misforming the young, or cfe by 
some defect of the dam or fire, in that perhaps they be diseaued within, and have their feed 
corrupted.

The accidental diseaues be thoae that come by chance, as by surfeiting, of cold, heat, and 
such like thing. But forasmuch as none of these writers do follow their own divisions, 
or handle the parts thereof accordingly: to avoid their confusion, and to teach plainly: I 
thought good and profitable therefore to use this my own division and order here fol-
lowing.

First then, of diseaues some be inward, and some be outward. The inward be thoae that breed 
within the Horses body, and are properly called maladies and diseaues, whereof some do occupy all the 
whole body, and some particular parts or members of the body.

Of those that occupy all the body, and not be accident to any private member, I do first 
treat, as of Aues, of the Puffling, and such like, and then of those that be incident to every 
particulur member, beginning at the head, and so proceed orderly throughout all the members; 
even down to the sole of the foot, observing therein no night as I can, the 1lef first order that Galen 
useth in his book, De loco male affectu, declaring what manner of diseaue it is, and how it is called in 
English, and also in Italian, because the Kings lyable is never without Italian Riders, of whom our 
Farriars borrowed divers names, as you shall perceive hereafter. Then the cauas whereof it pro-
cceeds, and the signes how to know it, and finally, the cure and diet belonging to the same; and 
because I find not inward diseaues enow to answer every part of the body, I do not let to interlace them 
with outward diseaues incident to those parts, yen rather, I leave out no outward diseaue belonging to 
any particular member, and to the intent you may the better know to what diseaues or forances 
every part or member of the Horses body is most commonly subjext. And note by the way, that I 
call those outward diseaues that proceed not of any inward cauas, but of some outward cauas, as 
when a Horse is shoudered by means of some outward cauze, or his back galled with the faddle, or 
his fides spurgalled, or his his hoof cloid with a nail, which properly may be called forances or 
griues.

Thirdly, I talk of those diseaues as well outward as inward, that may indifferently chance in any 
part of the body, so as Impofumes, Cankerous Ulcers, Wounds, Fieules, Burns, Bruifings, 
Breaking of bones, and such like.

Fourthly, because most diseaues are healed either by letting of blood, by taking up of veins, by 
purgation, or else by cauteration, that is to say by giving the fire: I talk of those four neceffary 
thingseverally by themselvess and finally I shew you the true order of paring and fiousing all man-
ner of hoofs, according as the diversity of hoofs require: and to the intent you may the better un-
derstand me, you have the perfect shapes of all neceffary fhooes, plainly fet forth in figures before 
your eyes. Thus much touching mine order which I have hitherto observed.

Now it is neceffary to know, that to every diseaue or malady, belongeth four feveral times, that is 
to say, the beginning, the increafing, the flate, and declination, which times are diligently to be 
oberved of the Farriar, because they require divers applying of medicinc: for that medicinc which 
was meet to be ued in the beginning of the diseaue, perhaps is not to be ued in the declination 
thereof: and that which is requisite, and very needful, to be applyed in the flate of chiefit of the 
diseaue, may be very dangerous to be ued in the beginning. And therefore the Farriar ought to be 
a man of judgement, and able to discern one time from another, to the intent he may apply his 
medicines rightly. Hither of caues and sicknes in general. Now it is also meet, that we speak in 
general of signes whereby sicknes is known.

Sicknes according to the learned Phýtitions, is known four manner of wanes. First, by infepa-
Blandevile.
urable or subfultant accidents, as by the shape, number, quality, and fight of the part or 
member diseaued. For if it be otherwise formed, or more or leffe in number or quantity, or 
else otherwise placed then it ought to be, then it is not well. Secondly, sicknes is known by alte-
ration of the quality, as, if it be too hot, or too cold, too moift, or too dry. Thirdly, when the 
action of any member is hurt or letted, as when the eye-fight is not perfect, it is a manifest fign that 
the eye is urill affected or fick. Likewise, when there breedeth no good blood in the body, it is an 
evident token that the Liver is not well. Fourthly, sicknes is known by the excrements that come 
from the Beaf; as by dung or flate; For if his dung be too strong of fent, full of whole Cornes, or of 
Wormes, too hard, or too foft, or urill coloured, it is a token that he is not well in his body; so like-
wise if his flate be too thick, or too thin, too white, or too red, it becometh some furfe, raw diges-
tion, or else some grie in his reins, bladder or flones. But Vesgius faith, that it is best known, whe-
ther a Horfe be fick or not, or toward sicknes, by these signes here following; for if he be more 
flow and heavie in his trotting, or galloping, harder of Spur then he was wont to be, or spredeth 
his litter abroad with his feet, often tumbling in the night feafon, fetching his breath short and vi-
olently, loud ftruifing in the Nofe, and caufing our vapors at his Noftrils, or lyeth down immediately 
A 2

after
after his provender, or maketh long draughts in his drinking, or in the night seaseon is now down, and now on foot, or if in the next morning he be very hot in his patterns, or betwixt his cars, or that his ears hang more then they are wont to do; again, if his eye light be dim, and his eyes hollow in his head, his hairs standing right up, and his flanks hollow and empty, whenever two or three of these signes do concur together, then it is to be thought, faith Virgiinius, that the Horie is not well, and therefore he would have him immediately to be separated from his companions that he whole, and to be placed by himself untill his disease be perfectly known and cured, and especially if it be any contagious disease.

I have seen divers Farriars here in England to use that for the trial of a Horie's sicknes, which I never read in any Author, that is, to feel his bones, whether they be hot or cold, and to smell at his nostrils, and so by the favour thereof to judge what sicknes the Horie hath. Truly I think that no evil way, if they can discern with their fende of smelling, the diversity of favours, the one cometh out of his Nostrils, and then apply the saine to the humours whereof such favours be bred, and so orderly to seek out the original cause of his sicknes. But I fear me, that more Farriars fumble with our judgement, then with such judgement, and no marvell why, ift that few or none be learned, or have been brought up with skillfull Matters. But from henceforth I truull that my travall will cause such Farriars as can read, and have some understanding already, to be more diligent in seeking after knowledge then they have been heretofore, whereby they shall be the better able to serve their Country, and also to profit themselves, with good fame, whereas now for lack of knowledge they incur much slander.

Of the Fever and divers kinds thereof in a Horie.

Blondelvile.

I Think it will seem strange unto some, to hear that a Horie should have an Ague or Fever, but it was not strange unto the men of old time, as to Abfritus, Hierocles, Xenophus, Vegetius, and such like old Souldiers, thereby experimented in Horie's griefs. A Fever, according to the learned Phyfitians, is an unnatural and inmoderate heat, which proceeding first from the heart, spreadeth itself throughout all the arteries and veins of the body, and so leteth the aethons thereof.

Of Fevers there be three general kinds, whereof the first, is that which breedeth in the spirits, being inflamed or heated more then their nature requireth. The second breedeth in the humors, being also distempered by heat. The third in the firm parts of the body, being continually hot. What spirits and humors be, hath been told you before in the keepers Office. Of these three general kinds do spring many other special kinds, as Quotidian, Tertians, Quartans, Fevers Heftick, and very many others, whereunto mans body is subject, whereof none of my Authors do treat, unless Virgiinius, who speakeith somwhat of a Fever Quotidian, of a Fever continual, and also of a Fever accidental. He speakeith alfo of Summer, Autumn, and Winter Fevers, without making any great difference betwixt them, more then that one is worse then another, by reason of the time and seasion of the year. So that in effect all is but one Fever. Wherefore according unto Abfritus opinion, I will briefly shew you first the causes whereof it proceeds, and then the signes how to know it, and finally how to cure the same.

The Fever changeth sometimne by surfeiting of extreme labour or exercise, as of too much travelling, and especially in hot weather, of too swift gallopping and running, and sometimne by extreme heat of the Sun, and also by extreme cold of the aire, and sometimne it breedeth of crudity or raw digestion, which many times happeneth by over greedy eating of sweet green corn, or of such provender as was not thoroughly dried or cleansed; for after such greedy eating, and specially such meat, never followeth perfect digestion. The signes to know a Fever be these. The Horie doth continually hold down his head, and is not able to lift it up, his eyes are even blown fo as he cannot easily open them: yea and many times they be watering, the flesh of his lips and of all his body is lufh and feeble, his bones hang low, his body is hot, and his breath is very hot and strong; he standeth weakly on his legs, and in his going draweth them lastly after him, yea he cannot go but very softly, and that flaggering here and there he will lie down on his side, and is not able to turn himself, or to wallow; he foraketh his meat both hay and provender, and is defirous of nothing but of drink, which, as Abfritus faith, is an affured token of a Fever: he also sleepeeth but little. The cure and diet. Let him bloud in the face and temples, and alfo in the palat of his mouth, and the first day give him no meat, but only warm drink, and that by little and little. Afterward give him continually grasse, or else very sweet hay wet in water, and let him be kept warm, and sometime walk him up and down fair and softly in a temperate air, and then let him reit, and when you see that he begins to amend, give him by little and little at once Barley fare fitted and well sodden, and alfo mundified, that is to say, the husk pulled away, like as when you blanch Almonds.
Of the Horse.

Of divers sorts of Fevers according to Vegetius, and first of that which continueth but one day.

The Fever of one day called by the Greek name Ephemerer, or else by the Latin name Diaria, changeth many times through the rathmes and small direction of the keeper, or some other that letteth not to ride a Horfe uneasurably, either before or after watering, whereby the Horfe afterward in the stables entret into an extreme heat, and fo falleth into his Fever, which thou shalt know partly by his watrhim and bloud-fothten eyes, and partly by his short violent and hot breathing and panting. Moreover, he will forfake his meat, and his legs will wax thife and feeble. The cure Let him have reft all the next day following, and be comforted with warm meat, then let him be walked up and down fair and softly, and by little and little brought again to his former eflate.

Of the Fever continuall.

The Fever continuall, is that which continueth without intermission, and is called in Italian by the Latin name Febris continua, which springeth of some inflammation or extreme heat, bred in the principal members or inward parts, about the heart, which is known in this fort. The Horfe doth not take his accustomed reft, whereby his fleshe doth fall away every day more and more, and sometimes there doth appear hot inflamations in his flanks, and above his withers. The cure; Purge his head by sifting into his Noftris Mans urine, or the Water of an Ox that hath been refled a certain time, to the intent such water may be the stronger, and then give him the drink written in the next Chapter.

Of the Fever taken in the Autumn, that is to say, at the fall of the leaf.

If a Horfe chance to get a Fever at the fall of the leaf, caufe him immediately to be fet bloud in the neck vein, and also in the third furrow of the roof of his mouth, and then give him this drink; Take of Jermander four ounces, of Gum-dragant, and of dryed Roses, of each one ounce, beat them all into fine powder, and put them into a quart of Ale, adding thereunto of Oil-olive four ounces, and of Hony as much, and give it the Horfe lukewarm.

Of the Fever in Summer season.

A Fever taken in Summer feafton is much worfe then in any other time, and especially if it be taken in the Dog days, for then the accidents be more furious. The Signes be thefe, his arteries will beat evidently, and he will fheed his feed when heflate, and his going will be unorderly. The cure; Let him blood in a vein that he hath in his hinder hanch, about four fengers beneath the fundamental, or if you cannot finde that vein, let him blood in the neck vein, toward the withers, and if it be needful you may also give him this drink; Take the juicer of a handful of Parfley mingled with Gum-dragant, with Enfens, and a few Damask roches, beaten all into fine powder, and then put thereunto a fufficient quantity of Ale made fweet with Hony.

Of the Fever in Winter.

Or the Fever in Winter, it shall be good to take the powder of the drugs laft mentioned, and with a quill or reed, to blow it up into his left noftir to make him to necfe. It shall be good alfo to let him bloud in the neck vein, and in the palat of the mouth, and then give him one of thefe drinks here following: Take of Ireos fix ounces, of Round Pepper one ounce, of Bay berries, and of the feed of Smallage, of each one ounce, and let him drink them with sodden Wine. Or else take a pinte of good Milk, and put therein of Oyle four ounces, of Saffron one scrupe, of Myrthe two scruples, of the feed of Smallage a spoonful, and make him drink that: or make him this drink; Take of Aroflohoch, otherwise called round Hartwort, one ounce, of Gentian, of Hyfop, of Wormwood, of Sootherwood, of each one ounce, of dry fat figs fix ounces, of the feed of Smallage three ounces, of Rue a handful, boil them all in a clean Veffel with River Water, untill the third part be confumed, and when you fee it look black and thick, take it from the fire, strain it, and give the Horfe to drink thereof lukewarm.

As touching his diet, let his water be alwayes lukewarm, wherein would be put a little Wheat meal, and remember to give him no meat fo long as his fit continueth. And because in all Agues it is good to quicken the natural heat of the Horfe, by rubbing and fretting his body; it shall not be amifs in some fair day to use this Friction, called of the ancient writers Aetaraphie, which is made in this fort. Take of Damask Roses one pound, of old Oyl a pinte, of strong Vinegar a pinte and a half, of Mints and Rue beaten into powder, of each one ounce and a half, together with one old dry Nut, beat them and mingle them together, then being strained and made lukewarm, rub and chafe all the Horfes body therewith against the hair, untill he beginnew to sweat, then let him up in the warmeft place of the stable, and cover him well.
The History of Four-footed Beasts.

Of the Fever which cometh of raw Digestion, or of Repulsion.

You shall know if the Fever proceedeth of any such cause, by these signs here following. The Horse will blow at the nose, more then he is accustomed to do, seemeth to fetch his winds only at his nose, and his breath will be short, hot and dry. You shall see his flanks walk, and his back to beat. The cure: Cause him to let blood abundantly in the head and palpate of his mouth, and by injecting warm Vinegar in the morning into his nostrils, force him to sneeze: and if he be cold, let his fundament be soaked, or else give him a Glyster to ease the pain in his head. And as touching his diet, give him but little provender or hay, neither let him drink much nor often, but buttwixt times. But in any wise let him be well rubbed and chafed, and that a good while together, and if you use the Friction declared in the last Chapter before in such fort as there is said, it shall do him very much good.

Of the Fever accidental coming of some Viles in the mouth or throat.

The Horse not being well kept and governed, after that he hath been let blood in the upper parts; yet, and also besides that of his own nature is subject unto the dissillation in his thorax or parts thereabout, the painful swelling or Ulcer whereof, causeth the Horse to fall into a grievous Ague. Whereof, besides the former remedies apt to purge humors, it shall be necessary also, to let him blood in the vein of the head, and in the palpate of his mouth, and to be short, in all those places where the disease causeth most grief. And if the Horse be for one pained as he cannot swallow down his meat, it shall be good to give him lukewarm water mingled with Barley meal, or Wheat meal, and beside that, to make him swallow down seven fops topped in Wine one after another, at one time: some use at the second time to dip such fops in sweet Sallet Oil. Thus far.

Of the Pellisent Ague.

It seemeth by Laurentius Ruffius, that Horses be also subject to a Pellisent Fever, which almost incurable, is called of him Infirmus Epidemialis, that is to say, a Contagious and pestiferous disease, whereof there dyed in one year in Rome above a thousand Horses, which as I take it came by some corruption of the air, whereunto Rome in the chief of Summer is much subject, or else corrupt humors in the body engendered by unkind food, by reason perhaps, that the City was then perilled with more Horse-men then there could be conveniently harbored or fed. Laurentian himself rendreth no cause thereof, but only writeth Signes how to know it, which he saith: The Horse holdeth down his head, eateth little or nothing, his eyes watereth, and his flanks do continually beat. The Cure: First give him this Glyster, Take of the pulp of Colonnaunts one ounce, of D'arganum one ounce and a half, of Centaury and Wortwood, of each one handful, of Cepharos half an ounce, boil them in Water, then being strained, diftill thereon of Geroussdamum six ounces, of Salt an ounce and a half, and half a pound of Ol-olive, and minifie it lukewarm with a horn, or pipe made of purpose. Make also this Plaster for his head; Take of Squilla five ounces, of Elder, of Cepharos, of Maltard feed and of Euforium, of each two ounces, diftill the same in the juice of Dafodill, and of Sage, and lay it to the Temples of his head next unto his ears; or else give him any of these three drinks following, Take of the salt Tracle two or three ounces, and diltemper it in good Wine, and give it him with a horn; or else let him drink every morning the space of three days, one pound or two of the juceye of Elder roots; or else give him every morning to eat, a good quantity of Quenum hair, called of the Lattus, Cepharum Venetiis, newly and freshly gathered, but if it be old, then boil it in Water, and give him the decocotion thereof to drink with a horn.

Martin's opinion and experience touching a Horses Fever.

Though Martin have not seen so many several kinds of Fevers to chance to Horses, yet he confesseth that a Horse will have a Fever, and that, you shall know it by these signes: For after the Horse hath been sick two or three days, if you look upon his tongue you shall see it almost raw and scall, with the heat that comes out of his body, and he will shake and tremble, reel and stagger when his fit cometh, which fit will keep him his due hours.—both of coming and also of continuance, unless you prevent it by putting the Horse into a heat, which would be done so soon as you see him begin to tremble, either by riding him, or lying upon his legs, and by chafing him up and down in the stable, until he leave shaking, and then let him be kept warm, and stand on the bit the space of two hours, that done, you may give him some hay, by a little at once; and give him warm water, with a little ground malt twice a day, the space of three or four days, and once a day wasth his tongue with Alomwater, Vinegar & Saxe But if you see that all this prevents not, then purge him with this drink, after that he hath fainted all one night; Take of Aloe one ounce, of Agrick half an ounce, of Licors and Annis seeds, of each a dram beaten to powder, and let him drink it
with a quart of white wine likewarme, and made sweet with a little hony in the morning falling, and let him be chafed a little after it, and be kept warm, and suffered to stand on the bit meatlefe two or three hours after, and he shall recover his health again quickly.

Of sicknes in general, and the Fever.

In general, sicknes is an opposite foe to nature, warring against the agents of the body and mind, seeking to confound those actions which uphold and maintain the bodies strength and lively-ood. Who coveteth to have larger definition of sicknes, let him read Vegetius, Rufius, or excellent Master Blundevile, who in that hath been admirably well-deferving painfull. For mine one part; my intent is to write nothing more then mine own experience, and what I have approved in Horfes diseases most available: and first of the Fever or Ague in a Horfe, though it be a diseafe seldom or not at all noted by our Mechanical Horfe Farriars, who cure many times what they know nor, and kill where they might cure, knew they the caufe: yet I have my self seen of late (both by the demonstrate opinions of others better learned, and by the effects of the diseafe) one or two Horfes which, I dare avouch were mightily tormented with a Fever; though divers Leecles had thereof given divers opinions, one saying it was, the Bots, by reason of his immoderate largen-ment: another affirmed him to be bewitched, by reason of great shaking, haemervs, and swea-ting: but I have found it and approved it to be a Fever, both in effect, nature, and quality; the cure whereof is thus: for the original caufe of a Fever, is hurt, breeding putrefaction in the blood; then when his shaking begineth, take three new laid Eggs, break them in a dish; and beat them together, then mix thereto five or six spoonfuls of excellent good Aqvevitae, and give it him in a horn, then bile him, and in three or four Cour, chase him till his shaking cease, and he begin to sweat: then let him up and cloath him warm, and during the time of his sicknes, give him no water to drink, but before he drink it, boil therein Mallowes, Sorrel, Purlau, of each two or three handfuls.

As for his food, let it be fodder Barly, and now and then a little Rice in the sheaf to cleanse and purge him, chiefly if he be dry inwardly and grow coffive. This I have proved uneffectualls for this diseafe, and also much available for any other inward sicknes proceeding either of raw digestion, too extream riding, or other surfeit. Divers have written diversely of divers Agues, and I could pre-SCRIBE receipts for them, but since I have not been experimented in them all, I mean to omit them, intending not to exceed mine own knowledge in any thing.

Of the Pestillence.

T he Pestillence is a contagious diseafe, proceeding, as Pelagian faith, sometime of overmuch labour, heat, cold, hunger, and sometime of sudden running after long reft, or of the reten-tion or holding of hale or urge, or of drinking cold water whiles the Horfe is hot and sweating; for all these things do breed corrupt humors in the Horfes body, whereof the Pestillence doth chiefly proceed, or else of the corruption of the air, poisoning the breath whereby the Beasts should live, which also happeneth sometime of the corruption of evil vapors and exhalations that spring out of the earth, and after great floods or earthquakes, and sometime by means of some evil diis-tribution or influence of the Planets, corrupting sometime the plants and fruits of the earth, and sometime divers kind of Cattle, and sometime both Men, Women and Children, as we daily see by experience. It seemeth that this evil or mitchief in times past came suddenly, without giving any warming, for none of mine Authors doth declare any signes how to know whether a Horfe hath this diseafe or not, but only affirm, that if one Horfe do die of it, all his fellows that bear him company will follow after, if they be not remedied in time: so that as far as I can learn, the sudden death of one or two first, must be the only mean to know that this diseafe doth reign. And the remedy that they give is this, first separate the whole from the sick; yes, and have them clean out of the air of those that be dead, the bodies whereof, as Vegetius faith, if they be not deep buried, will infect all the rest. And let them bloud as well in the neck, as in the mouth, and then give them this drink, Take of Gentian, of Aritisloch, of Bay berries, of Myrhe, of the scraping of Ivory, of each like quantity, beat them into fine powder, and give as well to the sick as to the whole, whom you would preserve from this contagion, every day a spoonful or two of this powder in a pinte of good Wine, so long as you shall see it needful. This medicine before rehearsed, is called of the ancient writers Diapente, that is to say, a composition of five simples, and is praised to be a soveraigne medicine and prefervative against all inward diseases, and therefore they would have such as travell by the way, to carry of this powder alwayes about them.

There be many other medicines which I leave to write, because if I should rehearse every mans medicine, my book would be infinite: for my part would ufe no other then that before expressed, or else Wine and Treacle only.
The History of Four-footed Beasts.

Of the Diseases in the Head.

Blundevile.

The head is subject to divers diseases according to the divers parts thereof: for in the panicles or little fine skins cleaving to the bones, and covering the brain, do most properly breed head-ach and Migrain. Again, in the substance of the brain, (which in a Horse is as much in quantity as is almost the brain of a mean Hog) do breed the Frenzie, madnefs, flying evil, the Palifie and forgetfulness. Finally, in the ventricles or cells of the brain, and in those conducents through which the spirits animal do give feeling and moving to the body, do breed the Turnick or flaggers, the Falling-evil, the Night-mare, the Apoplexy, the Palifie, and the Convulsion or Cramp, the Catar or Rhume, which in a Horse is called the Glaunders: but first of Head-ach.

Of Head-ach.

The Head-ach either cometh of some inward causes: as of some choleric humor, bred in the panicles of the brain, or else of some outward cause, as of extream heat or cold, of some blow, or of some violent favour. Eumelus faith, that it cometh of raw digestion: but Martin faith most commonly of cold: the signes be thefe: the Horse will hang down his head, and also hang down his ears: his fight will be dim, his eyes swollen and waterish; and he will forsake his meat. The cure. Let him bloud in the palat of his mouth: also purge his head with this perfume; Take of Garlike flarks a handful, all to broken in short pieces, and a good quantity of Frankincence, and being put into a chafing-dish of fresh coals, hold the chafing-dish under the Horfes noftils, as fo the fume may ascend up into his head: and in using him thus once or twice, it will make him to caft at the nofe, and fo purge his head of all fith. Pelaginus faith, that it is good to pour into his noftills Wine, wherein hath been loderd Enfeburn, Centaury, and Frankincence.

Of the Frenzy and Madness of a Horse.

The learned Phyfitians do make divers kindes, as well of Frenzie, as of Madnefs, which are not needful to be recited, fith I could never read in any Author, nor learn of any Farriar, that a Horfe were fubject to the one half of them. Abfiyris, Hierocles, Eumelus, Pelaginus, and Hippocrates, do write simply de fuave & rabie: that is to fay, of the madness of a Horfe. But indeed, Vegetis in his fecond Book of Horfe-leach-craft, feemeth to make four mad passions belonging to a Horfe, intituting his Chapters in this fort, de Appiofus, de Frenzie, de Cardiacia, de Rabisus, the effects thereof, though I fear me it will be to no great purpose, yet to content such as perhaps have read the Author as well as I my felf, I will here briefly rehearfe the fame.

When some naughty bloud (faith he) doth strike the film or pannicle of the brain, in one part only, and maketh the fame grievously toake, then the beft become Aphiufum; that is to fay, as it feemeth by his own words next following, both dull of minde and of fight. This word Aphiufum is a strange word, and not to be found again in any other Author, and because in this passion, the one side of the head is only grieved, the Horfe turneth round, as though he went in a Mill. But when the poyfon of fuch corrupt bloud doth infect the mid brain, then the Horfe becometh Prantick, and will leap and fling, and will run against the walls. And if fuch bloud filleth the veins of the ftomach, or breast, then it infecteth as well the heart as the brain, and caufeth alienation of minde, and the body to fweat, and this difeafe is called Ephiufus Paffiocardiaca, which if Equis Appiosus chance to have, then he becometh Rabisus, that is to fay, flark-mad. For faith he, by overmuch heat of the liver and bloud, the veins, and arteryes of the heart are choked up, for grief and pain whereof the Horfe biteth himfelf, and gaaweth his own fith.

Of two forts of mad Horfes, I believe I have seen my felf here in this Realm. For I faw once a black Sweatland Horfe (as I took him to be) in my Lord of Hundons table at Hundon, coming thicker by chance with my Lord Merley, which Horfe would stand all day long biting of the manger, and eat little meat or none, sufferinge no man to approach unto him, by which his doings, and partly by his colour and complixion, I judged him to be vexed with a melancholy madnefs, called of the Phyfitians Manias, or rather Melancholia, which cometh of a corrupt Melancholy, and filthy bloud or humor, sometime spread throughout all the veins of the body, and sometimes perhaps remaining only in the head, or elfe in the fpleen, or places next adjoyning. The other mad Horfe was a Roan of Maufer Abeles, Maufer of the Jewell house, which with his teeth crufted his Maufers right forefinger in pieces, whilst he offered him a little Hay to eat, whereby he loft in a manner the ufe of his whole hand, to the great grief of all his friends, and alfo of all the Mauers, which were wont to be much delighted with fuch paffing sweet mufick as that his fine quawering hand could sometime make upon divers Instruments, but especially upon the Virginals.

This Horfe I fay, though he could eat his meat, drink his drink, and sleep: yet if he were never fo little offended, he would take on like a spirit, and both bite and strike at any man that came nigh him: yea and would bite himfelf by the shoulders most terribly, pulling away lumps of ftiofe, fo broad as a mans hand: and whensoever he was ridden, he was fain to be mulfed with a mulfell of iron, made of purpole to keep him from biting either of his Rider or of himself, which no doubt proceeded of some kinde of frenzy or madness, whereunto the Horfe was fubjeft; by means that hot bloud
blood (as I take it) abounded over much in him. But now as touching the cures, signes, and cure of Horses madness, you shall hear the opinion of old Writers: for Martin never took such cure in hand. 

Abstinent and the other Authors before mentioned, say, that the madness of a Horse comes either by means of some extreme heat, taken by travelling, or long standing in the hot Sun, or else by eating over many stiches, or by some hot blood referring to the puncies of the brain; or through abundance of choler remaining in the veins; or else by drinking of some very unwholesome water. The signes be these, he will bite the manger and his own body, and run upon every man that comes nigh him, he will continually shake his ears, and stare with his eyes, and some at the mouth: and also, as Leporescath faith, he will forsake his meat and pine himself with hunger.

The care. Cause him to let blood in his legs abundantly, which is done (as I take it) to divert the blood from his head. Notwithstanding it were not amiss, to let him blood in the neck and breit veins. Then give him this drink: take the roots of wide Cowcumber, and boil it in harde Red Wine, and put thereunto a little Nutre, and give it him with a horn Luke warm: or if you can get no Cowcumber, then take Rue and Mints, and boil them in the Wine: it were not amiss also to add thereunto a handful of black Eleborus, for that is a very good herb against madness. 

Eumelius faith, that if you give him mans dung in Wine, to drink three mornings together, it will heal him: also to take of black Eleborus two or three handfuls, and boil it in a sufficient quantity of strong Vinegar, and therewith rub and chafe both his head, and all his body once or twice a day; for the other his head is rubbed, the better, and oftentimes is very profitable to all his body. Some again would have the skin of his body to be pierced in divers places with an hot iron, to let out the evil humors: but if none of all this will prevail, then the last remedy is to geld him of both his foemes, or else of one at the least; for either that will heal him, or else nothing. As touching the diet and usage of a mad Horse, the Authors do not agree; for some would have him kept in a close, dark and quiet house, void from all noisie, which as Abstinent faith, will either make him madder, or else kill him out of hand. His diet would be thin, that is to say, without any provender, and this day that he is let blood, and receiveth his drink, they would have him eat until then, and then to have a warm mash of Barley meals: ye, me thinks it were not amiss to feed him only with warm mathes and hay; and that by a little at once, until he be somewhat recovered.

Another of the Head-ach. 

He Head-ach, as most are opinioned, proceedeth of cold and raw digestion: the cure is: Take a Goose feather anointed with Oyl-de-bay, and thrust it up into the Horse's nostrils, to make him sneeze: then take a wreath of Pease-draw or websay, and putting fire thereunto, hold it under the Horse's nose, so as the smoke may ascend up into his head; then being thus perfumed, take a knife and prick him in the palate of the mouth, so that he may lick up and chew his own blood, which done, have great care in keeping his head warm, and doubt not his recovery.

Of the Sleeping-evil.

This is a disease forcing the Beast continually to sleep, whether he will or not, taking his memory and appetite clean away, and therefore is called of the Physitians Lethargy, it proceedeth of abundance of phlegm moistening the brain overmuch. It is easy to know it, by the continual sleeping of the Horse. The cure of this disease according to Pelagonius, Vegetius, and others, is in this fort: Let him bleed in the neck, and then give him this drink: Take of Camomile and Mother-wort, of each two or three handfuls, and boil them in a sufficient quantity of water, and put thereunto a little Wheat-braint, Salt and Vinegar, and let him drink a pint of that every day, the space of three or four days together. It is good also to perfume and chafe his head, with Thyme and Deputyroyal foddens together in Vinegar, or with Brimstone and feathers burned upon a chafing-dish of coal under his nose, and to provoke him to sneeze, by blowing Pepper and Pyretre beaten to powder, up into his nostrils: yea and to anoint the patate of his mouth, with Honey and Mutter mingled together, and in his drink, which would be always warm water, to put Parsley seed, and Fenel seed, to provoke urine. His legs also would be bathed, and his hooves filled with Wheat-braint, Salt, and Vinegar, foddens together, and laid to so hot as he may endure; and in any case suffer him not to sleep, but keep him waking and stirring, by continual crying into him, or pricking him with some sharp thing, that cannot pass through the skin, or else by beating him with a whip, and this doing he shall recover.

Another of the Sleeping-evil.

This Sleeping-evil in a Horse, differeth nothing from that which the Physitians call the Lethargy in men, for it provoketh the Horse to sleep continually, without danger, robbing his memory, and appetite of their qualities: the knowledge thereof is easily known by his darkness, and the cure in this fort: Let one stand by him, and either with fearful noise or despair, so force keep him waking; then let him bleed under the eyes, and in the neck, and then take a leaf or two of the bell Tobacco, which being dried and beaten to powder, with a quill blow it up into his nostrils, and give him to drink Vinegar, Salt, and Mutter mingled well together, to which if you put a little
Honey, it shall not be amiss; and also when he drinketh any water, put thereto either Fennel-seeds, Aniseseeds or Pepper.

**Of a Horse that is taken.**

**Blundevile.**

A Horse is said to be taken, when he is deprived of his feeling and moving, so as he is able to stir no manner of way, but remaineth in such state and form, as he was taken in; which disease is called of the Phyfitians by the Greek name Catalepsis, and in Latin, Depreceptio, or Congelatio; and of Vegetius, Sideratio; which also called those Beasts that have this disease Funemta sideratitis. The Phyfitians say, that it cometh of abundance of phlegm and choler mixt together, or else of melancholy blood, which is a cold dry humor oppressing the hinder parts of the brain. But Vegetius faith, that it comes of some extreme outward cold, striking suddenly into the empty veins, or some extreme heat or raw digestion; or else of some great hunger, caused by long fasting. It is easie to know by the description before mentioned.

As touching the cure, Vegetius faith, that if it come of cold, then it is good to give him to drink one ounce of Lasterpitium, with Wine and Oyl mixt together, and made luke-warm: if of heat, then to give it him with Water and Honey: if of crudity, then to heat him by fasting: if of hunger, then by feeding him well with Peafe. But Martin faith, that this disease is called of the French men Surprins, and it cometh (as he faith) most chiefly of cold taken after heat, and he writeth a Horse that is thus taken, to be cured in this fort. First to be let bloud on both sides of the breast, and then to be put in a heat either by continual ftringing and mollyenting him; or else if he will sitt by no means, then to bury him all fave the head in a warm dunghill, and there to let him ly till his limbs have some feeling. And after you boe him, it shall be good to give him this drink: Take of Malmifie three pintes, and put thereunto a quartern of Sugar, and some Cinnamon and Cloves, and let him drink it good and warm, and before till he be perfectly whole, let him be kept warm, and often exercized and walked up and down in the stably, and thinly dietted, and drink nothing but warm water, wherein if you put some Fennel and Parsly seed, to provoke him to urine, it shall be the better. And if he cannot dung, let him be raked, and have a Giyter made of the broth of Malows and fresh Butter.

**Another of a Horse that is taken.**

**Markham.**

A Horse which is bereft of his feeling, moving or sifting, is said to be taken, and in sooth fo he is, in that he is arrested by fo wilful an disease; yet some Farryers, not well understanding the ground of the disease, confeft the word taken, to be stricken by some Planet, or evill spirit, which is false; for it procedeth of too great abundance of phlegm and choler, symbolized together: the cure is thus: Let him bloud in his furp veins, and his breath veins, and then by foulding him in abundant number of cloaths, drive him into an extrem heat, during which time of his sweating, let one chafe his legs with Oyl-de-bay; then after he hath sweat the space of two hours, abate his clothes moderately; and throughly after he is dry, anoint him all over with Oyl Petrolium, and in twice or thrice drefling him he will be found.

**Of the Staggers.**

**Blundevile.**

His is a dizziness of the head, called in Latin, Vertigine; and of the Italians, as I remember, Capifìna. It comes of some corrupt blood, or gros and tough humors oppressing the brain, from whence procedeth a vaporous spirit, disolved by a weak heat, which troublith all the head. The figues be thefe; dimnes of sight, the reeling and staggering of the Horse, who for very pain will thrust his head against the wall, and forfake his meat. The cure according to Martin is thus:

Let him bloud in the temple veins, and then with a knife make an hole an inch long over-throw his fore-head, hard underneath his fore-top, and raife the skin with a Corner, thoufing it upward towards the head-stale a good handful, and then put in a tent dipit in Turpentine and Hogs greafe molten together, renewing the tent every day once until it be whole, and do the like upon the rige of the rump; but me thinks it were better to do the like, in the powl of his head, or nape of his neck, for if thoufl the evil humors have both ways the easier and speedier paffage: and as touching his diet, let him have continually warm drink, and maffes; and once a day be walked up and down fair and foltly to exercize his body.

**Of the Staggers.**

**Markham.**

The Staggers is a dzy disease, breeding frenzy in a Horse, which if it be not instantly helped, is mortal: the cure is thus: Let him bloud in the temple veins, and then apply to his temples cloth wet in the juice of Garlike, and Aqua vitae mixt together: if you cruel Garlike, and put it in his ears, it is excellent; or if you hit his fore-head, and loofening the skin from the bone, taint it with Turpentine and Salte-oyl, it will undoubtedly help him.
Of the Horse.

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Of the Falling-evil.

His is a kind of Convulsion or Cramp, called of the Latines by the Greek name Epilepsia; in Italian, il morbo caduco, depriving the Beast at certain times, and for a certain space of the use of feeling, hearing, and seeing, and of all the other senses. And although it be a disease hath been seldom seen to chance unto Horces of this Countrie, yet it appeareth by Abulfus, and also by Vegetius, and divers others, that Horces be subject thereunto. For Abulfus writing to his friend Tiberus Claudius faith, that unto Horces changeth many times the Falling-ficknes. The signs whereof are these: The Horse will fall down suddenly, partly through the resolution of his members, and partly through dilution of his fiewes, and all his body will quiver and quake, and sometime he will foam at the mouth. Vegetius again writeth in this fort: By a certain course of the Moon Horces and other beasts many times do fall, and dy for a time as well as men. The fignes whereof are these: Being fallen, their bodies will quiver and quake, and their mouths will foam, and when a man would think that they would dy out of hand, they rise suddeuly up and fall to their meat. And by feeling the griffe of their nostrils with your finger, you shall know whether they will fall often or not: for the more cold the griffe be, the oftener, and the les cold it be, the feldomer they will fall. The cure:

Let him bloud abundantly in the neck veins, and within five days after, let him bloud again in the temple veins, and let him hand in a warm and dark flable, and anoint all his body with comfortable Ointments, and his head and ears with Oyl of Bay, and liquid Pitch or Tar, mingled together. And also put some thereof into his ears, and then make a Biggen for him of some folt warm skin, as of a Sheeps skin, or elfe of Canvas ruffed underneath with Wood, and make him this purging drink. Take of Radish roots two ounces, of the root of the herb called in Latine, Panax or Panse, and of Scammony, of each one ounce, beat all these things together, and boil them in a quart of Honey, and at sundry times as you shall see it needful, give him a good spoonefull or two of this in a quart of Ale luke-warm, whereunto would be put three or four spoonnefulls of Oyl. It is good also to blow the powders of Motherwort, or of Pyrethrum, up into his nostrils; and if the disease do continue still for all this, then it shall be needful to pierce the skin of his fore-head in divers places with a horizon, and to let out the humors oppreffing his brain.

Of the Night-mare.

This is a disease oppreffing either Man or Beast in the night feaon when he sleeppeth, so as he cannot draw his breath, and is called of the Latines, Incubus. It cometh of a continual crudity or raw digestion of the stomack, from whence grofs vapours ascending up into the head, do oppreffe the brain, and all the fensitive powers, so as they cannot do their office, in giving perfect feeling and moving to the body. And if this disease chancing often to a man, be not cured in time; it may perhaps grow to a worfe michief, as to the Falling-evil, Middens, or Apoplexy. But I could never learn that Horces were subject to this disease, neither by relation, nor yet by reading, but only in an old English Writer, who sheweth neither caufe nor fignes, how to know when a Horfe hath it, but only teacheth how to cure it with a fond foolish charm; which because it may perhaps make you gentle Reader to laugh, as well as it did me, for recreation fake I will here rehearfe it. Take a firit tone that hath a hole of his own kinde, and hang it over him, and write in a bill:

In nomine patris, &c.
Saint George our Ladier Knight,
He walked day, so did he night,
Until he her found,
He her beat, and be her bound;
Till truly her trouth he him plught,
That she would not come with the night;
There as Saint George our Ladier Knigbt,
Named was three times, Saint George.

And hang this Scripture over him, and let him alone: with such proper charms as this is, the false Fryers in times past were wont to charm the money out of plain folks purses.

Of the Apoplexy.

The Apoplexy, is a disease depriving all the whole body of sense and moving. And if it deprive but part of the body, then it is called of the Latines by the Greek name Parafaia, in our tongue a Pallie. It proceeds of cold, grofs, and tough humors, oppreffing the brain all at once, which may breed partly of crudities and raw digestion, and partly by means of some hurt in the head, taken by a fall, stipe, or otherwife. As touching Apoplexy, few or none writing of Horfe-leetch-craft do make any mention thereof: but of the Pallie Vegetius writeth in this maner: A Horfe (faith he) may have the Pallie as well as a man, which is known by these fignes: He will go grovelling and fidding like a Crab, carrying his neck awry, as if it were broken, and goeth crookedly with his legs, beating his head against the wals, and yet forfaketh not his meat nor drink, and his provender seemeth moit and wet. The cure. Let him bloud in the temple vein, on the contrary fide of the wrying of his neck, and anoint his neck with comfortable Oyment, and splent it with splents of wood to make
The History of Four-footed Beasts.

it stand right, and let him stand in a warm stable, and give him such drinks as are recited in the next chapter following. But if all this profiteh not, then draw his neck with a hot iron on the contrary side: this is to say, on the whole side, from the neather part of the ear down to the shoulders, and draw also a good long strike on his temple, on that side, and on the other temple make him a little slit in this fort *, and from his reins to his mid back, draw little lines, in manner of a ragged flaffe, and that will heal him.

Of the Cramp or Convulsion of the Sinews and Muscles.

A Convulsion or Cramp, is a forcible and painful contraction or drawing together of the sinews and muscles, which do happen sometime through the whole body, and sometime but in one part or member only. And according as the body may be diversly drawn, so do the Physicians, and also mine Authors that write of Horfe-leech-craft, give it divers names. For if the body be drawn forward, then they call it in Greek, Empyrolhiasin; in Latin, Tenfor ad anteriora. And if the body be drawn back, it is called in Greek, Opjiftatons; in Latin, Tenfoad posteriora.

But if the body be flark and ftrait, bowing neither forward, nor backward, then it is called simply in Greek, Tetanoe; in Latin, Diufenio or Rigor: which names also are applied to the like Convulsions of the neck. Notwithstanding, Vegetius writing of this disease, entitleth his chapters de Raborofo, a strange team, and not to be found again in any other Author. A Convulsion, as I said before, may chance as well to one part or member of the body, as to the whole body: as to the eye, to the skin of the fore head, to the roots of the tongue, to the jaws, to the lips, to the arm, hand or leg: that is to say, whensoever the finew or muscle serving to the moving of that part, is evill affected or grieved. Of which Convulsions, though there be many divers caufes: yet Hippocrates brings them all into two: that is to say, into unfines and emptines: for when a Convulsion proceedeth either of some inflammation of superfluous eating or drinking, or for lack of due purgation, or of overmuch rest and lack of exercise, all such caufes are to be referred to repletion or unfines. But if a Convulsion come by means of over-much purging or bleeding, or much watching, extreme labours, long failing; or by wounding or pricking of the linew, then all such caufes are to be referred unto emptines. And if the Convulsion proceed of unfines, it chanceth suddenly, and all at once; but if of emptines, then it cometh by little and little, and leisurely.

Besides thies kinds of Convulsions, there is also changing many times in a mans fingers, legs and toes, another kind of Convulsion, which may be called a windly Convulsion, for that it proceeds of some gros or tough vapore, entred into the branches of the finews, which maketh them to swell like a Lute string in moist weather, which though it be very painful for the time, yet it may be soon driven away, by chafing or rubbing the member grieved with a warm cloth. And this kind of Convulsion or Cramp chanceth also many times to a Horfe hinder-legs standing in the stable.

For I have seen some of my fel, that have had one of their hinder-legs drawn up with the Cramp almost to the belly to fitle and hard, as no man hath been able to fitle it, neither could the Horfe himself let it down to the ground of a long feaon, which I think might be soon remedied: first by continual chafing, fretting, or rubbing his legs with a good wiife, and then by tying up the other hinder-leg, or else the foreleg on the fore fide, whereby he should be forced to let down the pained leg. Thus far I have discussed of the Convulsion of finews, and of the caufes thereof, according to the opinions of the learned Physicians. Now I will briefly feue you the caufes, fignes, and cure thereof, according to the doctrine of mine Authors that write of Horfe-leech-craft.

Abhursis fithe, that this disease doth come, either by driving the Horfe into a sweat when he halt, or for that he hath trodden upon some nail, or by taking cold after journeying and sweating in Winter fason, whereby his lips are clung together, or by long lying and reft after sweating, whereby the finews of his fore-legs be numbed, or by having some tripe of his privy members; or by long travelling in the cold Mountains, where Snow and Ice doth abound. For Themenius writeth, that coming out of Peanies, with the King and his Army, and paffing over the Mountains to go into Italy, there fell such abundance of Snow, as not only many Souldiers dyed, fittin' fhill on their Horfes backs, with their Weapons in their hands, being so flark and fline, and cleaving fo faft to their Saddles, as they could not easily be pulled out of them: but alfo divers Horfes in their going were so numbed as they could not bow their legs: yea and fome were found flark dead, flanding fhill on their feet, and few Horfes or none escap'd at that time free from this Convulsion of fnews, infomuch that Themenius his own Horfe which he loved dearly, was fore vexed therewith. The fignes to know whether a Horfe be troubled with the Convulsion in the finews or not, be these:

His head and neck will be fo fline and flark, as he can bow in no manner of way, his ears will stand right up, and his eyes will be hollow in his head, and the fleshy parts thereof in the great corners, will be turned backward; his lips will be clung falt together, fo as he cannot open his mouth, and his tongue so numbed as he can neither eat nor drink; his back-bone and tail will be fo fline, as he cannot move it one way nor other, and his legs fo fline, as they will not bow, and being laid he is not able to rife, and specially on his hinder-legs, but falie down on his buttocks, like a Dog when he fitteth on the ground; and by means of the Convulsion in his back, his bladder also for neighbour-hood fake, fuffereth, whereby the Horfe cannot fline, but with great pain. The cure.
Of the Horse.

Put him into a sweat, either by burying him alive the head in some warm dunghill; or if he be a Horse of price, carry him into a hot house, where is no smoke, and let him sweat there. Then anoint all his body, head, neck, legs, and all, with Oyl of Cypresses, and Oyl of Bay mingleth together. Or else with one of these Ointments: Take of Hogs grease two pounds, of Turpentine half a pound, of Pepper beaten in powder one dram, of new Wax one pound, of old Oyl two pound; boil all these together, and being made very warm, anoint all his body therewith. Or else with this Ointment: Take of new Wax one pound, of Turpentine four ounces, of Oyl-de-bay as much, of Opopanax two ounces, of Deers sweats and Oyl of Storax, of each three ounces, melt all these together, and anoint all his body therewith.

It is good also to bath his head with the decoction of Fitches, or else of Lupins, and make him this drink: Take twenty grains of long Pepper, finely beaten into powder, of Cedar two ounces, of Nutre one ounce, of *Laserpitium* as much as a Bean, and mingle all these together with a sufficient quantity of white Wine; and give him thereof to drink a quart every morning and evening, for the space of three or four days; or else this drink: Take of Opopanax two ounces, of Storax three ounces; of Gennez three ounces, of Mann Sucarry three ounces, of Myrthe one scruple, of long Pepper two scruples, give him this with old Wine: or make him a drink of *Laserpitium*, Cumin, Amiie leed, Fenigreek, Bay-berries, and old Oyl.

In old time they were wont to let him bleed in the Temples, which *Abstrus* doth not allow saying, that it will cure the sinews of his lips to dry up, so as the Horfe being not able to move them, shall pine for hunger. As touching his diet, give him at the first warm mashes, and such soft meat as he may easily get down, and wet Hay, bringing him to harder food by little and little. And in any cafe, let him be kept very warm, and ridden or walked one day to exercise his legs and limbs. *Thebesius* cured his Horfe, as he faith, by placing him in a warm stable, and by making a clear fire without any smoke round about him; and the Horfe not being able to open his jaws of himself, he cau’d his mouth to be opened, and put therein tops dipt in a confection called *Emivin conditum*, and also anointed all his body with a Medicine or Ointment called *Acipum* (the making whereof hereafter followeth) dissolved in Cypresses Oyl, which made him to fall into a sweat, and being before half dead and more, brought him again to his feeling and moving, so as he did ride and eat his meat.

Of the Cramp or Convulsions of the Sinews or Muscles.

*A Convulusion or Cramp, is a forcible drawing together of the sinews, sometimes universally over the whole body; as I have seen one Horfe in my life time, and sometimes but in one part or member, as I have known and helped divers. These Convulsions have two grounds, namely, either natural, or else accidental; natural, as proceeding of cold windy humors ingenered in the body, and dispers’d into those parts, work then the effects of grievance. Accidental, is by wounding or prickling the sinews, of which immediately ensueth a Convulusion. If it be natural, and the disease generally dispers’d; then the cure is thus: Dig a great deep hole in some old dung-hill, and there bury him all save the head, so as he may sweat there for the space of two hours at the least; then take him out, and anoint his body all over with Nerve oil, Turpentine, and Deers sweats mingled together on the fire and bath his head in the juice of Rue and Camomile.

Then give him to drink old Ale brewed with Cinnamon, Ginger, Fenigreek and long Pepper; of each three ounces. As for his diet, let it be warm mashes, fodder wheat and hay, thorough carded with a pair of Wool-cards: let him be kept very warm and aired abroad once a day at the least.

If this Convulusion be but only in one member, then it is sufficient, if every day with hard ropes of hay or straw you rub and chafe that part exceedingly, and apply there to a little quantity of the Oyl of Pepper. If the Convulusion be accidental, proceeding of some hurt, whereby the sinew is wounded or prick’d; then shall you incommodiously take up the sinew so wounded, searching the wound with great dexterity, and cut it clean in funder; then shall you endeavour to heal up the fame with ungues, plattiers and balms, as shall be hereafter mentioned in the chapters of wounds and ulcers, of what kinde or nature soever.

Of the Cold in the Head.

ACcording as the cold which the Horfe hath taken, is new or old, great or small, and also according as humors do abound in his head, and as such humors be thick or thin, so is the disease more or les dangerous. For if the Horfe calleth little or no matter out of his nose, or hath no very great cough; but only heavy in his head, and perhaps lightly cougheth now and then, it is a sign that he is stopp’d in the head, which we were wont to call the pofe. But if his head be full of humors concealed by some extreme cold taken of long time past; and that he calleth foul filthy matter out at the nose, and cougheth grievously; then it is a sign that he hath either the Glaunders, or the Strangulation, mourning of the chen, or Conquamation of the Lungs. For all such diseases do breed for the most part of the rheume or distillation that cometh from the head. Of the cures thereof we leave to speak, until we come to talk of the diseases in the throat, minding here to shew you how to heal the pofe or cold before mentioned.
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MARTIN faith, it is good to purge his head, by perfuming him with Frankincense, and also to provoke him to neeze, by thwarting two Goose feathers dip't in Oyl-de-bay, up into his nostrils, and then to trot him up and down half an hour, for these feathers will make him to cough immediately at the nose. LAURENCE Rusius would have him to be perfumed with Wheat, Penny royal, and Sage sodden well together, and put into a bag so hot as may be; which bag would be so close fastened to his head, that all the favour thereof may ascend up into his nostrils, and his head also would be covered, and kept warm: and to provoke him to neeze, he would have you to bind a soft clout anointed with Sope, or else with Butter and Oyl-de-bay unto a stick, and to thrust that up and down into his nostrils, so high as you may conveniently go, and let him be kept warm, and drink no cold water. Yet, it shall be good for three or four days, to boil in his water a little Fenigreek, Wheat meal, and a few Anise-leeds. And every day after that you have purged his head by perfuming him, or by making him to neeze, cause him to be trott'd up and down, either in the warm Sun, or else in the house half an hour, which would be done before you water him, and give him his provender.

Of the Cold in the Head.

MARKHAM.

The pox or cold in a Horse, is the most general disease that happeneth, and is the easiest perceived, both by flopping, rating in the nose, and coughing, the cure thereof is in this sort: If it be but newly taken by some careless regard, and immediately perceived, you shall need no other remedy, but to keep him warm every morning and evening after his water, to ride him forth, and to trot him up and down very fast till his cold break, and then gently to gallop him a little, which moderate exercise with warm keeping will quickly recover him again; but if the cold hath had long residence in him, and still encreaseth, then you shall give him this drink three days together: Take of strong Ale one quart, of the best Treakle fix penny-worth, of long Pepper and grains, of each as much beaten to powder, of the juice of Garleek two spoonfuls, boil all these together, and give it the Horse to drink; so warm as he may suffer it, and then trot him up and down by the space of an hour or more, and keep him warm, giving him to drink no cold water.

Of the diseases of the Eyes.

BLANDEVILLE.

Horses eyes be subject to divers griefs, as to be waterish or blood-shotten, to be dim of sight, to have the Pin and Web, and the Haw, whereof some comes of inward causes, as of humors refracting to the eyes, and some of outward, as of cold heat, or stripe.

Of Weeping or Watering Eyes.

T HIS, as Laurensius Rusius faith, may come sometimetime by confluence of humors, and some- time by some stripe, whose cure I leave to recite, because it doth not differ from Martinus experience here following: Take of Pitch, Rofen and Mslick, a like quantity, melt them together. Then with a little stick, having a clout bound to the end thereof, and dip in them, amongst the temple veins on both sides, a handful above the eyes, as broad as a Telfern, and then clap unto it immediately a few flocks of like colour to the Horse, holding them close to his head with your hand, until they stick fast unto his head, then let him bloud on both sides, (if both sides be infected) a handful under the eyes. Rusius also thinketh it good to wash his eyes once a day with pure pure white wine, and then to blow therein a little of Tartarum, and of Pumice stone, beaten into fine powder.

Of Watering Eyes.

MARKHAM.

Watering eyes come most commonly in some stripe or blow, and the cure is thus: Lay unto his temples a plaster of Turpentine and Pitch molten together, then wash his eyes with white Wine, and afterward blow the powder of burnt Allum into the same.

Of Blood-shotten Eyes, also for a blow or itching, and rubbing in the Eyes.

BLANDEVILLE.

MARTIN never used any other medicine, then this water here following, wherewith he did always heal the forefaid griefs: Take of pure Rose water, of Malmie, of Fenelin water, of each three spoonfuls, of Tutia as much as you can easilly take with your thumb and finger, of Cloves a dozen beaten into fine powder; mingle them together, and being Luke-warm, or cold if you will, wash the inward part of the eye with a feather dip't therein, twice a day until he be whole. Rusius faith, that to blood-shotten eyes it is good to lay the white of an Egge, or to wash them with the juice of Celidony.
Another of Blind-shotten Eyes, or any other sore Eye, coming of rhume or other humor.

Or any sore eye make this water: Take of the water of Eye-bright, of Rose water, and Malmsey, of each three spoonfuls, of Cloves six or seven been to fine powder, of the juice of Houfeleek two spoonfuls; mix all these together, and wash the Horse's eyes therewith once a day, and it will recover him.

Of dimness of sight, and also for the Pin and Web, or any other spot in the Eye.

If the Horse be dim of sight, or hath any Pearl growing in his eye, or thin film covering the ball of his eye, then Buffia would have you take of Puttyce stone, of Tartarum, and of Salt Gumme, of each like weight, and being beaten into very fine powder, to blow a little of that in his eye, continuing to to do every day once or twice, unill he be whole. Martin faith, that he always used to blow a little Sandivoir into the eye once a day, which simple he affirmeth to be of such force, as it will break any Pearl or Web in short space, and make the eye very clear and fair. Buffia amongst a number of other medicines, praised most of all the powder of a black Flint stone.

Of the Pin and Web, and other dimness.

Or to cure the Pin, Web, Pearl Film, or other dimness, use this means following: Take of Sandivoir, the powder of burnt Allum, and the powder of black Flint-stone, of each like quantity: and once a day blow a little thereof into the Horse's eye, and it will wear away such imperfect matter, and make the eye clear.

Of the Hav, called of the Italians, Unghia degl' occhi.

This is a gristle covering sometime more then one half of the eye. It proceedeth of gros and tough humors, descending out of the head; which Hav, as Martin faith, would be cut away in this fort: First, pull both the both eye-lids open with two several chords, stitching with a needle to either of the lids. Then cast hold of the Hav with another needle and thred, and pull it out so far as you may cut it round the breadth of a penny, and leave the black behind. For by cutting away too much of the fat and black of the eye, the Horse many times becomes bear-eyed. And the Hav being clean taken away, squirt a little white Wine or Beer into his eye.

Another of the Hav.

A Hav is a gros gristle growing under the eye of a Horse, and covering more then one half of his sight; which if he be suffereth will in short time perish the eye: the cure is thus: Lay your thumb under his eye, in the very hollow, then with your finger pull down the lid, and with a sharp needle and thred take hold of the Hav, and pulling it out, with a sharp knife, cut away the compass of a penny, or more, that done, wash the eye with a little Beer.

Of Lunatick Eyes.

V Egetius writeth De ocula Lunatice, but he thorowth neither cause nor signes thereof, but only faith that the old men teared it fo, because it makesthe eye sometime to look as though it were covered with white, and sometime clear. 

Martin faith, that the Horse that hath this disease, is blind at certain times of the Moon, inmuch that he feeth almost nothing at all during that time, and then his eyes will look yellowish; yes, and somewhat reddish, which disease according to Martin, is to be cured in this fort: First use the plaster mentioned before in the chapter of Waterish or Weeping eyes, in such order as is there prescribed; and then with a sharp knife make two flits on both sides of his head an inch long, somewhat to wards the nose, a handful beneath the eyes, not touching the vein: and with a corneet hoofen the skin upward the breadth of a great, and thrust therein a round piece of leather, as broad as a two penny piece, with a hole in the middle to keep the hole open, and look to it once a day, that the maker may not be stopped, but continually run the space of ten days, then take the leather out, and heal the wound with a little flux dipte in the salve here following: Take of Turpentine, of Honey, of Wax, of each like quantity, and boil them together, which being a little warmed, will be liquid to leave your purpose, and take not away the plasters from the temples until they fall away of themselves, which being fallen, then with a small hot drawing Iron, make a star in the midst of each temple vein where the plaster did ly. Which star would have a hole in the midst made with the button end of your drawing Iron.
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Another of Lunatick or Moon-eyes.

Markham.  Of thefe Lunatick eyes, I have known divers: they are blinde at certain times of the Moon, they are very red, fiery, and full of him: they come with over-riding, and extraordinary heat and fury, the cure of them is thus: Lay upon the Temples of his head a plai ster of Pitch, Rotten, and Mallick molten together very exceeding hot: then with a little round Iron made for the purpose, burn three or four holes an inch or more underneath his eyes, and anoint those holes every day with Hogs grease, then put it in his eyes every day with a little Honey, and in short time he will recover his sight.

Of the Canker in the Eye.

Blundeville.  This cometh of a rancck and corrupt bloud defending from the head into the eye. The signes. You shall see red pimples, some small, and some great, both within and without upon the eye-lids, and all the eye will look red, and be full of corrupt matter. The cure according to Martin is thus: First, let him bloud on that side the neck, that the eye is grieved, the quantity of a potle. Then take of Roch Allum, of green Copperas, of each half a pound, of white Copperas one ounce, and boil them in three pintes of running water, until the half be consumed, then take it from the fire, and once a day witch his eye with this water being made luke-warm with a fine lenen cloth, and cleanse the eye therewith fo oft as it may look raw, continuing thus to do every day until it be whole.

Of diseases incident to the Ears, and Poll of the head, and first of an Impoſtum in the Ear.

Impoſtumes breed either by reafon of some blow or bruising, or elfe of evil humors congealed in the ear by some extrem cold: the signes be apparent, by the burning and painful swelling of the ear and part thereabout. The cure according to Martin is in this fort. First, rape the Impoſtume with this plaister. Take of Linseed beaten into powder, of Wheat floure, of each half a pinte, of Honey a pinte, of Hogs greafe, or Barrows greafe one pound. Warm all these things together in an earthen pot, and fir them continually with a flat fliek or flife, until they be thoroughly mingled and incorporated together, and then spread some of this plaister, being warm, upon a piece of lenen cloth, or soft white leather, fo broad as the swelling, and no more, and lay it warm unto it, and let it remain one whole day, and then renew it with fresh Ointment, continuing fo to do until it break; then lance the fore, fo that it may have passage downward, and tent it to the bottom with a tent of flax dipt in this Ointment: Take of Niel Resanum, of Oyl Olive and Turpentine, of each two ounces, and mingle them together, and make him a dipt of Canvas to clofe in the fore, fo as the tent with the Ointment may abide within, renewing the tent once a day until it be whole. But if the Horfe have pain in his ears, without any great swelling or Impoſtumation, then thrust in a little black Wooll dipt in Oyl of Camomile, and that will heal it.

Of the Poll evil.

This is a disease like a Fiftula growing betwixt the ears and the poll or nape of the neck, and proceedeth of evil humors gathered together in that place, or elfe of some blow or bruise, for that is the weakenest and tenderest part of all the head, and therefore soonest offended, which rude Carters do little consider, whilest in their fury they beat their Horfies upon that place of the head with their whip-flacks; and therefore no Horfe is more subject to this disease than the Cart-horse; and this disease cometh most in Winter fea{on. The signes. You shall perceive it by the swelling of the place, which by continuance of time will break it self, rottling more inward then outward, and therefore is more perilous if it be not cured in time; and the sooner it be taken in hand, the better. The cure according to Martin is thus: If it be not broken, rape it with a plaister of Hogs greafe laid unto it fo hot as may be; and make a biggen for the Poll of his head to keep it from cold; which biggen would have two holes open, fo as his ears may stand out; and renew the plaister every day once, until it break, keeping the fore place as warm as may be.

And if you fee that it will not break so soon as you would have it, then there as it is fo{set and most meetel to be opened; take a round hot Iron, as big as your little finger, and sharp at the point, and two inches beneath that soft place, thrust it in a good deepnefs upward, fo as the point of the Iron may come out at the ripeſt place, to the intent that the matter may descend downward, and come at the nearest hole, which would be always kept open; and therefore tent it with a tent of flax dipt in Hogs greafe, and lay a plaister of Hogs greafe alo upon the same, renewing it every day once the space of four days, which is done chiefly to kill the heat of the fire.

Then at the four days end, take of Turpentine half a pound, clean wash'd in nine findy waters, and after that throughly dry'd, by thrithling out the water with a flife on the dishes side, then put thereunto two yolks of Egges, and a little Saffron, and mingle them well together: that
The Vives be certain kernels growing under the Horse's ear, proceeding of some rank or corrupt blood referring to the place, which within are full of little white grains, like white salt kernels. The Italians call them Pisole, which if they be suffered to grow, Laurensius in his faith, that they will grievously pain the Horse in his throat, so as he shall not be able to swallow his meat, nor to breathe. They be easy to know for, they may be felt, and also seen: The cure according unto Martin, is in this fort: First draw them down in the midst with a hot iron, from the root of the ear so far as the tip of the ear will reach, being pulled down: and under the root again draw two strikes on each side a broad arrow head; then in the midst of the first lance them with a lancet, and taking hold of the kernels with a pair of pinfons, pull them so far forward, as you may cut the kernels out without hurting the vein; that done, fill the hole with white Salt. But Hieroles would have them to be cured in this fort: Take a piece of Spunge soaked well in strong Vinegar, and bind that to the fore, renewing it twice a day until it hath rotted the kernels; that done, lance the nearest part where the matter lyeth, and let it out, and then fill it up with Salt finely brayed, and the next day wash all the filth away with warm water, and anoint the place with Honey and Finch-flowers mingled together. But beware you touch none of the kernels with your bare finger, for fear of venoming the place, which is very apt for a Filitula to breed in.

An other of the Vives.

The Vives be certain kernels growing under the Horse's ear, which come of corrupt blood, the cure is diversly spoke and written of; but this is the bell mean which I have tried, that if you finde the kernels to enflame and grieve the Horse, take a handful of Sorrel, and lay it in a Baw-dock leaf, and roll it in the hot embers like as a Warden; then being taken out of the fire, apply it so hot as may be to the fore part, suffering it to ly thereunto the space of a day and a night, and then renew it, till such time that it ripen and break the fore, which it will in short space do. When it is broken, and the vitle matter taken away, you shall heal up the fore place with the yolk of an Egge, half a spoonful of Honey, and as much Wheat-flowes as will serve to make it thick, plaster-wise, which being bound thereunto, will in three or four days heal the same.

Of the Cankerous Ulcer in the Nose.

This disease is a fretting humor, eating and consuming the flesh, and making it all raw within, and not being holpen in time will eat through the gristle of the nose. It cometh of corrupt blood, or else of sharp humors ingendered by means of some extreme cold. The figures be these: He will bleed at the nose, and all the flesh within will be raw and filthy finking favours, and matter will come out at the nose. The cure according to Martin is thus: Take of green Copperas, of Allum, of each one pound, of white Copperas one quartern, and boil these in a pottle of running water, until a pinte be consumed, then take it off, and put thereunto half a pinte of Honey; then cause his head to be holden up with a drinking flaske, and squirt into his nostrils with a squirt of brafs, or rather of Elder, some of this water being luke-warm, three or four times one after another, but betwixt every squirtning, give him liberty to hold down his head, and to blow out the filthy matter, for otherwise perhaps you may choke him. And after this it shall be good also without holding up his head any more, to wash and rub his nostrils with a fine clayt bound to a white ficks end, and wet in the water aforefaid; and serve him thus once a day until he be whole.

Of bleeding at the Nose.

I have seen Horsetf my self; that have bled at the nose, which have had neither fore nor ulcer in their nose, and therefore I cannot choose, but say with the Phyfitians, that it cometh by means that the vein which endeth in that place, is either opened, broken or fettered. It is opened many times by means that blood aboundeth too much, or for that it is too fine, or too subtil and so perceth through the vein. Again, it may be broken by some violent strain, cut or blow. And finally, it may be fretted or gnawn through, by the sharpens of some blood, or else of some other humor contained there-in. As touching the cure, Martin faith, it is good to take a pinte of red Wine, and to put therein a quartern of Bole Armony, beaten into fine powder, and being made luke-warm, to pour the one half thereof the first day into his nostril that bleedeth, causing his head to be holden up, and drinking the liquor may not fall out, and the next day to give him the other half. But if this previalleth not, then
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Even for my part would cause him to let blood in the breast vein, on the same side that he bled, at several times; then take of Frankincense one ounce, of Aloes half an ounce, and beat them into powder, and mingle them thoroughly with the whites of Eggs, until it be so thick as Honey, and with half Hares' hair, thrust it up into his nostril, filling the hole so full, as it cannot fall out; or else fill his nostrils full of Affes dung, or Hogs dung, for either of them is excellent good to restrain any flux of blood.

Of the bleeding at the Nose, or to staunch Flux of blood in any sort.

Markham.

I have known many Horses in great danger by bleeding, and I have tryed divers remedies for the same, yet have I not found any more certain then this: take a spoonful or two of his blood, and put it in a Sawer, and let it upon a chafing dith of coals, and let it boil till it be all dryed up into powder, then take that powder, and if he bleed at the nose, with a Cane or Quill blow the same up into his nostrils, if his bleeding come of any wound or other accident, then into the wound put the same powder, which is a present remedy. New Horfe-dung, or earth, is a present remedy, applied to the bleeding place; and so are Sage leaves bruised and put into the wound.

Of the diseasen in the Mouth, and slight of the bloody Rits, or Chops in the Palatn of the Month.

Blundeville.

This disease is called of the Italians, Papatina; which as Laurentius Ruffus faith, cometh by eating horse-dung or provender that is full of prickings feeds, which by continual prickings and fretting the furrows of the mouth do cause them to ranke, and to bleed corrupt and thinking matter, which you shall quickly remedy, as Martin faith, by washing first the fore places with Vinegar and Salt, and then by anointing the same with Honey.

Of the Bladders in an Horse's mouth, which our old Farriers were wont to call the Gigs. The Italians call them Fronzelle.

Markham.

Some Horses will have bladders like paps growing in the inside of their lips, next unto their great teeth, which are much painful: the cure whereof is thus: Take a sharp pair of thers, and clip them away close to the gum, and then wash the fore place with running water, Allum and Honey boiled together, till it be whole.

Of the Lamps.

Markham.

The Lamps, called of the Italians, Lampaeus, proceedeth of the abundance of blood, resorting to the first furrow of the mouth. I mean that which is next unto the upper fore-teeth, causing the said furrow to swell so high as the Horses teeth, so as he cannot chew his meat, but is forced to let it fall out of his mouth. The remedy is to cut all the superfluous flesh away, with a crooked hot iron made of purpose, which every Smith can do.

Another of the Lamps.

Markham.

The Lamps is a thick spongy flesh, growing over a Horse upper teeth, hindering the conjuncti- on of his chaps, in such sort that he can hardly eat: the cure is as followeth. Cut all that naughty flesh away with a hot iron, and then rub the fore well with Salt, which the most ignorant Smith can do sufficiently.

Of the Canker in the mouth.

Blundeville.

This disease, as Martin faith, is a rawness of the mouth and tongue, which is full of blisters, so as he cannot eat his meat. Which proceeds of some unnatural heat coming from the stomach. For the cure whereof, take of Allum half a pound, of Honey a quarter of a pinte, of Columbine leaves, of Sage leaves, of each a handful; boil all these together in three pints of water, until a pinte be consumed, and wash the fore places therewith so as it may bleed, continuing so to do every day once until it be whole.
Of the Horse.

Another of the Canker in the mouth.

This disease proceedeth of divers causers, as of unnatural heat of the stomac, of foul feeding, or of the ruff or venom of some bit or snaffle, undiscreeitly lookt unto. The cure is thus: Wash the fore place with warm Vinegar, made thick with the powder of Allum, two or three dayes together, every time until it bleed, which will kill the poison and vigor of the exulcerated matter: then make this water; Take of running water a quart, of Allum four ounces, of Hony four or five spoon-fulls, of Woodbine leaves, of Sage leaves, and of Columbine leaves, of each half a handful, boil all these together till one half be consumed, then take it off, and every day with the water warmed, wash the fore until it be whole.

Of the heat in the mouth and lips.

Sometime the heat that cometh out of the stomac breedeth no Canker, but maketh the mouth hot, and causeth the Horse to forake his meat. The cure whereof, as Martin faith, is in this fort: First, turn up his upper lip, and jagge it lightly with a launcet, fo as it may bleed, and then wash both that and all his mouth and tongue with Vinegar and Salt.

Of the tongue being hurt with the bit or otherwise.

If the tongue be cut or hurt any manner of way, Martin faith, it is good first to wash it with Allum water, and then to take the leaves of black Bramble, and to chop them together small with a little Lar'd, that done, to binde it up in a little clout, making it round like a ball, then having dippt the round end in Hony, rub the tongue therewith: continuing fo to do once a day until it be whole.

Of the Barbles or paps underneath the tongue.

Here be two little paps, called of the Italian, Barbole, growing naturally (as I think) in every Horfes mouth underneath the tongue, in the neather jawes, which if they grow to any length, Russif faith, that they will hinder the Horfes feeding, and therefore he and Martin also would have them to be clipt away with a pair of sheers, and that done, the Horfes mouth to be washed with Vinegar and Salt.

Of the pain in the teeth and gums, of the Wolfs teeth, and Jaw teeth.

A Horse may have pain in his teeth, partly by defcent of humor from his head, down into his teeth and gums, which is to be perceived by the rankness and swelling of the gums, and partly having two extraordinary teeth, called the Wolfs teeth, which be two little teeth growing in the upper jawes, next unto the great grinding teeth, which are so painful to the Horse, as he cannot endure to chaw his meat, but is forced either to let it fall out of his mouth, or else to keep it still half chawed, whereby the Horse prospereth not, but waxeth lean and poor, and he will do the like also when his upper Jaw-teeth be so far grown as they overhang the neather Jaw-teeth, and therewith be so sharp, as in moving his jawes they cut and rave the insides of his cheeks, even as they were rafed with a knife. And first as touching the cure of the pain in the teeth, that cometh by means of some distillation: Vegetum faith, it is good to rub all the outside of his gums with fine chalk and strong Vinegar mingled together, or else after that you have washed the gums with Vinegar, to strew on them of Pomegranate plies. But me thinks that beides this, we were not amisse to hopp the temple veins, with the planter before mentioned, in the Chapter of weeping and waterish eyes. The cure of the Wolfs teeth, and of the Jaw-teeth, according to Martin, is in this fort: First cause the Horse head to be tyed up to some rafter or post, and his mouth to be opened with a cord, fo wide as you may easily see every part thereof; then take a round strong iron toole, half a yard long, and made at the one end in all points like unto the Carpenters gouge, wherewith he maketh his holes to be bored with a wimble or auger, and with your left hand set the edge of your tool at the foot of the Wolfs teeth, on the outside of the jaw, turning the hollow side of the tool downward, holding your hand readily, fo as the tool may not slip from the aforefaid tooch: then having a mallet in your right hand, strike upon the head of the tool one pretie blow, and thersewith you shall loose the tooth, and cause it to bend inward: then slaying the middle of your tool upon the Horfes neather jaw, wrench the tooth outward, with the inside or hollow side of the tool, and thrust it clean out of his head: that done, serve the other Wolfs tooth on the other side in like manner, and fill up the empty places with Salt finely brayed. But if the upper Jaw-teeth do also overhang the neather teeth, and fo cut the inside of his mouth as is aforefaid, then keeping his mouth still open, take your tool and mallet, and pare all those teeth shorter, running along them even from the first unto the laft, turning the hollow side of your tool towards the teeth, fo shall not the tool cut the inside of his cheeks, and the back or round side being turned towards the foresaid cheeks, and that done wash all his mouth with Vinegar and Salt, and let him go.
Why the diseases in the neck, withers, and back, be declared here before the diseases in the throat.

Having hitherto spoken of the diseases incident to a Horse's head, and to all the parts thereof, natural order requireth that we should now descend into the throat, as a part next adjacent to the mouth. But forasmuch as the diseases in the throat have not only affinity with the head, but also with the lungs and other inward parts, which are many times grieved by means of distillation coming from the head, and through the throat: I will speak of the diseases incident to the neck, withers, and back of a Horse, to the intent that when I come to talk of such diseases, as Rheumes and distillations do cause, I may discourse of them orderly without interruption.

Of the Crick in the neck.

Because a Crick is no other thing then a kind of Convulsion, and for that we have spoken sufficiently before of all kindes thereof in the Chapter of Convulsion, I purpose not here therefore to trouble you with many words, but only shew you Ruffinopinion, and also Martin experience therein. The Crick then called of the Italians, Senna, or Lutero according to Ruffin, and according to Martin is, when the Horse cannot turn his neck any manner of way, but hold it still forth right, insomuch as he cannot take his meat from the ground but by times, and that very slowly; Ruffin faith, it cometh by means of some great weight laid on the Horse's shoulders, or else be overmuch drying up of the fines of the neck. The cure whereof, according to Martin, is in this fort. Draw him with a hot iron from the root of the ear on both sides of the neck, through the midle of the same even down to the breast, a draw deep, so as both ends may meet upon the breast, then make a hole in his forehead, hard under the foretop, and thrust in a Coronet upward between the skin and the flesh a handful deep, then put in a Goose feather, doubled in the midle and anointed with Hogs grease to keep the hole open, to the intent the matter may run out the space of ten days. But every day during that time, the hole must be cleansed once, and the feather also cleansed and fresh anointed, and so put in again. And once a day let him stand upon the bit one hour or two, or be ridden two or three miles abroad, by such an one as will bear his head, and make him to bring it in. But if the Crick be such as the Horse cannot hold his neck straight, but clean awry, as I have seen divers my self: then I think it not good that the Horse be drawn with a hot iron on both sides of the neck, but only on the contrary side. As for example, if he bend his head toward the right side, then to draw him as is aforesaid only on the left side, and to use the rest of the cure as is above said, and if need be, you may splent him also with handfome flaves meet for the purpose to make his neck stand right.

Of Wens in the neck.

A Wen is a certain kineyll like a tumor of swelling, the inside whereof is hard like a gristle, and spongy like a skin full of wrets. Of Wens, some be great, and some be small. Again, some be very painful, and some not painful at all. The Physitians say, that they proceed of groffe and vicious humors; but Vegetine faith, that they chance to a Horse by taking cold, or by drinking of waters that be extreme cold. The cure according to Martin is thus. Take of Mallowes, Sage, and red Nettles, of each one handful, boil them in running waters, and put thereunto a little Butter and Honey, and when the Herbs be soft, take them out and all to bruife them, and put thereunto of oil of Bay two ounces, and two ounces of Hogs grease, and warm them together over the fire, mingling them well together; that done, platter it upon a piece of leather fo big as the Wen, and lay it to hot as the Horse may endure it, renewing it every day in such fort, the space of eight days, and if you perceive that it will come to no head, then lance it from the midle of the Wen downward, so deep as the matter in the bottom may be discovered and let out; that done, heal it up with this Salve, Take of Turpentine a quarter, and Walsh nine times in fair new water, then put thereunto the yolk of an Egg and a little English Saffron beaten into powder, and make a tent or rowle of Flax, and dip it in that ointment, and lay it unto the fore, renewing the same every day once until it be whole.

Of swelling in the neck after blood-letting.

This may come of the stem being rufly, and so causing the vein to rankle, or else by means of some cold wind striking suddenly into the hole. The cure according to Martin is thus: First anoint it with oil of Camouile warmed, and then lay upon it a little hay wet in cold water, and bind it about with a cloth, renewing it every day the space of five days, to see whether it will grow to a head, or else vanish away. If it grow to a head, then give it a slit with a lanceet, and open it with a Coronet that the matter may come out. Then heal it up, by tenting it with Flax dipped in Turpentine and Hogs grease melted together, dressing it so once a day untill it be whole.
How to staunch bleed.

If a Horse be let bleed when the sign is in the neck, the vein perhaps will not leave bleeding so soon as a man would have it, which if any such thing chance, then Rub your Faith, it is good to bind thereunto a little new Horse dung tempered with chalk and strong Vinegar, and not to remove it from thence the space of three days, or else to lay thereunto burnt silk, felt, or cloth, for all such things will staunch bleed.

Of the falling of the Crest.

This cometh for the most part of poverty, and specially when a fat Horse falleth away suddenly. The cure according to Martin is thus: Draw his Crest the depthnes a straw, on the contrary side with a hot iron, the edge of which iron, would be half an inch broad, and make your beginning and ending somewhat beyond the fall, so as the first draught may go all the way hard upon the edge of the mane, even underneath the roots of the same, beareing your hand right downward, into the neckward, then answere that with another draught beneath, and so far distant from the first as the fall is broad, compassing as it were all the fall, but still on the contrary side: and betwixt those two draughts right in the midst, draw a third draught, then with a button iron of an inch about, burn at each end a hole, and also in the spaces betwixt the draughts, make divers holes distant three fingers broad one from another: that done, to flake the fire anoint it every day once, for the space of nine days, with a feather dipt in fresh Butter moulten. Then take Malows and Sage, of each one handful, boil them well in running water, and wash the burning away untill it be raw flesh then dry it up with this powder: Take of Honey half a pinte, and so much unfeck't line as will make that Honey thick like paste, then hold it in a fire-pan over the fire untill it be baked so hard as it may be made in powder, and sprinkle that upon the fore places.

Of the falling of the Crest.

The falling of the Crest is occasioned most commonly through poverty; yet sometimes I have seen it chance thorough the ill proportion of the Crest, which being high, thick and heavy, the neck thin and weak underneath, is not able to support or sustain it up, however he be, there is remedy for both: if it proceed of poverty, first try by good keeping to get it up again, but if it will not rise, or that the original of the disease be in the ill fashion of the Crest, then let this be the cure, First with your hand raise up the Crest as you would have it stand, or rather more to that side from which it declineth, then take up the skin between your fingers on that side from which the Crest swarveith, and with a sharp knife cut away the breadth of very near an inch, and the length of four inches; which done, stitch up the skin together again with three or four stitches, and by means of stringing, weights, or other devices, keep the Crest perforce on that side, applying thereunto a plaster of Deers sweete and Turpentine, boiled together, till the fore be healed; and at the self same instant that by this manner of infliction you draw together and straiten the skin on that side, you shall in this sort give liberty to the other side, whereby the Crest may the easier attain to his place, Take a hot iron made in fashion of a knife, the edge being a quarter of an inch broad, and therewith from the upper part of his Crest unto the neather part of the same extending towards his shoulder, draw three lines in this forme || ||, and the same again dayly with fresh Butter, untill such time as it be perfectly whole. By this manner of cure, you may make any lame-ear'd Horse, to be as prick ear'd and comely, as any other Horse whatsoever.

Of the mangles of the Mane.

The mangles proceedeth of ranknes of blood, or of poverty, of lowliness, or else of rubbing where a mangy Horse hath rubbed, or of filthy dust lying in the mane for lack of good drefling. The signes be apparent by the itching and rubbing of the Horse, and the Scabs, fretting both flesh and skin. The cure, according to Martin, is thus: Take of fresh grease one pound, of Quicksilver half an ounce, of Brimstone one ounce, of Rape oil half a pinte, mingle them together, and ther them continually in a pot with a flisce, untill the Quicksilver be so wrought with the retl, as you shall perceive no Quicksilver therein. That done, take a blunt knife, or an old Horse-comb, and scratch all the mangy places therewith untill it be raw and bloody, and then anoint it with this ointment, in the sunshine it may be, to the intent the ointment may link in: or else hold before it in a fire-pan or some broad bar of iron made hot, to make the ointment to melt into the flesh. And if you see that within the space of three days after, with this once anointing, he leave not rubbing, then make in what place he rubbeth, and drefse that place again, and you shall see it heal quickly.
of the falling of the hair of the Mane.

T falleth for the most part, because it is eaten with little Wormes, fretting the roots in sundry which, according to Martin, you shall remedy in this fort: Anoint the mane and Creft with Sop, then make strong lie and wash all the mane and Creft withall, and that will kill the Wormes, within twice or thrice washing.

of griefs in the widders.

O a Horfes widders and back, do chance many griefs and storms, which, as Ruffin faith, do sometime proceed of inward causes, as of the corruption of humors; and sometime of outward causes, as through the galling and pinching of some naughty faddle, or by some heavy burthen laid on the Horfes back, or fuch like. And of such griefs, some be but superficial blisters, swellings, light-gals or bruises, and be easily cured. Some again do pierce to the very bone, and do dangerous, and especially if they be nigh the back bone; let us firft then fiew you the cure of the smaller griefs, and then of the greater.

Another of blisterings, or small swellings in the widders or back and galling.

W hensoever you fee any swelling rife, then Martin would have you to binde a little hot Horfe dung unto it, and that will affwage it. If not, then to prick it round about the swelling, either with a flem, or else with a fharp pointed knife not too deep, but fo as it may pierce the skin, and make the bloud to fiume forth. That done, take of Mallowes or elfe of Smallage, two or three handfulls, and boil them in running water until they be fo hot as pap; then drain the water from it, and bruife the herbs in a treen difh, putting thereunto a little Hogs greafe, or elfe Sallet oil, or Sheeps fefew, or any other frefh greafe, boil them and fur them together, not frying them hard, but fo as it may be fof and fipple, and then with a clowft lay it warm upon the fore, renewing it every day once until the swelling be gone. For this will either drive it away, or elfe bring it into his head, which lightly chanceh not, unleffe there be fome griffle or bone perforf.

Ruffin biddeth you, fo foon as you fee any swelling rife, to have the place with a rafor & lay thereunto this plaiter: Take a little Wheat flower and the white of an Egge beaten together, and fpread it on a little clowft, which being laid unto the swelling two or three days and not removed, will bring it to a head, and when you come to it to take it off, pull it away fo softly as you can poffible, and whereas you fee the corruption gathered together, then in the loweft place thereof, pierce it upward with a fharf iron fomewhat hot, that the corruption may come out, and anoint the fore place every day once with frefh Butter, or Hogs greafe; but if the skin be only chafed off without any swelling, then wafh the place with Water and Salt, or elfe with warm Wine, and fprinkle this powder thereon: Take of unleck's Lime beaten into fine powder, and mingle it with Hony until it be as thick as any paffe, and make rols or bals theof, and bake them in a fire-pan over the fire, untill they be fo hard as they may be brought to powder, for this is a very good powder to dry any galling or fore. The powder of Myrthe or burnt flift, felt, or cloth, or any old poft, is alfo good for fuch purpofes; but whensoever you ufe this powder of Lime and Hony, let the place be wafhed, as is aforefaid.

Of great swellings and inflammations in a Horfes widders.

If the swelling be very great, then the cure according to Martin is thus: Fift draw round about the swelling with a hot iron, and then croffe him with the fame iron in manner of aチェックer, then take a round hot iron having a fharf point, and thrust it into the swelling place on each fide up toward the point of the widders; to the intent the matter may fuisse downward at the hols. That done, tent both the hols with a tent dipt in Hogs greafe to kill the fire, and also anoint all the other burnt places therewith, continuing fo to do untill the swelling be affwaged, renewing it every day once, until the fiery matter be clean fallen away, and then tent him again with wafhed Turpentine mingled with yolks of Eggs and Saffron in fuch manner as hath been aforefaid, renewing the tent every day once untill it be whole.

If you fee that the swelling for all this go not away, then it is a figne of fome impofition within and therefore it fhall be neceffary to lance it, and to let out the corruption; then take of Hony half a pinte, of Verdigrife two ounces beaten to powder, and mingle it together with the Hony, then boil them in a pot untill it look red, then being lukewarm, make either a tent or plaiter, according as the wound fhall require, renewing the fame every day once, untill it be whole. But the fore may be fo vehement, that for lack of looking in time, it will pierce downward betwixt both shoulders toward the intrails, which is very dangerous: yea, and as Ruffin faith, mortal, because the corruption of the fore infecting the lungs and heart (which be the vital parts and chief prefervers of life) the body muft needs decay. And therefore Martin would have you to fill the hole with the Salve laft mentioned, and to thrust in afterward a piece of a}*{spung;
Of the Horse.

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lponge, as well to keep the hole open, as also to suck out the corruption, renewing it every day once until it be whole.

Of the horns or hard knobs growing under the Saddle side.

This is a dead skin like a piece of leather, called of the Italians, Cutane, that is to say, a horn, Blunderbuss.

for that it is hard under, and come by means of some shrart Saddle, pinching the Horse more on the one side then on the other; or else on both sides equally. The cure whereof, according to Martin, is in this sort; Anoint them with fresh Butter or Hog's grease, until they be mollified and made so soft as you may either cut them, or pull them away, and then wash the wound with mans bile, or with white Wine, and dry it with powder of unliquef't Lime mixt with Hony.

Of Wens or knobs growing about the Saddle skirts.

These great hard knobs growing most commonly betwixt two ribs, apparent to the eye, which by their hardness seem to come of some old bruise, and are called of the Italians, le Cut. The cure whereof, according to Martin, is thus; First mollify them, by anointing them with Hog's grease every day once or twice, the space of eight dayes, and if you perceive that it will come to no head with this, then lance it from the middle downward, that the matter may come out: then tent it with washed Turpentine, yolks of Eggs, and Saffron mingled together as is aforesaid, renewing the tent every day until it be whole.

Of the Navill gall.

The Navill gall, is a bruise on the back behind the Saddle right against the Navil of the Horse, and thereof taketh his name. It cometh either by splitting of the Saddle behind, or for lack of stuffing, or by means of the hinder buckle fretting that place, or else by some great weight laid on his back: you shall perceive it by the pulled up and spongy flesh, looking like rotten Lights or Lungs, and therefore is called of the Italians, Pulmon, or Pulmonials. The cure whereof, according to Martin, is thus; Cut it round about with a sharp knife or razor even to the bone, leaving no rotten flesh behind: that done, take the white of an Egg and Salt beaten together, and lay that phalafenwife to the fore upon a little towe, renewing it once a day the space of two dayes. Then take of Hony a quartern of a pinte, and of Verdigrease an ounce beat into powder, and boile them together in a pot, flirring it sill until it look red, and being lukewarm, make a plaister with cowe and clap it to the wound, waffhing and cleansing well the wound first with a little warm Vinegar or white Wine, continuing it once a day until it begin to heal and skin, then dry it up, by sprinkling thereon this powder following; Take of Hony a quartern, and as much of unliquef't Lime as will thicken the Hony like unto pate, and in a fire pan over the fire, flir it sill until it be hard baked, so as it may be beaten into powder, but before you throw on the powder, wash the wound first with warm Vinegar, continuing so to do until it be perfectly skinned and whole.

Of the foaying of the back.

This is called of the Italians, Malefato, and according to Raffian and Martin's opinions, cometh either by some great strain, or else by heavy burthen: you shall perceive it by the reeling and rolling of the Horfes hinder parts in his going, which will falter many times, and sway sometimes backward, and sometime fiddling, and be ready to fall even to the ground, and the Horse being laid, is scant able to get up. The cure, according to Martin, is thus; Cover his back with a Sheep's skin, coming hot from the Sheeps back, laying the fleshie side next unto his back, and lay a houling cloth upon the same to keep his back as warm as may be, and so let it continue until it begin to smell; then take the old skin away, and lay a new unto it, continuing so to do the space of three weeks. And if he amend not with this, then draw his back with a hot iron out on both sides of the ridge of his back, from the pitch of the Buttocks, unto a handful within the Saddle, and let every line be an inch distant one from another, and then again overthwart checkerwise, but let not such strokes be over deep, and so burned as every one look yellow, then lay on this charge following; Take Pitch one pound, of Rozen half a pound, of Bole Armony half a pound made in powder, and half a pinte of Tar, and boil all these together in a pot, flirring it until every thing be molten and thoroughly mingled together, then being lukewarm, dawb all the burning therewith very thick, and thereupon clap as many flocks of the Horfes colour, as you can make to abide on, and remove it not before it fall away it fell, and if it be in Summer, you may turn him to graffe.
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Of the weakness in the back.

It doth appear by Laurentius Russius, that there is another kind of weaknesses in the back, called in Italian, le gatte o mortecucura del reuo, that is to say, the fretting or biting of the reins, which as the said Russius faith, proceedeth of abundance of humor resorting to that place, whereby all the hinder parts of the Horsie do lose their feeling and strength, and the Horsie falleth down on the ground; yea, and such humor resorting to the heart, do suffocate the same, and in two or three hours do cause the Horsie to die. The remedy, according to Russius, is in this fort; Let him blide abundantly in the neck, and draw his back with a hot iron, in such fort as is declared in the last Chapter. He faith alio it is good to make him swim thorough a river, and to rowel him on his hanches nigh the huckle bones; and to make the hair to grow again, it is good, as he faith, to anoint the place with Hogs greate, and three leaved graffe stamped together.

Of Hidebound.

Hidebound, is when the skin cleaveth so fast to the Horsies back, that a man cannot pull it from the fifth with his hand, which Russius calleth Corroges; it cometh for the most part of poverty, or else when the Horsie after some great heat hath been suffered to stand long in the rain or wet weather, for that will cause the skin to shrink, and to cling to his ribs. It is known by the leanes of the Horsie, and gantnest of his belly, and by full flocking of the skin unto the ribs when you pull it at with your hand. The cure, according to Maritius, is thus: Let him bloud on both sides the belly in the flank veins betwixt the flank and the girding places: that done, give him this drink: Take a quart of white Wine, or else of good Ale, and put thereunto three ounces of good Saller Oil, or Cumin one ounce, or Annis two ounces, ofLicoras two ounces, beat all into fine powder, and give it him lukewarm with a horn. And when he hath drank, let one flanding at his huckle bone, rub him hard with his hand along the back, and overthwart the ribs, the space of half an hour: that done, let him in a warm stables, and let him stand in litter up to the belly, and cover all his back and ribs with a sack firft, throely soaked in a tub of cold water, and then well and hard wrung, and over that cast another cloth, and gird it fast with a surcingle, fluffing him well about the back with freth straw, continuing thus to do every day once the space of a week, during which time he will give him no cold water, but lukewarm, and put therein a little ground Mault. The wet sack will cause the back to gather heat it self, and the skin to loosen from the fifth, and if you will beftow more cote, you may anoint all his body with Wine and oil mingled together, according to the opinion of the old writers, which no doubt is a very comfortable thing, and must needs supple the skin, and loosen it from the fifth.

Of the disease in the thorae and lungs, and why the griefs of the shoulders and hips be not mentioned before amongst the griefs of the withers and back.

Some perhaps would look here, that for so much as I have declared the diseases of the neck, withers and back, that I should also follow on now with the griefs of the shoulders and hips. But fith that such griefs for the most part doe caufe a Horsie to halfe, and that it requireth some skill to know when a Horsie halteth, whether the fault be in his withers, hip, leg, joint, or foot, I think it is not good to separate those parts of one another, specially fith nature hath joined them together, that is to say, the withers to the forelegs, and the hips to the hinder legs. And therefore according to nature order, I will treat of them in their proper place; that is to say, after that I have shewed all the diseases that be in the inward Horsies body, not only above the midriff, as the diseases of the throat, lungs, breast and heart, but also under the midriff, as those of the liver, lungs, and guts, and of all the rest. And first, as touching the diseases of the throat, the Glandures, and Strangullion, to all Horsies is most common.

Of the Glanders and Strangullion, so called according to the Italian name Strangullion.

Most Farriars do take the Glandures and Strangullion to be all one disease, but it is not so, for the Glandures is that which the Physitians call Tosyle, and the Strangullion is that which they call in Latin, Angina, in Greek, Gynance, and we commonly call it in English the Squinacy, or Quinsie. Tosyle, is interpreted by them to be the inflammations of the kirnels called in Latin, Glandes, the Italian, Glandule, which lie on both sides of the throat, underneath the root of the tongue, nigh unto the swallowing place; of which word Glandes, or Gondule, I think we borrow this name Glandure; for when the Horsie is troubled with this disease, he hath great kirnels underneath his jaws, eafe to be seen or felt, paining him so, as he cannot safely swallow down his meat, which cometh first of cold distillations out of the head: But if such kirnels be not inflamed, they will perhaps go away of themselves, or else by laying a little hot horse-dung and straw unto them, the warmth thereof will dissolve them, and make them to vanish away.
But if they be inflamed, they will not go away but encrease and wax greater and greater, and be more painful every day then other, and cause the Horse to eat continually filthy matter at the Nose. The cure whereof, according to Martin, is this: First rife the kernels with this-plaister: Take of bran two handfuls, or as much as will thicken a quart of Wine or Ale: then put thereunto half a pound of Hogs grease, and boil them together, and lay it hot to the fore with a cloth, renewing it every day until it be ready to break, then lance it, and let out all the matter, and tent it with a tent of Flax dipt in this false; Take of Turpentine of Hogs grease, of each like quantity; and a little wax, and melt them together, and renew the tent every day until it be whole. Laetentius Roffius faith, that this diseaſe is very common to Colts, because in them both abound fluable moiturie, apt to be dissolved with every little heat, and to turn to putrifacions: and therefore if the Horse be not yeong, he would have you first to let him bleed in the neck vein, and then to lay unto the face a ripeing plaister, made of Mallowes, Linfeeds, Rew, Wormwood, ground Ivy, Oyl of Bayes, and Dailthea, and to anoint his throat alfo, and all the fore place with freth Butter: and the fore being ripe, to lance it, or else to rowel it, that the matter may come forth. But if the kernels will not decrease, then pull them away by the roots, and dry up the Ucerous place with an omtent made of unſleck. Limne, Pepper, Brimthone, Nitrum, and Oyl Olive. It shall be alfo good to purge his head by perfuming him every day once, in such fort as hath been before declared. And let the Horse be kept warm about the head, and hand in a warm bed, and let him drink no cold water: but if you see that after you have taken away the kernels, the Horſe doth not for all that leave calling filaſy matter at the Nose, then it is to be feared that he hath some fpice of the Mourning of the Chine, for both difeafes proceed of one caulfe, and therefore I think good to faek of it here presently. But firſt I will let down a drink which I have feen proved upon a Horſe that I thought could never have been recovered of the fame disſeaſe, and yet it did recover him in very short space, fo as he travelled immediately after many miles, without the help of any other medicin.

A drink for the Strangullion or Glanders.

Take of warm milk as it cometh from the Cow a quart, or in ſtead thereof a quart of new Beer Blanched, or Ale warmed, and put thereunto of moutien Butter the quantity of an Egge: and then take one head of Garlick, firſt clean pilled and then stamped small, which you must put into the milk or drink being made lukewarm, and give it the Horſe with a horn, and immediately after the drink be given, catch hold of his tongue with your hand, and having broken two raw Eggges, either upon his fortemeeth, or against the ſtaffe wherewith his head is holden up, call those broken Eggges, thels and all into his throat, making him to ſwallow down the ſame; that done, ride him up and down till he begin to sweat, then let him up covered warm with an old coverlet and ſhay, not suffering him to eat or drink for the ſpace of two or three hours after, and let his drink for the ſpace of two or three dayes be ſomeſwhat warm, whereunto it is good to put a handful or two of Bran or ground Malt, and in giving the said drink, it ſhall not be amifsie to powre some thereof into either Noſtril.

Of the Mourning of the Chine.

This word, Mourning of the Chine, is a corrupt name borrowed of the French tongue, wherein it is called Moſte defoblé, that is to fay, the death of the back. Because many do hold this opinion, that this diseaſe doth confume the marrow of the back; for remedy whereof, they use strange kinds of cure. For some taking it to be a rhuema, go about to ſtop it, by laying affiftive, or binding charges to the ſpace of the ſkin. Some again do twine out the pithe of the back with a long wire throught up into the Horſes head, and do into his neck and back, with what reaſon I know not. Well, I know that few Horſes do recover that have this diseaſe. Some again think that the Lungs of the Horſe be rotten, and that the Horſe doth call them out at his Noſte. But Martin faith, that he hath cut up divers Horſes which have been judged to have dyed of the mourning of the Chine, but he could finde never either Back or Lungs to be perifhed, but only the Liver, and most commonly that side of the Liver which anſwereth the Noſtril whereat he calleth, whereof we will talk in his proper place, when we come to speake of the diseaſes in the Liver. The Italians do call this diseaſe Glimorra, the old Authors do call it the moift malady, whereof Thrommeſius maketh two differences. For in the one the matter which he doth call at the Noſte is white, and doth not ſmell at all: and in the other which he calleth is filthy and finking corruption. They proceed both of cold humors congeated in the head, but more abounding in the one then in the other: by reaſon perhaps that the Horſe was not cured in time: for of cold firſt cometh the Pote, and the Cough, then the Glanders, and laſt of all the Mourning of the Chine. When the Horſe calleth matter at the Noſte that is not finking, he may easily be cured by fuch remedies as have been before declared in the Chapter of the Pote: but if the matter be very ſmelly and finking, then it is very hard to cure. Notwithstanding it shall not grieve me to write unto you here, the experience of Thrommeſius, and of Laetentius Roffius. Thrommeſius cure is thus; Take of Water and Hony, Ge called
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called of the Phystians *Hydromel*, a quart, and put thereunto three ounces of Oyl, and powre that into his Nostrils every morning the space of three days; and if that do not profit him, then let him drink every day, or once in two days, a quart of old Wine, mingled with some of the medicine, or rather the precious meat, called of the old writers *Tetrapharmacum*, and that will restore him to his former elate. *Laurentius Ruffius* faith, that of all disases there is none more perillous, nor more to be suspect, then the rheume which cometh of cold, for Horfes have large Conduites, and are full of moisture, and therefore if cold once enter, it findeth matter enough to work on, to breed continual distillation as well outwardly at the Nofe, as inwardly, descending down to the vital part in such forts, as it doth not suffoicate the fame.

The signes, according to the said *Ruffius*, be these: the Horie doth caft matter continually at the Nofe, sometime thin, and sometime thick. his Nostrils, Ears, and all his outward parts, will be cold to the feeling, his eyes, head, and all his body heavy, and he will cough, and have small appetite to his meat, and leele to his drink, and sometime he will tremble and shakke. His cure is in this fort; Purge his head, partly by perfuming him, & partly by making him to neeze in such fort as hath been before taught in the Chapter of the Pofe, which wayes of perfuming and purging his head as they be good, so doth *Ruffius* praise these two here following to be most excellent; the first is this: Take of the falks of *Vitis alba*, otherwife called *Brunie*, or wilde Vine, two or three good handfuls, and being bruised put them into a linen bag, and fallen the bag to the Horfes head, so as he may receive the fents up into his Nostrils, without touching the heare with his mouth, and this will cause the humors to run down abundantly. The second medicine; Take of Eurfobium beaten into fine powder, three ounces, of the juice of Betes one pound, of Swines blood halfe a pound, boy all these together until they be throughly mingled together, and liquid like an ointment, and then take it from the fire, and put thereunto one ounce more of Eurfobium, and mingle them again throughly together, and preserve the same in a box, to use at needful times in this fort; Make two full long rolls or tampins of linen, or such like stuff, sharp pointed like Sugar loaves, which tampins are called of the Phystians in *Latin*, *Riphi*, and being anointed with the ointment aforesaid, thrust them up into the Horfes Nostrils, and let them abide thereas in a pretty while, then pull them out, and you shall fee such abundance of matter come forth at his Nofe, as is marvellous to behold. *Ruffius* also praiseth very much this medicine here following.

Take as much of the middle bark of an Elder tree, growing on the water side, as will fill a new earthen pot of a mean size, putting thereunto as much clear water as a pot will hold, and let it boil until one halfe be consumed, and then to be filled up again with fresh water, continuing fo to do three three times one after another, and at the last time that the one halfe is consumed, take it from the fire, and draine it through a linnen cloth. Then take two parts of that decoction, and one part of Hogs greafe, or Butter, and being warmd again together, give the Horfe to drink thereof one horneful, and powre another horneful into his Nostrils. and caife them; and whensoever you give him this medicine, let the Horfe be empty and fasting, and keep him without meat alfo two or three hours after, for this is a very good drink for any ficknes that cometh of cold. Moreover, open the skin of his forehead, and of his temples, and alfo of his tail with a sharp hot iron, that the corrup humors may issue outward. That done, take hot brucics, or elle a pan of freth burning coles, and hold it nigh unto his belly and flanks, to the intent that they may be throughly warmd, and being so warmd, anoint them all over with Oyl-de-bay, or Dialthea, to defend his body from the cold, and let his head be well covered, and all his belly kept warm. Yea, and it were good to bathe his head some time, as *Ruffius* faith, with a bath made of Rew, Wormwood, Sage, Juniper, Bay leaves, and Hyfop. And let his drink be warm water mingled with Wheat meal; yea, and to make it the more comfortable, it were good, as *Ruffius* faith, to put thereunto some Cinnamon, Ginger, Galangale, and such hot pieces. And his meat in Winter season would be no other but loddan Corn, or warm Mathes, made of ground Malt and Wheat bran: in Summer season, if he went to graffe, I think it would do him most good, so that he go in a dry warm ground, for by feeding alwaies downward, he shall purge his head the better, as *Ruffius* faith. Thus much of the Glanders, and mourning of the Chine. Now we will speake somewhat of the Strangulion, according to the opinion of the Authors, though not to the satisfaction perhaps of our English Parriars.

Of the Strangulion or Squainy.

The Strangulion, called of the *Latin*, *Angina*, according to the Phystians, is an inflammotion of the inward parts of the throat, and as I said before, is called of the *Greeks*, *Cynechr*, which is as much to say in English as Strangling, whereof this name Strangulion as I think is derived for this disease doth strangle every Man or Beast, and therefore is termed amongst the perillous and sharp disases, called of the *Latin*, *Morbi acuti*; of which strangling, the Phystians in Mans body make four differences; The first and worst is, when no part within the mouth nor without, appeareth manifeftly to be inflamed, and yet the patient is in great peril of strangling. The second is, when the inward parts of the throat only be inflamed. The third is, when the inward and outward parts of the throat be both inflamed. The fourth is, when the muscles of the neck
Of the Horse.

neck are inflamed, or the inward joints thereof so loosened, as they straie ten thereby both the throat, or wealnd, or wind-pipe; for short breath is incident to all the four kinds before rected, and they proceed all of one cause; that is to say, of some cholerick or bloody fluxion, which comes out of the branches of the throat venes into those parts, and there breedeth some hot inflammation. But now to prove that a Horfe is subject to this disease, you shall hear what Abftrius Hieroles, Vegiutus and others do say. Abftrius writing to his friend a certain Farriar or Horfe-leach, called Afiorius, spekeyth in this manner. When a Horfe hath the strangollion it quickly killeth him; the signes whereof be these: His temples shall be hollow, his tongue will swell and hang out of his mouth, his eyes alfo will be swollen, and the paffage of his throat flopt so as he can neither eat nor drink. All these signes be also confirmed by his rocolis. Moreover, Vegiutus rendereth the caufe of this disease, affirming that it proceedeth of abundance of subtle bloud, which after long travele will inflame the inward or outward muscles of the throat or weand, or such affluence of bloud may come, by use of hot meats after great travele, being fo alterative, as they caufe those parts to swell in such fort, as the Horfe can neither eat nor drink nor draw his breath. The cure, according to Vegiutus, is in this fort: First bathe his mouth and tongue in hot water, and then anoint it with the gulf of a Bull; that done, give him this drink, Take of old Oyl two pound, of old Wine a quart, nine Figs, and nine Leeks heads well flamped and brayed together. And after you have boiled thefe a while before you strain them, put thereunto a little Nitre, Alexandrinum, and give him a quart of this every morning and evening. Abftrius and Hieroles would have you to let him bloud in the palate of his mouth, and alfo to pouwe Wine and Oyl into his Nostrils, and alfo give him to drink this decoction of Figs and Nitre in foddon together, or elfe to anoint his throat within with Nitre, Oil, and Hony, or elfe with Hony and Hogs dung mingled together, which differeth not much from Galen his medicine, to be given unto man. For he faith, that Hony mingled with the powder of Hogs dung that is white, and swallowed down, doth remedy the Squinany presently. Abftrius alfo praieth the ointment made of Bddellium, and when the inflamation beginneth somewhat to decrease, he faith it is good to purge the Horfe, by giving him wilde Cucumber and Nitre to drink. Let his meate be graffe if it may be gotten, or elfe wet hay, and sprinkled with Nitre. Let his drink alfo be lukewarm water, with some Barley meal in it.

Of the Cough.

Of Coughs, some be outward, and some be inward. Thofe be outward which do come of outward causes, as by eating a feether, or by sitting duluy or sharp straw, and fuch like things: which tickling his throat, caufeth him to cough: you fhall perceive it by waggynge and wryng his head in his coughing, and by flamping fometyme with his foot, labouring to get out the thing that grieveth him, and cannot. The cure, according to Martin, is thus: Take a Willow wand, rold throughout with a fine linnen clothe, and then anoint it all over with Hony, and thrust it down his throat, drawing your hand to and fro, to the intent it may either drive down the thing that grieveth him, or elfe bring it up, and do this twice or thrice, anointing every time the flick with fresh Hony.

Of the inward and wet Cough.

Of inward Coughs, some be wet, and some be dry. The wet Cough is that cometh of cold, taken after some great heat given to the Horfe, disloving humour, which being afterward congealed, doth caufe obstruction and toppng in the lungs. And I call it the wet Cough, because the Horfe in his coughing will void moist matter at his mouth after that it is once broken. The signes be these: The Horfe will be heavie, and his eyes will run with water, and he will forfake his meat; and when he cougheth, he thrufleth out his head, and reacheth with great pain at the firit, as though he had a dry Cough, untilt the fleam be broken, and then he will cough more hollow, which is a signe of amendment. And therefore, according to Martin's experience, to the intent the fleam may break the fooner, it fhall be neceffary to keep him warm, by clothing him with a double cloth, and by littering him up to the belly with fresh straw; and then to give him this drink; Take of Barley one peck, and bowly in two or three gallons of fair water, unfill the Barley begin to burft, and bowly therewith of bruifed Licoros, of Antifeeds or Raifins, of each one pound; then flain it, and to that liquor put of Hony a pinte, and a quartern of Sugareandy, and keep it clofe in a pot to serve the Horfe therewith four or five mornings, and call not away the foddon Barley with the refl of the brayings, but make it hot every day to perfume the Horfe withal, being put in a bag and tied to his head, and if the Horfe will eat of it, it fhall do him the more good. And this perfuming in Winter feldon would be used about ten of the clock in the morning, when the Sun is of fome hight, to the intent the Horfe may be walked abroad, if the Sun fhine, to exercise him moderately. And until his Cough wear away, fall not to give him warm water, with a little ground Mulie. And as his Cough breaketh more and more, fo let his water everyday be leffe warmed then other.
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Of the dry Cough.

His feemeth to come of some grosse and tough humor cleaving hard to the hollow places of the Lungs which stoppeth the winde-pipes, so as the Horfe cannot easilie draw his breath, and if it continue, he will either grow to the Purtlick, or else break his winde altogether. The signs be these: He will cough both often, drily, and also vehemently, without voiding at the nose or mouth. The cure, according to Martin, is in this fort: Take a clofe earthen pot, and put therein three pinte of strong Vinegar, and four Eggs, thels and all unbroken, and four Garlick heads clean pilled and bruised, and let the pot be very clofe covered in some warm dunghill, and there let it stand a whole night; and the next morning with your hand take out the Eggs, which will be so soft as filk, and lay them by untill you have strained the Garlick and Vinegar through a fair cloth, then put to that liquor a quartern of Honie, and half a quartern of Sugar-candy, and two ounces of Licoras, and two ounces of Anife seeds, beaten all into fine powder. And then the Horfe having fasted all the night before, in the morning betwixt seven and eight of the clock, open his mouth with a cord, and whistle therein one of the Eggs, so as he may swallow it down, and then immediately pouer in after a hornefull of the aforefaid drink, being first made lukewarm, and eat in another Egg with another hornful of drink, and so continue to do, untill he hath swallowed up all the Eggs, and drunk up all the drink; and then bridle him, and cover him with warmer clothes then he had before, and bring him into the stable, and there let him stand on the bit, at the bare rack, well littered up to the belly, the space of two hours. Then unbitt him, and if it be in Winter, offer him a handful of Wheaten straw; if in Summer, give him grasse, and let him eat no hay unlesse it be very well dusted and sprinkled with water, and give him not much thereof. And therefore you shall need to give him the more provender, which also must be well cleaned of all filth and duff, and give him no water the space of nine days. And if you perceive that the Cough doth not wear away, then if it be in Winter, purge him with these pilis; Take of Lard two pound laid in water two hours, then take nothing but the clean fat thereof, and flamp it in a morter, and thereto put of Licoras, of Anife seeds, of TENegreek, of each beaten into powder three ounces, of Aloes in powder two ounces, of Agarick one ounce: Knead thefe together like paste, and make thereof fix bals as big as an Egge. Then the Horfe having fallen over night, give him the next morning these pilis one after another, anointed with Honie and Oyl mingled together in a platter; and to the intent he may swallow them down whether he will or not, when you have opened his mouth, catch hold of his tongue, and hold it fast while you whirle in one of the pilis; that done, thrust it into his throat with a rolling-pin, and then let his tongue go untill he hath swallowed it down; then give him in like manner all the rest of the pilis, and let him stand on the bit warm clothed and littered, the space of three hours at the least, and after that give him a little wet hay, and warm water with a little ground mault in it to drink, and let him drink no other but warm water the space of a week. And now and then in a fair sunny day, it shall be good to troste him now and then to breath him.

Of the Frettizd, broken and rotten Lungs.

This proceedeth, as Albesius and THEOMENSIUS faith, either of an extreme Cough, or of vehement running, or leaping, or of over greedy drinking after great thirst, for the Lungs be infected in a very thin film or skin, and therefore easie to be broken, which if it be not cured in time, doth grow to Apototamation, and to corruption, oppressing all the Lungs, which of old Authors is called Ymomia, and Suppuratio. But THEOMENSIUS faith, that broken Lungs, and rotten Lungs, be two divers diseases, and have divers signes, and divers cures. The signes of broken Lungs be these: The Horfe draweth his wind short, and by little at once, he will turn his head toward the place grazed, and groaneth in his breathing, he is afraid to cough, and yet cougheith as though he had eaten small bones. The same THEOMENSIUS healed a friends Horfe of his, whose Lungs were fretizd, or rather broken as he faith, by continual eating of Salt, with this manner of cure here following: Let the Horfe have quiet and reft, and then let him blow in the hanches, where the veins appear most: and give him to drink the space of seven days, Barley, or rather Oates fedden in Goats milk; or if you can get no milk, boil it in water, and put therein some thicke collops of Lard and of Deers feathers, and let him drink that: and let his common drink in Winter seafon be the decoction of Wheat meal; and in the Summer time, the decoction of Barley; and this as he faith will bind his Lungs again together. VEGASKIN utterly disalloweth letting of bloud in any such disease as this is; and all manner of sharp medicines, for fear of provoking the Cough, by means whereof the broken pieces can never heal perfectly. And therefore neither his medicines nor meaz would be harsh, but smooth, gentle and cooling. The best medicine that may be given him at all times is; Take of TENegreek, and of Linseed, of each half a pound, of Gum dragant, of Malice, of Myrrhe, of Sugar, of Fitch flower, of each one ounce. Let all these things be beaten into fine powder, and then infuted one whole night in a sufficent quantity of warm water, and the next day give him a quart of this lake-water, putting thereunto two or three ounces of Oyl of Rofes, continuing so to do many days together, and if the disease be new, this will heal him; yea, and it will easie him very much, although the disease be old, which is thought uncurable. And in Winter seafon fo long as he langeth in the
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Of putrid and rotten lungs.

The signs to know whether a Horse's lungs be putrid or rotten, according to Theophrastus are these: The Horse will eat and drink greedily then he was wont to do, he shall be oftener vexed with a Cough, and in coughing he will cast little lumps of matter out of his mouth. The cure whereof, according to Theophrastus, is thus: Give him to drink every morning, the space of seven days, the juice of Purslain mingled with Oil of Roses, and add thereunto a little Tragananthum that hath been layed before in steep in Goats milk, or else in Barley or Oaten milk, strained out of the Corn. When the Apotheke is broken, then a very strong vile and evil favour will come out of his Nostrils; for remedy whereof, it shall be good to give him the space of seven days this drink here following: Take of the root called Cclus tus two ounces, and of Catia or else of Cinnamon three ounces into fine powder, and a few Raisins, and give it him to drink with wine. But Vegetius would have him to be cured in this fort, and with lefse cost: I assure you; Take of Frankincense and Arisftoloch, of each two ounces, beaten into fine powder, and give him that with wine; or else take of unburnt Brimstone four ounces, and of Arisftoloch one ounce and a half beaten into powder, and give him that with wine. And he would have you also to draw his breath with a hot iron, to the intent the humors may issue forth outwardly.

Of shortness of breath.

A Horse may have shortness of breath, by halfly running after drinking, or upon a full stomach, or by the defcending of humors unto his throat or lungs, after some extreme heat dissolving the said humors, which so long as there is nothing broken, may in the beginning be easly holpen. The signs be these: The Horse will continually pant, and fetch his breath short, which will come very hot at once, and in his breathing he will quife in the nose, and his flanks will bear thick and some cannot fetch their breath unless they hold their necks right out and straight, which disease is called of the old writers by the Greek name Orthopnea. The cure; Let him bloud in the neck, and give him this drink; Take of Wine and Oil, of each a pinte, of Frankincense half an ounce; and of the juice of Horehound half a pinte. It is good also to powre into his throat Hony, Butter and Hogs greafe mouteen together, and made luke warm. Tibrina faith, it is good to give him whole Eggs, silks and all, steeped and made soft in Vinegar; that is to say, the firft day three, the second day five, and the third day seven; and to powre Wine and Oile into his Nostrils. I for my part would take nothing but Anis seeds, Licoras and Sugar-candy, beaten all into fine powder, give him that to drink, with Wine and Oile mingled together.

Of the Purfick.

This is a shortness of breath, and the Horse that is so diseased is called of the Italians, Cebali pulvisor, or Bils, which I think is derived of the Latin word Vulfus, by changing V. into B. and I think differeth not much from him that hath broken lungs, called of Vegetius and other old writers Vulfus, for such shortness of breath comes either of the same cause, or else much like, as abundance of groffe humors, cleaving hard to the hollow places of the Lungs, and stopping the windpipes. And the winde being kept in, doth refort downward, as Rulfus faith, into the Horses guts, and so caufeth his flanks to beat continually without order; that is to say, more swiftly and higher up to the back, than the flanks of any Horse that is found of winde. And if the diseafe be old, it is seldom or never cured; and though I finde many medicines, prescribed by divers Authors, few or none do content me, unlefs it be that of Vegetius, recited before in the Chapter of broken Lungs. And if that prevalent he, then I think it were not amiss according to Rulfus to purge him with this drink here following; Take of Maiden hair, of Fenugreek, or Licoras, of Peper, of Butter Almonds, of Baratrach, of each two ounces, Of Nettle seed, and of Arisftoloch, of each three ounces, boil them all together in a sufficient quantity of water, and in that decoction dissolve half an ounce of Aparick, and two ounces of Cocloquintida, together with two pound of Hony, and give him of this a pinte or a quarter at divers times; and if it be too thick, make it thinner, by putting thereunto water wherein Licoras hath been sodden: and if need be, you may also draw both his flanks croffe-wise with a hot iron, to relat the beating of them, and also slit his Nostrils, to give him more air. And if it be in Summer, turn him to graffe; if in Winter, let him be kept warm, and give him now and then a little sodden wheaten Rulfus would have it to be given him three dayes together, and also new sweet wine to drink, or else other good wine mingled with Licoras water.

Of the Spleen.

The signs to know whether a Horse's spleen be putrid or rotten, according to Theophrastus are these: The Horse will eat and drink greedily then he was wont to do, he shall be oftener vexed with a Cough, and in coughing he will cast little lumps of matter out of his mouth. The cure whereof, according to Theophrastus, is thus: Give him to drink every morning, the space of seven days, the juice of Purslain mingled with Oil of Roses, and add thereunto a little Tragananthum that hath been layed before in steep in Goats milk, or else in Barley or Oaten milk, strained out of the Corn. When the Apotheke is broken, then a very strong vile and evil favour will come out of his Nostrils; for remedy whereof, it shall be good to give him the space of seven days this drink here following: Take of the root called Cclus tus two ounces, and of Catia or else of Cinnamon three ounces into fine powder, and a few Raisins, and give it him to drink with wine. But Vegetius would have him to be cured in this fort, and with lefse cost: I assure you; Take of Frankincense and Arisftoloch, of each two ounces, beaten into fine powder, and give him that with wine; or else take of unburnt Brimstone four ounces, and of Arisftoloch one ounce and a half beaten into powder, and give him that with wine. And he would have you also to draw his breath with a hot iron, to the intent the humors may issue forth outwardly.
Consumption is no other thing but an exileration of the lungs, proceeding of some frett ing or gnawing humor, descending out of the head into the lungs. And I take it to be that distemper which the old Writers are wont to call the dry Malady; which perhaps some would rather interpret to be the mourning of the chine, with whom I intend not to strive. But thus much I mutt needs say, that every Horse having the mourning of the Chine, or draining of the nose, in the dry Malady it is contrary. For all the Authors that write thereof affirm, that the Horse avoideth nothing at the nose. And the signs to know the dry Malady, according to their doctrine, be these: His flesh doth clean consume away, his belly is gaunt, and the skin thereof doth shrivel, or rather shrunk up, as if you strike on him with your hand it will sound like a Taber, and he will be hollow back, and forfeake his meat, and though he eateth it, (as Abytius faith) yet he doth not digest it, nor prospereth not withal, he would cough and cannot but hickup, as though he had eaten small bones. And this distemper is judged of all the Authors to be incurable. Notwithstanding they say, that it is good to purge his head with such perfumes as have been shewed you before in the Chapter of the Glanders, and also to give him alwayes Coleworts, chopt small with his provender. Some would have him to drink the warm blood of sucking Pigs new flain; and some the juice of Leeks, with Oyl and Wine mingled together. Others praise Wine and Frankincense; some, Oyl and Rue; some would have his body to be purged and fet to grafts.

Of the Consumption of the Flesh, and how to make a lean Horse fat.

Marinus faith, that if a Horse take a great cold after a heat, it will cause his flesh to wilt, and his skin to wax hard and dry, and to cleave fast to his fides, and if he shall have no appetite unto his meat, and the fillets of his back will fall away, and all the flesh of his buttocks, and of his shoulders will be consumed. The cure whereof is thus: Take two Sheep's heads entire, boyl them in three gallons of Ale, or fair running waters, until the flesh be consumed from the bones, that done, strain it through a fine cloth, and then put thereunto of Sugar one pound, of Cinamon two ounces, of Conserve of Roses, of Barberryes, of Cherries, of each two ounces: and mingle them together, and give the Horse every day in the morning a quart thereof lukewarm, until all be spent: and after every time he drinketh, let him be walked up and down in the Stable, or else abroad if the weather be warm, and not windy, and let him neither eat nor drink in two hours after, and let him drink no cold water, but lukewarm, the space of fifteen days, and let him be fed by little and little, with such meat as the Horse hath most appetite unto. But if the Horse be not sound and tender, and fo wax lean without any apparent grief or distemper, then the old Writers would have him to be fed now and then with parched Wheat, and also to drink Wine with his water, and eat continually Wheat-bran mingled with his provender, until he wax strong; and he must be often drest and trimmed, and ly fay, without the which things his meat will do him but little good. And his meat must be fine and clean, and given often and by little at once. Ruflius faith, that if a Horse eating his meat with good appetite, doth not for all that prosper, but is full lean: then it is good to give him Sage, Savin, Bay-berries, Earth-nuts, and Boare's-grasse, to drink with Wine: or to give him the intrails of a Barbel or Tench, with white Wine. He faith also that sodden Beans mingled with Bran and Salt, will make a lean Horse fay in very short space.

Of grief in the Breast.

Blundevile.

Augustius Ruflius writeth of a distemper called in Italian, Gravezza di petto, which hath not been in experience amongst our Farriers, that I can learn. It comes, as Ruflius faith, of the superfluity of blood, or other humors dissolved by some extreme heat, and returning down the breast, paining the Horse, so as he cannot well go. The cure whereof according to Ruflius is thus: Let him bleed on both sides of the breast in the accustomed veins, and rowel him under the breast, and twice a day turn the rowels with your hand, to move the humors that they may issue forth, and let him go forrowed the space of fifteen days.

Of the pain in the Heart called Anticor, that is to say, contrary to the Heart.

His proceedeth of abundance of ranck blood bred with good feeding and over much rest, which blood reftoring to the inward parts doth suffocate the heart, and many times causeth swellings to appear before the brest, which will grow upward to the neck, and then it kil leth the Horse. The signs: The Horse will hang down his head in the manger foraking his meat, and is not able to lift up his head. The cure according to Martin is thus: Let him bleed on both fides abundantly in the plat veins, and then give him this drink: Take a quart of Malm ste, and put thereunto half a quartern of Sugar, and two ounces of Cinamon, and give it him.
him like warm, then keep him warm in the Stable, stuffing him well about the stomach, that the wind offend him no manner of way; and give him warm water with mault always to drink, and give him such meat as he will eat. And if the swelling do appear, then besides letting him blood, strike the swelling in divers places with your stam, that the corruption may go forth: and anoint the place with warm Hogs grease, and that will either make it to wear away, or else to grow to a head, if it be covered and kept warm.

**Of tired Horses.**

But because we are in hand here with the vital parts, and that when the Horses be tired with overmuch labour, their vital spirits wax feeble, I think it best to speak of them even here, not with long discoursing, as Vegetius useth; but briefly to shew you how to refresh the poor Horse, having need thereof, which is done chiefly by giving him raff, warmth and good feeding, as with warm medicines and plenty of provender. And to quicken his spirits, it shall be good to pour a little Oyl and Vinegar into his nostrils, and to give him the drink of Sheep's heads recited before in the Chapter of Consumption of the flesh; yea, and also to bath his legs with this bath: Take of Mallows, of Sage, of each two or three handfuls, and of a Rofe-cake; boil these things together, and being boiled, then put unto it a good quantity of Butter, or of Sallet-oyl. Or else make him this charge: Take of Bole Armony, and of Wheat-flowre, of each half a pound, and a little Razen beaten into powder, and a quart of strong Vinegar, and mingle them together, and cover all his legs therewith; and if it be Summer turn him to graze.

**Of the diseased parts under the Midriff, and first of the Stomach.**

The old Authors make mention of many diseases incident to a Horse's stomach, as loathing of meat, spewing up his drink, surfeiting of provender, the hungry evil, and such like, which few of our Farriers have observed: and therefore I will briefly speak of as many as I think necessary to be known; and first of the loathing of meat.

**Of the loathing of Meat.**

A Horse may loath his meat through the intemperance of his stomach, as for that it is too hot or too cold. If his stomach be too hot, then most commonly it will either inflame his mouth and make it to break out in blisters, yea and perhaps cause some Cancker to breed there: The cure of all which things hath been taught before. But if he forfake his meat only for very heat, which you shall perceive by the hotness of his breath and mouth, then cool his stomach by giving him cold water, mingled with a little Vinegar and Oyl to drink; or else give him this drink: Take of Milk, and of Wine, of each one pint, and put thereunto three ounces of Mel Rosetum, and wash all his mouth with Vinegar and Salt. If his stomach be too cold, then his hair will tare and stand right up, which Abhirus and others were wont to cure, by giving the Horse good Wine and Oyl to drink, and some would feethe in Wine Rew, or Sage; some would add thereunto white Pepper and Myrrhe; some would give him Onyons and Rocket-seed to drink with Wine: Again, there be other some which prescribe the blood of a young Sow with old Wine. Abhirus would have the Horse to eat the green blades of Wheat, if the time of the year will serve for it. Columella states, that if a Horse, or any other Beast, do loath his meat, it is good to give him Wine, and the feed of Gith; or else Wine and Flash Garlick.

**Of casting out his Drink.**

Vegetius states, that the Horse may have such a Palate proceeding of cold in his stomach, as he is not able to keep his drink but many times to cast it out again at his mouth. The remedy whereof is to let him blood in the neck, and to give him Cordial drinks, that is to say, made of hot and comfortable Spices; and also to anoint all his breast, and under his shoulders with hot Oyls, and to purge his head, by blowing up into his nostrils, powders that provoke neezing, such as have been taught you before.

**Of Surfeiting with glut of Provender.**

The glut of provender or other meat not digested, doth cause a Horse to have great pain in his body, so as he is not able to stand on his feet, but lyeth down, and walereth as though he had the Bots. The cure whereof according to Martinus experience, is in this sort: Let him blood in the neck, then trot him up and down for the space of an hour; and if he cannot take, draw it out of his yard, and wash it with a little white Wine lukewarm, and thrust into his yard either a bruised clove of Garlick, or else a little oyl of Camomile, with a wax Candle. If he cannot dung, then rase his fundament, and give him this Glyster: Take of Mallows two or three handfuls, and boil them in a potte of fair running water; and when the Mallows be sodden, then strain it, and put thereunto a quart of Wheath Butter, and half a pinte of Oyl Olive; and having received this Glyster, lead him up and down,
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down, untill he hath emptied his belly, then let him up, and keep him hungry the space of three or four days, and the Hay that he eateh, let it be sprinkled with water, and let him drink water, where in should be put a little Bran, and when he hath drunk, give him the Bran to eat, and give him little or no provender at all, for the space of eight or ten days.

Of another Kinde of Surfetings with Meat or Drink, called of us, Foundering in the body.

Blundevile.  

His diseaue is called of the old Writers in Greek, Crisibius; in Latin, Hardestio; it cometh as they say, by eating of much provender suddently after labour, whilst the Horfe is hot and panting, whereby his meat not being digested, breedeth evil humor, which by little and little do spread throughout his members, and at length do oppresse all his body, and do clean take away his strengthe, and make him in such a case, as he can neither go, nor bow his joynts, nor being laid, he is not able to rise again; neither can he stale, but with great pain. It may come also, as they say, of drinking too much in travelling by the way when the Horfe is hot, but then it is not so dangerous, as when it cometh of eating too much.

But howsoever it cometh, they say all, that the humors will immediately refort down into the Horfes legs, and feet, and make him to call his hoofs: and therefore I must needs judge it to be no other thing but a plain foundering; which word foundering is borrowed, as I take it, of the French word Fundero, that is to say, molten. For foundering is a melting or dissolution of humors, which the Italians call Infusione. Martin maketh divers kinds of foundering, as the foundering of the body, which the French men call most commonly Morbus; and foundering in the legs and feet; also foundering before and behind, which some Authors do deny, as Magister Neurus, and Laurentius Ruffius, affirming that there are fewer humors behind then before, and that they cannot easily be disolved or molten, being so far distant from the heart, and the other vital parts. Whereunto a man might answer, that the natural heat of the body doth not cause dissolution of humors, but some unnatural and accidental heat, spred throughout all the members, which is dayly proved by good experience.

For we see Horfes foundered not only before or behinde, but also of all four legs at once, which most commonly changeth either by taking cold suddently after a great heat; as by standing full upon some cold pavement, or abroad in the cold winde; or else perhaps the Horfe travelling by the way, and being in a sweat, was suddently to stand in some cold water while he did drink, which was worse then his drinking: for in the mean time the cold entering at his feet, afcended upward, and concealed the humors which the heat before had dissolvd, and thereby when he cometh once to reft, he waxeth thinke and lame of his legs. But leaving to speake of foundering in the legs, as well before as behinde, untill we come to the griefs in the legs and feet; we intend to talk here only of foundering in the body, according to Martin's experience. The signes to know if a Horfe be foundered in the body, be these: His hair will flare, and he will be chill, and shrif for cold, and forfike his meat, hanging down his head, and quiver after cold water; and after two or three days he will begin to cough. The cure, according to Martin is thus: First, scour his belly with the Glyster laft mentioned, and then give him a comfortable drink made in this fort: Take of Malmife a quart, of Sugar half a quarter, of Honey half a quarter, of Cinnamon half an ounce, of Licorcs and Anife seeds, of each two spoonsfuls, beaten into fine powder, which being put into the Malmife, warm them together at the fire, so as the Honey may be molten, and then give it him Luke-warm: that done, walk him up and down in the warm stable the space of half an hour, and then let him stand on the bit two or three hours without meat; but let him be warm covered, and well litted: and give him Hay sprinkled with a little water, and clean pasted provender by a little at once; and let his water be warmed with a little ground Malt therein. And if you fee him somewhat cheered, then let him bleed in the neck, and also perfume him once a day with a little Frankincense; and use to walk him abroad, when the weather is fair and not windy, or else in the house, if the weather be foul; and by thus using him you shall quickly recover him.

Of the Hungry Evill.

This is a very great desire to eat, following some great emptines, or lack of meat, and it is called of the old Authors by the Greek name Beimus, which is as much to say, as a great hunger proceeding, as the Phyfians say, at the first of some extreme outward cold, taken by long travelling in cold barren places, and especially where Snow aboundeth, which outward cold caueth the stomach to be cold, and the inward powers to be feeble. The cure according to Abiopus and Hierocles, is in the beginning to comfort the Horfes stomach, by giving him Bread foft in Wine. And if you be in a place of reft, to give him Wheat-floure and Wine to drink; or to make him Cakes or Bals of Floure and Wine kneaded together, and to feed him with that; or with Wine and Nuts of Pine trees. Hierocles faith, if any such thing chance by the way whereas no floure is to be had, then it shall be best to give him Wine and earth wrought together, either to drink, or else to eat in Bals.
Of the Disease in the Liver.

All the old Authors speak much of the pain in the liver, but none of them do declare whereof it cometh, or by what means, saving that Hippocrates faith, that some Horseths get it by violent running upon some fiery or hard ground. I for my part think that the liver of a Horse is subject to as many diseases as the liver of a man, and therefore may be pains diversly. As sometimes by the intemperateness of the same, as for that it is perhaps too hot, or too cold, too moist, or too dry: sometimes by means of evil humors, as choler, or flemg abounding in the same, according as the liver is either hot or cold: for heat breedeth choler, and cold, flemg, by means of which intemperature proceedeth all the weaknesses of the liver. It may be pains also sometime by obstruction and stopping, and sometime by hard knobs, inflammation, Apotloume, or Ulcer bred therein, sometime by Consumption of the substanc thereof. The signes of heat and hot humors, be these: loathing of meat, great thirst, and looseness of belly, voiding dung of strong fent, and learness of body. The signes of cold, and cold humors be these: appetite to meat without thirst, a belly neither continually loole nor lipitike, but between times, no strong fent of dung, nor learnness of body, by which kind of signes, both first and last mentioned, and such like, the weaknesses and grief of the liver be.

Obstruction or stopping most commonly chargeth by travelling or labouring upon a full stomack, whereby the meat not being perfectly digested, breedeth grofe and tough humors, which humors by vehement of the labour, are also driven violently into the small veins, whereby the liver should receive good nutriment, and so breedeth obstruction and stopping.

The signes whereof in mans body is heaviness and diffusion, or swelling, with some grief in the right side under the short ribs, and especially when he laboureth immediately after meat, which things I believe if they were diligently observed, were easift enough to finde in a Horse, by his heavy going at his setting forth, and often turning his head to the side grieved. Of an old obstruction, and especially if the humors be cholerick, breedeth many times a hard knob on the liver, called of the Phyfitians Sclerites, which in mans body may be felt, if the body be not over fat: and it is more easift for him to ly on the right side than on the left, because that lying on the left side, the weight of the knob would oppress the stomack and vital parts very fore, by which signes methinks a diligent Farrier may learn, whether a Horse hath any such diseafe or not. The inflammation of the liver cometh by means that the blood either through the abundance, thinness, boiling heat, or sharpeness thereof; or else through the violence of some outward caufe, breaketh out of the veins, and floweth into the body of the liver, and there being out of his proper vessels both immediately putrific and is inflamed and therewith corrupteth soo much fleshy substance of the liver as is imbrowed withall; and therefore for the most part, the hollow fide of the liver is consumed: yet, and sometime the full fide.

This hot bloody matter then is properly called an Inflammation, which by natural heat is afterward turned into a plain corruption, and then it is called an Impollumte, which if it break out and run, then it is called an Ulcer, or filthy fore: Thus you fee, of one evil Fountain may spring divers griefs, requiring divers cures. And though none of mine Authors, nor any other Farrier that I know have waded thus far, yet I thought good by writing thus much, to give such Farriers as be wise, discreet and diligent, occasion to seek for more knowledge and understanding then is taught them; and me thinketh that it is a great shame, that the Farriers of this age should not know much more than the Farriers of old time, fith that beides that the old mens knowledge is not hidden from them, they have also their own experience; and time also bringeth every day new things to light. But now to proceed in diffcourling of the liver according to the Phyfitian doctrine as I have begun; I say then of an inflammation in the hollow fide of the liver, the signes be these: loathing of meat, great thirst, looseness of belly, easift lying on the right side, and painful lying on the left. But if the inflammation be on the full side or swelling fide of the liver, then the patient is troubled with difficulty of breathing, with a dry cough and grievous pain, pulling and twitching the winde-pipe, and to ly upon the right side is more painful than the left, and the swelling may be felt with a mans hand. But you must understand by the way, that all these things last mentioned be the signes of some great inflammation, for small inflammations have not such signes, but are to be judged only by grief under the short ribs and fetching of the breath.

The signes of Apotlumation is painful and great heat. The signes of Ulcerations is decrease of the heat with felleannes and fainting. For the filthy matter flowing abroad with evil vapours corrupteth the heart, and many times caufeth death. The signes of the Consumption of the liver, shall be declared in the next Chapter; and as for the curing of all other diseases before mentioned, experience must first teach it ere I can write it. Notwithstanding, I cannot think but that such things as are good to heal the like diseases in Mans body, are also good for a Horse; for his liver is like in substance and shape to a mans liver, differing in nothing but only in greatness. And therefore I would wish you to learn at the Phyfitians hands, who I am sure first, as touching the weaknesses of the liver, proceeding of the intemperateness thereof, will bid you to heal every such intemperateness by his contrary; that is to fay, heat by cold, and dryness by moisture: and for contrary; And therefore it shall be very necessary for you to learn the qualities, natures, and virtues of herbs, drugs, and all other simples, and how to apply them in time. And for to heal the oblation of the liver, they will counsel you perhaps to make the Horfe drinks of such simples as these.
The History of Four-footed Beasts.

be, Agrimony, Fumitory, Camomile, Wormwood, Licorice, Anise seeds, Smallage, Parfley, Spikenard, Gentian, Succory, Endive, Sperage, Lupines, the vertues whereof you shall learn in the Herbs; but amongst all simples, there is none more praifed than the liver of a Woolf beaten into powder, and mingled in any medicine that is made for any diseas in the liver.

The cure of an inflammation conffitteth in letting blood, and in bathing, or fomenting the fore place with fuch herbs and Oyls, as may mollifie and diffolve the furfeit, whereby lome simples that be allritent would be always mingled: yes, and in all other medicines that be applied to the liver, for any manner of diseases. Simples that mollifie and diffolve be thefe: Linseed, Fe- niger, Camomile, Anife seeds, Melliot; and fuch like things. Simples allritent be thefe: Red Rofe leaves, Bramble leaves, Wormwood, Plantain, Myrrhe, Mahick, Strax, and fuch like. Apo- thumes are to be ripped and voided. Ulcers must be cleaned, and fcowred downward, either by the belly, or by urine: and therefore the use of fuch simples as provoke urine in fuch cafe is neceffary. The old Writers of Horse-leech-craft do fay, that when a Horfe is griev'd in his liver, he will for- fake his meat, and his body will wafte, his mouth will be dry, his tongue rough and harfh: yea, and it will smell, and he will refuse to ly on that fide where his grief is. The cure whereof according to Affyrus is in this fort: Let him drink flantmpt Ireres with Wine allayed with water. He praieth alfo an herb much like unto Calamint; called of Fliny, Polymnia; or let him drink Savory with Wine and Oyl. I think that Agrimony or Liver-wort is as good as the best of them. Affyrus would have his body to be chafed with Wine and Oyl mixt together; and to be well lithered that he may ly fift; and his provender that fhould be given him to be steeped firt in warm water: and now and then fome Nitre to be put into his drink.

of theConsumption in the Liver.

I believe that no inward member of a Horfe doth suffer fo much as the lungs and liver, and that not fo much by continual, as by unordinate, and untimely travall, labour, and exercife, whereby either the Horfes lungs, or his liver do most commonly perifh, and is confumed: yea, and fome- time both. Of the Conflammation of the lungs, we have talked sufficiently before: therefore let us fiew you here the caufes whereof the Conflammation of the liver proceedeth. The Phyftians fay, that it may come of any humor, but chiefly and moft commonly of cholerick matter, fted throughout the fubflance of the liver, which purifying by little and little, and lefuely, doth at length corrupt and perifh all the fubflance of the liver, which thing in mans body doth firft proceed, as the Phyftians fay, either by eating corrupt meats, or elfe by continual drinking of sweet Wines.

But me thinks that the Conflammation of a Horfes liver, fhou'd come by fome extreme heat, in- flamming the blood, which afterward being purified, doth corrupt and exacerbate the fubflance of the liver. For after inflammation, as I faid before, cometh Apollamation, and Exulceration, which is very hard to cure, becaufe the fubflance of the liver is spongious like unto the lungs. And whileft the liver is fo corrupted, there can be no good digeflion, for lack whereof the body receiveth no good nutriment, and therefore muft needs alfo languifh and confume. The figures according to Mee- tin be thefe:

The Horfe will forfake his meat, and will fland stretching himfelf in length, and never cover to ly down; and his breath will be fo strong, as no man can abide it, and he will continually caft yellowish matter at the one noftril, or elfe at both, according as one or both fides of the liver is corrupted; and on that fide that he caufeth moft, he will have under his jaw, even about the midft thereof, a knob or kernel as much as a Walnut, which when Martin ffindeth, he comitteth his car- kafe to the Crows, taking him to be paft cure. But if he were let bold in time, and had fuch drinks given him, as are good to comfort and strenthen the liver, he thinketh that the Horfe might be recovered. I never read any medicine for the wafting of the liver, as I remember, but this only diet, which I found in an old English Book: Let him drink for the space of three days no other thing but warm wort; and let him eat no other meat but Oats baked in an Oven, and let him fland meatles the firft night before you give him the wort: But I think it were not amifs to put into the wort that he drinketh every morning fome good confection or powder made of Agrimony, red Rofe leaves, Salumn, Refum, Diarchedan, Albathe, Disfantlon, Licorat, and of the liver of a Wolf, and fuch other simples as do comfort and strenthen the liver; or elfe to give him the fame things with Goats milk Luke-warm.

of the diseases in the Gall.

In my opinion the gall of a Horfe is subject to divers diseafes, as well as the gall of a Man, as to obfttruction, whereof cometh the fulness and emptines of the bladder, and likewife the stone in the gall. But obfttruction may chance two manner of ways: Firft, when the way, whereby the cholrer fhould proceed from the liver unto the bladder of the gall as unto its receptacle, is flopped, and thereby the bladder remaineth empty, whereof may spring divers evil accidents: as vomit- ing, the Lax or Bloodly flx. Secondly, when the way whereby fuch cholrer fhould iffue forth of the bladder of the gall down into the guts is shut up, whereby the bladder is over full and abound- eth with two much cholrer,which causeth heavines, suffocation, belching, heat, thirst, and disposition.
To angrynes: The signes of both kindes of obstruction in the gall is coalevenes and yellowishness of skin infected with the yellow Jaundife. The stone in the gall, which is somewhat blackish, procedeth of the obstruction of the conduits of the bladder, whereby the choler being long kept in, waxeth dry, and turneth at length to hard gravel or stones; whereof because there is neither signes nor any grievous accident known to the Physitians, I leave to talk any farther thereof, and the rather for that none of mine Authors do make any mention of the gall at all. Notwithstanding to give some light to the learned Farriers; and that they may the better understand the inward parts of a Horse; I thought good to write thus much, thinking it no time lost while I may profit them any way.

Of the diseases in the Spleen.

The Spleen, as I have said before in many places, is the receptacle of melancholy, and of the dreggs of blood, and is subject to the like diseases that the Liver is, that is to say; to swelling, obstruction, hard knobs, and inflammation; for the substance of the Spleen is spongy, and therefore apt to wax in all flesh, and to dilate it self; wherefore being full it must needs swell, which will appear in the left side under the short ribs; and such swelling causeth also shortness of breath, and especially when the body doth labour or travel. It is painful also to ly on the right side, because the spleen being too thin to oppose the midriff, and especially when the stomacch is full of meall, and the patient hath worse digestion then appetit, and is troubled with much wind, both upward and downward. Moreover the vapour of the humor doth offend the heart, making it faint, and causeth all the body to be heavy and dull; and if such swelling be suffered to go uncured; then if it be a melancholy humor, and abounding over much, it waxeth every day thicker and thicker, causing obstruction not only in the veins & arteries, which is to be perceived by heaviness and grief on the left side, but also in the Spleen it self; whereas by vertue of the heat it is hardned every day more and more, and so by little and little waxeth to a hard knob, which doth not only occupy all the substance of the Spleen, but also many times all the left side of the womb, and thereby maketh the evil accidents or griefs before recited much more than they were.

Now as touching the inflammation of the Spleen which changeth very seldom; for so much as every inflammation proceedeth of pure blood, which seldom entereth into the Spleen: I shall not need to make many words, but refer you over to the Chapter of the Liver, for in such case they differ not, but proceeding of like cause, have also like signes, and do require like cure. The old Writers say, that Horfes be often grievous with grief in the Spleen, and specially in Summer feaon with greedy eating of sweet green meats, and they call those Horfes Liniath; that is to say, Spleenetic. The signes whereof (lay they) are these, hard swelling on the left side, short breath, often groaning, and greedy appetite to meat. The remedy whereas according to Abjirus is to make a Horfe to sweat one day during a certain time, by riding him, or otherwise travelling him, and to pour into his left noftroll every day the juice of Mirabolas mingled with Wine and Water, amounting in all to the quantity of a pinte. But me thinks it would do him more good, if he drank it as Hieropis would have him to do. Eumelius praifeth this drink: Take of Chamim feed and of Honey, of each fix ounces, and of Lapsa so much as a Bean of Vinegar a pint, and put all these into three quarts of water, and let it stand for all night, and the next morning give the Horfe thereof to drink, being kept over night fasting. The same Abjirus praifeth the decoction of Capers, especially if the bulk of the root thereof may be gotten stuffed in water to a fyrop. Or else make him a drink of Garlic, Nitre, Hore-bound, and Wormwood, stuffed in harth Wine: and he would have the left side to be bathed in warm water, and to be hard rubbed. And if all this will not help; then to give him the fire, which Abjirus doth not allow, saying the Spleen lyeth so, as it cannot easilly be fired, to do him any good. But for so much as the Liver and Spleen are members much occupied in the ingendring and separating of the vitals, many evil accidents and griefs do take their first beginning of them, as the Jaundife, called in a Horfe, the yellows, drieenes of body, and Concupis- ence of the feth, without any apparent caufe why, which the Physitians call Arithia; also evil habit of the body, called of them Coexhes, and the Drapfie. But first we will speake of the Jaun- dife or Yellows.

Of the Yellows.

The Physitians in a mans body do make two kindes of Jaundife: that is to say, the Yellow, pro- ceeding of choler dispersed throughout the whole body, and dying the skin yellow; and the Black, proceeding of melancholy, dispersed likewise throughout the whole body, and making all the skin black. And as the yellow Jaundife cometh for the most part, either by obstruction or Reip- ping of the conduits belonging to the bladder of the gall, which (as I said before) is the receptacle of choler; or by some inflammation of the Liver, whereby the blond is converted into choler, and fo spreadeth throughout the body; even so the Black Jaundife cometh by mean of some obstruction in the Liver-veins, that goeth to the Spleen, not suffering the Spleen to do his office, in receiving the dreggs of the blond from the Liver, wherein they abound too much; or else for that the Spleen is already too full of dreggs, and fo sheddeth them back again into the veins. But as for the black Jaundife; they have not been observed to be in Horfes as in Men, by any of our Farriers in these days
that I can learn. And yet the old [Writers of Horfe-leech-craft, do seem to make two kindes
of Jaundife called of them Cholerja, that is to fay, the dry choler, and alfo the moist choler. The fignes of
the dry choler, as Abjurtus fayth, is great heat in the body, and coftiveness of the belly, whereof it
faid to be dry. Moreover, the Horfe will not covet to ly down, because he is fo pained in his body,
and his mouth will be hot and dry.

It cometh, as he fayth, by obftuction of the conduit, whereby the choler fhould refort into the
bladder of the gall, and by obftuction alfo of the urine vefifals, as fo he cannot flate. The cure ac-
cording to his experience, is to give him a Glyftier made of Oyl, Water and Nitrum, and to give
him no provender, before that you have raked his fundament, and to pour the decocution of Mal-
lows mingled with sweet Wine into his noftrils, and let his meat be grafs, or elfe fweet Hay fprikned
with Nitre and Water; and he muft reft from labour, and be often rubbed. Horfe fayth would
him to drink the decocution of wilde Coleworts fidden in Wine. Again of the moist choler of Jaun-
dife, there are the fignes: The Horfes eyes will look yellow, and his noftrils will open wide; his ears
and his flanks will fweat, and his flate will be yellow and cholerick; and he will goone when he ly-
ed or laid down; which difeafe the faid Abjurtus was wont to heal, as he fayth, by giving the Horfe a drink
made of Thyme and Cumin, of each like quanity flappd together, and mingled with Wine, Honey,
and Water, and alfo by letting him bloud in the patterns. This laft difeafe feemeth to differ nothing
at all from that which our Farriers call the Yellows. The fignes whereof, according to Martin, be
thefe: The Horfe will be faint, and sweat as he flannedeth in the flate, and forfake his meat: and his
eyes, and the inside of his lips and all his mouth within will be yellow. The cure whereof accord-
ing to him is in this fort: Let him bloud in the neck-vein, a good quantity, and then give him this drink: Take of white Wine, of Ale a quart, and put thereunto of Saffron, Turmeric, of
each half an ounce, and the juycce that is wrung out of a handful of Celandine, and being luque-warm,
give it the Horfe to drink, and keep him warm the space of three or four days, giving him warm wa-
ter with a little Bran in it.

Of the Yellows.

Markham.

The Yellows is a general difeafe in Horfes, and differ nothing from the yellow Jaundife in men:
It is mortall, and many Horfes die thereof: the fignes to know it is thus: pull down the lids of
the Horfes eyes, and the white of the eye will be yellow, the infide of his lips will be yellow, and
pumps; the cure followed: Firft, let him bloud in the palat of his mouth, that he may fuck up the
fame, then give him this drink: Take of strong Ale a quart, of the green ordure of Ghee strained,
three or four fpoonfuls, of the juycce of Celandine as much, of Saffron half an ounce; mix thefe to-
gether, and being warm, give it the Horfe to drink.

Blundevile.

A touching the drinckes and Conufmption of the fluth, without any apparent caufe why, called
of the Phyfitians as I faid before Atropia; I know not what to fay more then I have already
before in the Chapter of Conufmption of the fluth, and therefore refert thither. And as for the
ew habit of the body, which is to be euill coloured, heavy, dull, and of no force, flrength, nor live-
lines, cometh not for lack of nutriment, but for lack of good nutriment, for that the bloud is cor-
ruped with flem, choler, or melancholy, proceeding either from the Spleen, or elfe through weak-
nefs of the stomatch or liver, caufing euill digeftion, or it may come by foul feeding: yea, and alfo
for lack of moderate exercife. The Euill habit of the body, is next couuen to the Dropifie, whereof
though our Farriers have had no experience, yet because mine old Authors writing of Horfe-leech-
craft do speake much thereof: I think it good here briefly to fhew you their experience therein,that
is to fay, how to know it, and alfo how to cure it. But fith none of them do fwee the caufe whereof it
proceeds; I think it meete firft therefore to declare unto you the caufes thereof, according to the do-
crine of the learned Phyfitians, which in mans body do make three kindes of Dropiffies, calling
the firft Anaftarea, the second Aiftera, and the third Timpania. Anaftarea, is an univerfal fwalving of the
body through the abundance of the water, lying betwixt the skin and the bones, and different not
from the difeafe laft mentioned, called Catheria, that is to fay, Euill habit of the blood, faying that
the body is more fwinon in this then in Catheria, albeit they proceed both of like caufes as of coldnefs
and weaknes of the liver, or by means that the heart, fpleen, stomatch, and other members ferving to
digiftion, be grieved or diseafe. Aiftera is a swallving in the covering of the belly, called of the Phy-
sitians Abdamen, comprifing both the skin, the fat, eight mufcles, and the film or pancile called
Peritoniun, through the abundance of some wayiff blood entred into the fame, which besides the
cauces before alledged, proceeded moft chiefly by means that some of the vesfels within be broken
or rather cracked, out of the which, though the bloud being somewhat grofs cannotiffe forth, yet
the wayiff blood being fubil, may run out into the belly, like water diftilling through a crack-
ed pot. Timpania, called of us commonly the Timpany, is a swallving of the aforesaid covering of the
belly, through the abundance of winde entred into the fame, which winde is ingendered of cruelty
and euill digiftion, and whileft it abunorth in the stomatch, or other intraits finding no iffue out,
it breaketh in violently through the small conduits among the pannicles of the aforesaid covering,
Of the Horse.

not without great pain to the patient, and so by tolling to and fro, windeeth at length into the space of the covering at self. But fully such winde cannot be altogether void of mischief.

Notwithstanding, the body twelfth not so much with this kind of Dropsey as with the other kind called Afebræ. The signes of the Dropsey is shortness of breath, swelling of the body, evil colour, loathing of meat, and great desire to drink, especially in the Dropsey called Afebræ, in which also the belly will found like a bottle half full of water: but in the Timpany it will found like a Tabber. But now though mine Authors make not so many kindes of Dropseys, yet they say all generally, that a Horse is subject to the Dropsey. The signes according to Abhurius and Hierocles, be these: His belly, legs, and bones, will be fwool; but his back, buttocks, and flanks, will be dried and shrunk up to the very bones.

Moreover the veins of his face and temples, and also the veins under his tongue will be so hidden, as you cannot see them; and if you thrust your finger hard against his body, you shall leave the print thereof behind, for the flesh lacking natural heat will not return again to his place, and when the Horse lyeth down he spreadeth himself abroad, not being able to lie round together on his belly; and the hair of his back by rubbing will fall away. Pelagorius in shewing the signes of the Dropsey, not much differing from the Physitians first rected, feemethe to make two kindes thereof, calling the one the Timpany, which for difference fake may be called in English the Winde Dropsey, and the other the Water Dropsey. Notwithstanding both have one cure, so far as I can perceive, which is in this fort: Let him be warm covered, and walked a good while together in the Sun to provoke sweat, and let all his body be well and often rubbed alonget he hair, and let him feed upon Coleworts, Smallage, and Elming boughs, and on all things, and on all kindes which may loosen the belly, or provoke urine; and let his common meat be grofs if it may be gotten, if not, then Hay sprinkled with Water and Nitram. It is good also to give him a kinde of Pulfe called Cich, steeped a day and a night in water, and then taken out, and laid so as the water may drop away from it. Pelagorius would have him to drink partly flampet with Wine, or the root of the herb called in Latin, Panax, with Wine. But if the swelling of the belly will not decrease for all this, then flit a little hole under his belly a handfule behind the navil, and put into that hole a hollow reed or some other pipe, that the water or winde may go out, not all at once, but by little and little at divers times, and beware that you make not the hole over wide, left the kall of the belly fall down thereunto; and when all the water is clean run out, then heal up the wound as you do all other wounds, and let the Horse drink as little as is possible.

Of the Evil habit of the Stomach.

If your Horse either by inward ficknesse, or by present furrie, grow to a toath of his meat, or by weaknesse of his stomatch call up his meat and drink; this shall be the cure for the same: First, in all the drink he drinks, let him have the powder of hot Spices; as namely, of Ginger, Anise seeds, Licorac, Cinamon, and Pepper; then blow up into his nostrils the powder of Tobacco to occasion him to sneeze, instantly after he hath eaten any meat, for an hour together after. Let one fland by him, and hold at his nose a piece of fowre leaven封建 in Vinegar, then anoint all his breas over with the Oyl of Ginnuper and Pepper mixt together.

Of the diseases of the Guts of a Horse, and first of the Colick.

The guts of a Horse may be diseased with divers griefes, as with the Colick, with Colitvencetis, with the Las, with the Bloody flux and Worms. The Colick is a grievous pain in the great gut, called of the Physitians Ctenis, whereof this disease taketh his name, which gut because it is very large and ample, and full of corners, it is apt to receive divers matters, and so become subject to divers griefes. For sometime it is tormenteded with the abundance of gros humors gotten betwixt the panicle of the said gut, and sometime with winde having no issue out, sometime with inflammatiion, and sometime with sharp fretting humors. But so far as I can learn, a Horse is most commonly troubled with the Colick that cometh of winde, and therefore our Farriers do term it the winde Colick. The signes whereof be these: The Horse will fortake his meat, and lie down and wallow and wander upon the ground, and standing on his feetes he will flamp for very pain with his fore-feet, and strike on his belly with his hinder foot, and look often towards his belly, which also towards his flanks will swell, and seem greater to the eye then it was wont to be. The cure whereof according to Martin, is in this fort: Take a quart of Malmte, of Cloves, Pepper, Cinamon, of each halfe an ounce, of Sugar halfe a quarter, and give it the Horse lukewarm, and anoint his flanks with Oyl of Bay, and then bende him and trot him immediately up and down the space of an hour, until lie dung, and if he will not dung, then rake him; and if need be provoke him to dung, by putting into his fundament an Omony piled and jugged with a knife crose wise, so as the juice thereof may tickle his fundament; and for the space of three or four days let him drink no cold water, and let him be kept warm. Bussius was wont to use this kind of cure: Take a good big reed a span long or more, and being anointed with Oyl, thrust it into the Horse fundament, fastening the outward end thereof unto his tail, so as it cannot flip out, and then having
first anointed and chas’d all the Horse’s belly with some hot Oyl, cause him to be ridden hastily up and down some hilly ground, and that will make him to void the winde out of his belly through the reed: which done, let him be kept warm and fed with good provender, and warm maſhes made of Wheat-meal, and Fennel seed, and let him drink no cold water until he be whole. Abystyn would have you to give him a Glyster made of wild Cowcumber, or elle of Hens dung, Nitrum, and strong Wine.

Of Cofiveineſs, or Belly-bound.

C Oiliveſens is when a Horse is bound in the belly and cannot dung, which may come by glut of provender, or overmuch feeding and reft, whereof we have talked sufficient before, also by winde, gros humors, or cold causing obturſion, and floppıng in the guts. The cure whereof, ac-

©ording to Milton, is in this fort: Take of the decoction of Mallowes a quart, and put thereunto halı a pinte of Oyl, or in fleed thereof, halı a pinte of ſtreth Butter, and one ounce of Benteſide laxa-tive, and pour that into his fundament with a little Horn meæt for the purpoſe, that done, clap his tail to his fundament, holding it ﬁll with your hand, whilst another doth lead him in his hand, and trot him up and down, that the medicine may work the better, and having voided all that in his belly, bring him unto the ﬂable, and there let him fland a while on the bit well covered, and warm littered, and then give him a little Hay, and let his drink be warm’d; it shall not be amifs alfo to give him that night a warm maſh.

Of the Lax.

The Indians call this diſeafe Ragiſta, and the Horse that hath this diſeafe Caſuſo Arrayiga, or Sbrao. It may come through the abundance of choleric humors deſcending from the liver or gall, down to the guts. But Ruffino faith, that it cometh most commonly by drinking overmuch cold water immediately after provender, or by fudden travelling upon a full stomæch, before his meæt be digiſted, or by hally running, or galloping immediately after water. If this diſeafe continue long, it will make the Horse very weak and feeble, fo as he shall not be able to fland on his legs. Notwithstanding, fith nature feeling her self oppreſſed, endevoroureth thus to eafe her self by expelling those humors that grieve her, I would not with you suddeny to fip it, let fome worfe inconvenience grow thereof. But if you fee that the Horse looth his ſtreth, and waxeth more dull and feeble then he was wont to be; then give him this drink often experimen
ted by Milton, and that shall fip him: Take of Bean-flowre, and of Bole Armony, of each a quartra, mingle these things together in a quart of red Wine, and give it him Luke-warm, and let him reft and be kept warm, and let him drink no cold drink but Luke-warm, and put therein a little Bean-flowre, and let him not drink but once a day, and then not over-much, for the space of three or four days.

Of the Bloody flux.

I ffeemeth by the old Writers, that a Horse is alſo ſubject to the Bloody flux. For Abystyn, Hireroes, and Democritus, say all with one voyce, that the guts of a Horse may be fo excretaed, that he will void bloody matter at his fundament, yea and his fundament therewith will fall out, which diſeafe they cal

© Dyſteria, which is as much to fay, as a painful excretaion of the guts, under the which the old men as it ffeemeth by the words of Hiresos, and Abystyn, would comprehend the diſeafe called of the Phyfitians Tenafmus, that is to fay, a deſire to dung often, and to do but little, and that with great pain: And alſo another diſeafe called Proviſionia ani, that is to fay, the falling out of the fundament, which the Phyfitians do account as feveral diſeafees. Notwithstanding, for fo much as Dyſteria, and Tenafmus, do spring both of like caufes: yea, and alfo for that the falling out of the fundament hath some affinity with them, I will follow mine Authors, in joyning them alſo togethe

r in this one chapter.

The Phyfitians make divers kindes of Bloody flux, for sometime the fat of the fatty ſlith which is voided, is sprinkled with a little blood, sometime the matter that voideſeth is mixt with the feræping of the guts, and sometime it is waterſh blood, like water wherein fleſh hath been washd, and sometime blood mixt with melancholy, and sometime pure blood, and by the mixture of the matter you ſhall know in mans body, whether the ulceration be in the inner ſmall guts or no; if it be, the matter and blood will be perfectly mixt together; but if it be in the outward guts, then they be not mingled together, but come out severall, the blood most commonly following the matter. Of this kinde is the diſeafe called before Tenafmus, for that is an ulcer in the right gutterving the fundament; and doth proceed even as the flux doth of some ſharp humors, which being violently driven, and having to paſs through many crooked and narrowways, do cleave to the guts, and with their sharpnes fret them, caufing excretaion and grievous pain. The flux alfo may come of some extreme cold, heat or moistenes, or by mean of receiving some violent purgation, having therein over-much Scammony, or ſuch like violent fpife; or through weakenes of the Liver, or other members serving to digestion. Now as touching the falling out of the fundament, the Phyfitians say, it cometh through the resolution or weakenes of the muscles, serving
to draw up the fundament, which resolution may come partly by over-much training, and partly they may be loozened by over-much moisture, for whose sake children being full of moisture are more subject to this diseaie then men. And for the self same cause I think that Horfes having very moist bowies be subject thereunto. Thus having thewed you the cauеs of the diseases before receiued, I will shew you the cure prescribed by the old Writers. Alchemists would have the fundament on the outside to be cut round about, but to the inward ring thereof be not touched. For that were dangerous, and would have kill the Horfe, for so much as his fundament would never abide within his body; and that done, he would have you to give him to drink the powder of unripe Pomegranate blés, called in Latin, Malacram, together with Wine and Water, which indeed because it is allringent, is not to be miflied: But as for cutting of the fundament, I assure you I cannot judge what he shold mean thereby, unleas it be to widen the fundament, by giving it long lites or cuts on the outside; but well I know that it may cause more pain, and greater inflammation. And therefore me thinks it were better in this cate to follow the Phyftitians precepts, which is first to consider whether the fundament being fallen out be inflamed or not; for if it be not inflamed then it shall be good to anoint it first with Oyl of Rifes somewhat warmed, or else to wash it with warm red Wine. But if it be inflamed, then to bathe it well, first with a fuppen dipt in the decoction of Mallows, Camomile, Linfeed, and Fenigreek, and alfo to anoint it well with Oyl of Camomile and Dill mingled together, to affage the twelving, and then to rub it in again fair and foltly, with a soft linen cloth. That dose, it shall be good to bathe all the place about with red red Wine wherein hath been fdden Acratium, Galles, Acorn cups, parings of Quinces, and fuch like simples as be allringent, and then to throw on some allringent powder made of Bole Armony, Frankeence, Sanguia Dragomion, Myrifs, Acratium, and fuch like: yea, and alfo to give the Horfe this drink, much praising of the old Writers. Take of Saffron one ounce, of Myriffe two ounces, of the herb called in Latin, Abrotonum, named in some of our English Herbs Southenwood, three ounces, of Parfyl one ounce, of garden Rue, otherwise called Herb Grace three ounces, of Pitheum, otherwise called of some people Spittlewort, and of Hylas, of each two ounces, of Galles, which is like Cinnamon, one ounce. Let all these things be beaten in fine powder, and then mingled with Chalk and fimng Cord Vinegar wrought into pale, of which pale make little cakes, and dry them in the fadow, and being dryied, dissolve some of them in a fimcient quantity of Barly mylk, or joyce called of the old Writers, and alfo of the Phyftitians, Cremas, Pifane, and give to the Horfe to drink thereof with a horn, for the medicine, as the Authors write, doth not only heal the Bloudy-flix, and the other two diseases before receiued, but alfo if it be given with a quart of warm water, it will heal all grie and pain in the belly, and alfo of the bladder, that cometh for lack of italinge. And being given with sweet Wine, it will heal the buring of any Serpent or mad Dog.

Of the Worms.

I n a Horfes guts do breed three kindes of Worms, even as there doth in Mans body, though they be not altogether like in shape. The firft long and round, even like to those that children do molt commonly void, and called by the general name Worms. The second little worms having great heads, and small long tails like a needle, and be called bots. The third be thourt and thick like the end of a mans little finger, and therefore be call Trenchones: and though they have divers shapes according to the diversity of the place perhaps where they breed, or else according to the figure of the putrified matter whereby they breed: yet no doubt they proceed all of one caufe, that is to fays, of a raw, gros and fleematick matter apt to putrification, ingendered most commonly by foul feeding: and as they proceed of one self caufe, so also have they like fignes, and like cure. The fignes be thefe: The Horfe will forfike his meat, for the Trenchones and the Bots will covet alwayes to the maw, and pain him fore. He will also lie down and wallow, and standing he will flamp and strike at his belly with his hinder-foot, and look often toward his belly. The cure according to Martius is thus: Take of sweet Milke a quart, of Honey a quartern, and give it him luk-warm, and walk him up and down for the space of an hour, and to let him reit for that day, with as little meat or drink may be, and fuffer him not to lie down. Then the next day give him this drinke: Take of Herb-grace a handful, of Savin as much, and being well smappe, put thereunto a little Brimfbone, and a little Soot of a Chimmy, beaten fine into powde, and put all these things together in a quart of Wort or Ale, and there let them lie steep the space of an hour or two, then strain it well through a fair cloth, and give it the Horfe to drink lukewarm, then bridle him, and walk him up and down the space of an hour: that done, bring him into theitable, and let him liand on the bit two or three hours, & then give him a little Hay. Lawrence Kuffins faith, that it is good to give the Horfe the warm guts of a young Hen with a Salt three days together in the morning, and not to let him drink untill it be noon. Some fay that it is good to ride him, having his bit firft anointed with duing coming hot from the man: some again use to give him a quantity of Brimfbone, and hall as much Rozen beaten into powders, and mingled together with his provender, which he must eat a good while before he drinketh.

I have found by often tryal, that if you give the Horfe with a horn a good pretty dishing of Salt brine, be it flefh brine, or Cheefe brine, it will kill any of the three kindes of Worms, and make the Horfe to avoid them dead in short time after.
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Of Worms in general.

Beedes the Bots, there are other Worms, which lie in the great paunch or belly of a Horfe, and they be thinning, of colour like a Snake, six inches in length, great in the midst and sharp at both ends, and as much as a Spindle: they cause great pain in a Horfes belly, as you shall perceive by his continual sucking of himself on the belly with his foot. The cure is thus: Give him two or three mornings together new Milk and Garlic boiled together, or chop Hay in his provender, either of both will serve: it killeth the worms and maketh them to void.

Of the pain in the Kidneys.

Me thinks that the Kidneys of a Horfe should be subject to as many griefs as the Kidneys of a Man, as to Inflammation, Obstruction, Apoftumes and Ulcers, and specially to obstruction that cometh by means of some stone or gravel gathered together in the Kidneys whereby the Horfe cannot mrape but with pain; for I have seen divers Horses my self that have voided much gravel in their little, which without doubt did come from the Kidneys; but my Authors do refer such griefs to the bladder and urine, and write of no disease but only of the inflammation of the Kidneys, which is called of them Neftritis, and so is called of the Physitians. It cometh, as they say, by some great drain over some ditch; or else by bearing some great burden. The signes whereof be these: The Horfe will go rolling behind and staggering, his foles will shrunk up, and his little will be blackish and thick. I think this disease differeth not from that which we called before the swelling of the back when we talked of the griefs in the back and loins, and therefore refteth thither. The cure of this disease, according to the bell of the old Writers, is in this fort: Bathe his back and loins with Wine, Oyl, and Nature warm together, after that you have so bathed him, let him be covered with warm clothes, and stand littered up to the belly with straw, so as he may lie foit; and give him such drinks as may provoke urine as those that be made with Dill, Fennel, Anife, Smallage, Parley, Spikenard, Myrthe, and Caffia. Some say it is good to give him a kind of pulle called Chat with Wine. Some again do praise Ewes milk, or else Oyl and Deers sweet molten together, and given him to drink, or the root of the herb called Asphodelus, Englisht by some Daffadi, sodden in Wine.

Of the diseases belonging to the Bladder and Urine of a Horfe.

Hieraceps faith, that a Horfe is subject to three kind of diseases incident to the Bladder or Urine, the first is called Strangury; the second Dysuria; the third Ichuria. Strangury, other wise called in Latine, Sifedundium, and of our old Farriours, according to the French name Choulepsis, is, when the Horfe is provoked to foile often, and voideth nothing but a few drops, which cometh, as the Physitians say, either through the sharpnes of the urine, or by some exculoration of the bladder, or else by means of some Apoftume in the liver or Kidneys; which Apoftume being broken, the matter reforteth down into the bladder, and with the sharpnes thereof caufeth a continual provocation of pifling.

Dysuria is when a Horfe cannot pis but with great labour and pain, which for difference fako I will call from hence forth the pain-pis. It may come sometime through the weaknes of the bladder and cold intemperate thereof, and sometime through the abundance of flagmatics and grofs humors, fopping the neck of the bladder. Ichuria, is when the Horfe cannot pis at all, and therefore may be called the pis-suppreft, or imprefion of urine, whether you will: me thinks always that the shorter and the more proper the name is, the better and more eafe it is to pronounce.

It may come, as the Physitians say, by weaknes of the bladder, or for that the Water conduit is fopt with grofs humors, or with matter defending from the liver or Kidneys, or with the fone: yea and sometimes by means of some inflammation or hard knob growing at the mouth of the conduit, or for that the fiews of the bladder is numbed, fo as the bladder is without feeling: or it may come by retention, and long holding of the water, most of which caufes Hieraceps alfo reciteth, adding thereunto that it may chance to a Horfe through over-much red and idenees, and alfo by meanes of some extreme cold, and especially in Winter feaon; for which, warmth of the fire is a preuent remedy. But now me Authors do not fhow for every one of tho three kindes of diseases several signes; but only fay, that when a Horfe cannot pis, he will fand as though he would itale, and thref out his yard a little; and alfo for very pain, fanding beatt his tail between his thighs.

Neither do they seem to appoint several cures, but do make a hopochip, mingling them all togethersome of them praffing one thing, and some another: For some fay it is good to mingle the juice of Leeks with sweet smelling Wine and Oyl together, and to pour it into his right noftl, and then to walk him up and down upon it, and that will make him to itale. Some fay it is good to give him Smallage feed, or efe the root of wild Fennel sodden with Wine to drink; or to put fine sharp Onions clean pilled, and somewhat bruised into his fundament, and to chafe him immediately upon it, either by riding him or otherwife, and that shall caufe him to itale prefently. It is good alfo to bathe all his back and loins with warm water.

The
Of the Horse.

The scraping of the inward parts of his own hoofs beaten into powder and mingled with Wine, and poured into his right nostril, will make him to flate, if you chase him upon it, and the rather as Heriot's faith, if you carry him to some Sheeps cot; or other place where Sheep are wont to stand, the smell of whole dung and pifs, without any other medicine, as he faith, will provoke him to flate.

Some will give the Horse white Dog's dung dried and mingled with Salt, Wine, and Ammoniacum to drink, some Hogs dung only with Wine, and sothe the dogs of Horse:pifs with Wine, and many other medicines which I leave to rehearse, for fear of being too tedious, and especially, fifth Martin experience doth follow here at hand; agreeing in all points with Laurensius Kajser, cured, which is in this fort: First, draw out his yard, and wash it well in white Wine, and scour it well, because it will be many times flopped with durt and other baggage together, and hardened like a stone; and then put a little Oyl of Camomile into the conduit, with a wax Candle and a bruised clove of Garlic, and that will provoke him to flate. And if that will not help: Take of Puffley two handfuls, of Coriander one handful, flamethem and strain them with a quart of white Wine, and dilute therein one ounce of Cake-ope, and give it Luke- warm unto the Horse to drink, and keep him as warm as may be; and let him drink no cold water for the space of five or six days; and when you would have him to flate, let it be either upon plenty of straw, or upon some green plots, or elle in a Sheeps cot, the favour whereof will greatly provoke him to flate, as hath been aforesaid.

Of Pissing Blood.

Pelagius faith, that if a Horse be over-much laboured, or over-charged with heavy burdens, or over fat, he will many times pifs blood, and the rather as I think, for that some vein is broken within the Horse body, and then cleer bloud will come forth many times, as the Physitians say, without any pifs at all. But if the bloud be perfectly mingled together with his steale, then it is a signe that it cometh from the Kidneys, having some blone therein, which through vehement labour, doth fret the kidneys and veins thereof, and so cause them to bleed, through which while the urine paffeth, must needs be infected and dyed with the bloud. It may come also by some strife, or from the muscle that incloseth the neck of the bladder. The cure according to Pelagius, Absuris, Heriot's, and the rest, is thus: Let the Horse bloud in the palace of the mouth to convert the bloud the contrary way; then take of Tragagant that hath been steeped in Wine, half an ounce, and of Poppy seed one dram and one scruple, and of Strixas as much, and twelve Pineapple-kernels: Let all these things be beaten and mingled well together, and give the Horse thereof every morning, the space of seven days, the quantity of a Hafl-nut dilempered in a quart of Wine: me thinks that the quantity of a Wal-nut were too little for so much Wine. Some write that it is good to make him a drink with the root of the herb Aploodus, which some call Daf, dail, mingled with Wheat-flowre and Sumach sodden long in water, and so to be given the Horse with some Wine added thereunto; or make him a drink of Colts milk and Oyl, straining thereunto to a little Fromency. And I believe, that it is good to give the Horse three days together, sodden Beans clean pilled, whereunto would be added some Deers Sewer, and a little Wine.

of the Colt Evil.

This name Colt Evil, in my judgement, doth properly signifie that diasefe, which the Physitians call Prapismus, which is a continual standing together, with an unnatural swelling of the yard proceeding of some wind, filling the arteries and hollow finew or pipe of the yard; or elles by the abundance of seed, which do chance oftimes to man, and I think somet ime to fioned Hories. Notwithstanding Martin faith, that the Colt Evil is a swelling of the steale of the yard, and part of the belly thereabout, caufed of corrupt seed, coming out of the yard, and remaining within the steale where it putrefieth. And Gelding's most commonly are subject to this diasefe, not being able for lack of natural heat, to expel their seed any further. For Hories, as Martin faith, are seldom troubled with this diasefe, because of their heat, unless it be when they have been over travelled, or otherwise weakened. The cure, according to him is thus: Wash the steale clean within Luke-warm Vinegar; then draw out his yard and wash that also: that done, ride him into some running strem up to the belly, toffing him therein to and fro to allay the heat of the members, and use him thus two or three days, and he shall be whole.

Another of the Colt Evil.

The Colt Evil is a diasefe that cometh to fioned Hories, through rackness of nature and want of vent, it appeareth in his cod and steale, which will swell exceedingly; the cure is nothing: for if you will but every day, twice or thrice drive him to the mid-side in some Pond or running River, the swelling will fall, and the Horse will do well. If the Horse be of years, and troubled with this grief; if you put him to a Mare, it is not amifs; for standing still in a liable without exerc is, a great occasion of this diasefe.
of the mattering of the Yard.

Tcometh at covering time, when the Horse and Mare both are over-hot, and so perhaps burn themselves. The cure according to Martin is thus: Take a pinte of white Wine, and boil therein a quarton of roch Allum, and quirt thereof into his Yard three or four quartsfulls, one after another, and thrust the quirt so far as the liquor may pierce to the bottom, to scour away the bloody matter, continuing thus to do once a day until he be whole.

of the shedding of Seed.

His disease is called of the Phisitians Conurrea, which may come sometime through abundance and ranckness of feed, and sometime by the weakenss of the stones and feed veffels not able to retain the feed until it be diggled and thickened. Vegetius faith, that this disease will make the Horle very faint and weak, and especially in Summer feaon. For cure whereof, the said Vegetius would have the Horle to be ridden into some cold water, even up to the belly, so as his stones may be coverd in water; and then his fundament being first bathed with warm water and Oy', he would have you to thrust in your hand and arm even to the very bladder, and softly to rub and claw the same, and the parts thereabouts, which be the feed veffels: that done to cover him warm that he take no cold, and every day would you have to give the Horle Hogs dung to drink with red Wine until he be whole. I for my part, if I thought it came of weakens, as aforesaide, I which would judge by the waterishnes of the feed and unflinnes of the Horle, would give him red Wine to drink, and put therein a little Aescum, the juice of Plantain, and a little Mallick, and bath his back with red Wine and Oyl of Roses mingled together.

of the falling of the Yard.

I come, as I take it, through the weakenss of the member, by means of some resolution in the muscles and finevess furning the fame, caused at the first (perhaps) by some great strain or slippe on the back. It may come also by weariness and tiring. For remedy whereof, Absinth was wont to wash the yard with salt water from the Sea, if it may be gotten; and if not, with water and salt, and if that prevailed not, he would all to prick the outmost skin of the yard with a sharp needle, but not deep, and then wash all the prickes with strong Vinegar, and that did make the Horle, as he faith, to draw up his yard again immediately: yes, and this also will remedy the falling out of the fundament. Pelageius would have you to put into the pipe of his yard, Honey and Salt boiled together and made liquid, or else a quick flie, or a grain of Frankincense, or a clove of Garlick clean pinled, and somewhat bruised; and also to pour on his back Oyl, Wine, Nitre made warm and mingled together. But Martin's experience is in this fort: First, wash the yard with warm white Wine, and then anoint it with Oyl of Roses and Honey mingled together, and put it up into the sheath, and make him a Cod-piece of Canvas to keep it still up, and dres it thus every day once until it be whole. And in any case let his back be kept warm, either with a double cloth, or else with a charge made of Bole Armony, Eggs, Wheat-flowre, Sanguis Draconis, Turpentine, and Vinegar; or else lay on a wet sack, which being covered with another dry cloth will keep his back very warm.

of the swelling of the Cod and Stones.

Absinth faith, that the inflammation and swelling of the cod and stones, cometh by means of some wound, or by the flingling of some Serpent, or by lighting one Horle with another. For remedy whereof, he was wont to bathe the cod with water wherein hath been fdden the roots of Wilde Cowcumber and Salt, and then to anoint it with an Ointment made of Carsa Oyl, Goats greese, and the white of an Egge. Some again would have the cod to be bathed in warm Water, Nitrum, and Vinegar together, and allo to be anointed with an Ointment made of Chalk, or of Potters earth, Oxe dung, Gummi, Water and Vinegar, or else to be anointed with the juice of the herb Salamum, called of some Night-flade, or with the juice of Hemlock growing on dunghils: yes, and allo to be let bled in the bloud. But Martin faith, that the swelling of the cods cometh for the most part after some sicknes or sweating with cold, and then it is a sign of amendment. The cure according to his experience is in this fort: First let him bloud on both fides the flank vesse. Then take of Oyl of Roses, of Vinegar of each half a pinte, and half a quarton of Bole Armony beaten to powder. Mingle them together in a cruce, and being huke-warm, anoint the cods therewith two or three feathers bound together, and the next day ride him into the water, so as his cods may be within the water, giving him two or three turns therein, and so return fair and softe to the stable, and when he is dry anoint him again as before, continuing thus to do every day once until they be whole. The said Martin faith also, the cods may be swollen by means of one hurt or evil humors reftoring into the cod, and then he would have you cover the cods with a charge made of Bole Armony and Vinegar wrought together, renewing it every day once until the swelling go away, or that it break of itself, and it it break, then tent it with Mel Roseatum, and make him a breech of Canvas to keep it in, renewing the tent every day once until it be whole.
of incoring and bruising.

T

His term, Incoring, is borrowed of the Italian word Incoraro, which in plain English is as much to say as Burilen: and might be more rightly termed of us uncoddled. For when a Horse is Burilen, his guts falleth down into the cod making it to swell. The Italians, as I take it, did call it Incoraro, because the gut follows the string of the fome, called of them Cordone, or La corda, whereof Incoraro seems to be derived with some reason. According to which reason we should call it rather In-

fringed, then Incorded: for Corda doth signifie a string or cord. Notwithstanding, such that Incoraro is already received in the Cable; I for my part am very well content therewith, minding not to contend against it. But now you have to note, that either Man or Beast may be Burilen diversly, and according to the names of the parts griev'd: the Physicians do give it divers names; for you shall understand, that next unto the thick outward skin of the belly, there is also another inward thin skin covering all the muscles, the Caul, and the guts of the belly, called of the anatomists Peritoneum, which skin cometh from both parts and fides of the back, and is fastened to the Medriff above, and also to the borrom of the belly beneath, to keep in all the contents of the heather belly. And therefore if the skin be broken, or over ftreined or stretched, then either some part of the caul or guts flippeth down, sometyme into the cod, sometyme not so far.

If the guts flipp down into the cod, then it is called of the Physicians by the Greek name Enterocle, that is to say, Gut-burilen. But if the caul fall down into the cod, then it is called of the Physicians Epsheke, that is to say, Caul-burilen. But either of the diseas is most properly incident to the male kind, for the female kind hath no cod. Notwithstanding they may be to burilen; as either gut or caul may fall down into their natures, hanging there like a bag; but if it fall not down so low, but remaineth above nigh unto the privy members or fkins, which place is called of the Latins, Iegua, then of that place the Burilen is called of the Physicians Bubonocle, whereunto I know not what English name to give, unlefe I should call it flank-burilen. Moreover, the cod or flank may be sometimes swollen, by means of some watersh humour gathered together in the same, which is called of the Physicians Hydrocele, that is to say, Water-burilen; and sometimes the cod may be swollen by means of some hard piece of flesh cleaving to the thin skins or panicles of the fomes, and then it is called of the Physicians Sarocle, that is to say, Fleith-burilen.

But forasmuch as none of mine Authors, Martus, nor any other Farriere in these days that I know, have intermeddled with any kind of Buriling, but only with that wherein the gut falleth down into the cod: leaving all the rest apart, I will only take of this; and that according to Martus experience, which I assure you differeth not much from the precepts of the old writers: But firft you shall understand, that the Gut-burilen, and Flank-burilen, doth proceed both of one cause, that is to say, by means that the skin, called before Peritoneum, is either fore straine, or elfe broken, either by some stripe of another Horse, or elfe by some flrain in leaping over a hedge, ditch, or pale, or otherwife; yes, and many times in paffing a career, through the carelefnes of the Rider, stopping the Horse suddenly without giving warning, whereby the Horse is forced to cast his hinder legs abroad, and so straineth or burilen the skin aforefaid, by means whereof the gut falleth down into the cod. The figures be thefe; The Horse will forfake his meat, and fland fторing and leaning alwayes on that side that he is hurt; and on that fide if you fearch with your hand be twixt the fome and the thigh upward to the body, and somewhat above the fome you shall finde the gut it fell big and hard in the feeling, whereas on the other fide you shall finde no fuch thing. The cure, according to Martus, is thus: Bring the Horfe into some houfe or place that hath over head a ftrong back or beam going overthwart, and flrew that place thick with fraw; then put on four patterns with four rings on his feet, and then fluffen the one end of a long rope to one of thofe rings, then thread all the other rings with the loofe end of the rope, and to draw all his four feet together, and call him on the fraw. That done, call the rope over the baull, and hoife the Horfe fo as he may lie flat on his back, with his legs upward without struffling. Then bathe his fomes well with warm Water and Butter molten together, and the fomes being somewhat warm, and well mollified, raife them up from the body with both your hands being clofed by the fingers fift together, and holding the ftones in your hands in fuch manner, work down the gut into the body of the Horfe, by flinking it downward continually with your two thumbs, one labouring immediately after another, until you perceive that fide of the fome to be fo small as the other, and having fo disordered, that is to say, returned the gut into his right place; take a lift of two fingers broad throughe anointed with frefth Butter, and tie the fomes both together with the fame fide as may be, not over hard, but fo as you may put your finge betwixt That done, take the Horfe quietly down, and lead him fowol and softly into the fable, where he must fand warm, and not be flurred for the space of three weeks. But forget not the next day after his dis ordering to unloofen the lift, and to take it away, and as well at that time, as every day once or twice after, to caft a fift or two of cold water up into his cods, and that will caufe him to shrink up his fomes, and thereby refrain the gut from falling down, and at the three weeks end be sure, it were not amiffe to geld the fome on that fide away, fo shall lie never be encor-

ved again on that fide. But let him not euer nor drink much, and let his drink be always warm.
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of the bitch in the grains of a Horse.

If a Horse be full of humours and then suddenly laboured, the humors will resort into the weakest parts, and there gather together and breed a Bitch, and especially in the hinder parts bet\"twixt the thighs, not far from the cuds. The figures be these; The hinder legs will be all swollen, and especially from the hoofs upward, and if you feel with your hand you shall find a great kind of swelling, and if it be round and hard it will gather to a head. The cure, according to Martin, is thus; First ripe it with a plaiifer; take of Wheat-flowre, of Turpentine, and of Hony, of each a like quantity, flirring it together to make a liffe plaiifer, and with a cloth lay it unto the fore, renewing it every day until it break or wax soft, and then lane it as the matter may run downward; then tent it with Turpentine and Hogs greese molten together, renewing it every day once, until it be whole.

Of the diseases incident to the womb of a Mare, and specially of barrenness.

It semeth by some writers, that the womb of a Mare is subject to certain diseases, though not as many as the womb of a Woman, as to ascent, descent, falling out, Convulsion, Barrenness, abortion; yea, 

Aristotle and others do not let to write, that menstrual blood doth naturally void from the Mare, as from the Woman, though it be so little in quantity, as it cannot be well perceived. But sith none of mine Authors have written thereof to any purpose, nor any Farrier of this time that I know, have had any experience in such matters, I will pass them all over with silence, saving barrennesse, whereas I promised before in his due place, to declare unto you the causes and such kind of cure for the same, as the old writers have taught. A Mare then may be barren through the untemperatenes of the womb or matrix, as well for that it is too hot and fiery, or else too cold and moist, or too dry, or else too short, or too narrow, or having the neck thereof turned awry, or by means of some obstruction or stopping in the matrix; or for that the Mare is too fat, or too lean, and many times Mares go barren, for that they be not well Horfed. Wel, the cure of barrennesse that cometh through the fault of the matrix or womb according to the old writers is thus; Take a good handful of Leeks, ramp them in a morter with half a glasse full of wine, then put thereunto twelve Flies, called of the Apothecaries Cantharides, of divers colours, if they may be gotten, then strain all together with a sufficient quantity of water to ferre the Mare therewith two days together, by pouring the same into her nature with a horn or glyster-pipe made of purpofe, and at the end of three days following offer the Horse unto her that should cover her, and immediately after that she is covered, wath her nature twice together with cold water.

Another receipt for the same purpose.

Take of Nitrums, of Sparrows dung, and Turpentine, of each a like quantity well wrought together and made like a Suppository, and put that into her nature, and it will caufe her to defire the Horse, and also to conceive. *Hippocrates* faith, that it is good also to put a nettle into the Horfes mouth that should cover her.

Of the Itch, Scab, and Mangines in the tail, and falling of the tail.

Blundevile.

In spring time Horses many times are troubled with the Troncheons in their fundament, and then they will rub their tail, and break the hair thereof, and yet in their tail perhaps, shall be neither Itch, Scurfe nor Scab; wherefore if you rake the Horse well with your hand anointed with Sope, and search for those Troncheons and pull them clean out, you shall caufe him to leave rubbing; and if you see that the hair do fall away it self, then is it a sign, that it is either eaten with Worms, or that there is some Scurfe or Scab fretting the hair, and causing such an itch in his tail as the Horfe is always rubbing the same. As touching the wormes, Scurfe or Scab, it shall be good to anoint all the tail with Sope, and then to waft it clean even to the ground with strong liue, and that will kill the Wormes, and make the hair to grow again. And if much of the tail be worn away, it shall be needful to keep the tail continually wet with a flunge dipt in fair water, and that will make the hair to grow very fast. But if the Horse's tail be many, then heal that like as you do the mangines of the mane before rehearsed. Again, if there breed any Canker in the tail (which will consume both flesh and bone, and as *Laurentius Ruffin* faith, make the joints to fall away one by one) it shall be good, as *Martin* faith, to waft all his tail with *Aqua fortis*, or strong water made in this fort; take of green Copperas, of Allum, of each one pound, of white Copperas a quarter. Boyl of all these things together in three quarts of running water in a strong earthen pot, untill one halfe be conformed, and then with a little of this water being made lukewarm, waft his tail with a little clout, or flax bound to the end of a flicke, continuing so to do every day once untill it be whole.
of the Scab.

The Scab is a foul scourfe in divers parts of a Horse's body, and cometh of poverty or ill keeping, or many times by going amongst woods wherein they are infected with water boughs: it is most incident to old Horses, which will die thereof, and chiefly in the Spring time when the new blood appears: the cure whereof I have spoken before.

How to know when a Horse halteth before in what part his grief is.

Being now come to talk of the griefs in the shoulders, legs, hips, houghes, joynts and hoofs; I say the Horfe most commonly to halt: I think it good first to shew you the way how to find in what part of his legs the Horfe is grieved when he halteth either before or behind. And first you have to consider that if a Horfe halteth before, it must be either in his shoulders, in his legs, or in his feet. If it be in his shoulders and new hurt, the Horfe will not lift that leg, but trail it nigh the ground. If it be old hurt, he will call that leg further from him in his going then the other, and if he be turned on the foreside, then he will halt to much the more. If a Horfe halteth in the leg, it is either in the knee, in the shank, or else in the pattern joynte; if it be either in the knee, or pattern joynte, he will not bow that leg in his going like the other, but go very flify upon it. If he halteth in the shank, then it is by means of some splentiment, wind gal, or such apparent grief, apt to be seen or felt. If he halteth in the foot, it is either in the crotone, heel, in the toe, in the quarters, or sole of the foot. If it be in the crotone, the grief will be apparent, the skin being broken or twelome some manner of way. If in the heel, as by over-reach or otherwise, then he will tread moff on the toe. If upon any of the quarters, then going on the edge of a bank or hilly ground, he will halt more then on the plain ground, and by the Horfes coming toward you, and going from you upon such edge or bank, you shall easily perceive whether his grief be in the inward quarter or in the outward quarter; the quarter is to be understood, from the mid hoof to the heel.

If he halteth in the toe, which is not commonly seen, then he will tread more upon the heel. If the grief be in the sole of the foot, then he will halt all after one foot upon any ground, unlesse it be upon the llones. And to be sure in what part of the foot the grief is, it shall be good first to make him go upon the plain ground, and then upon a hard and fliny ground: yea, and also a banke ground. Thus having declared unto you in general, how to know in what part a Horfe is grieved when he halteth before: I think it meet first to shew you orderily all the particular griefs and forances, whereunto the foreparts of a Horfe is subject, together with the caufes, fignes and cure thereof. That done, I will speak of halting behind, and shew you first generally where the grief is, and then particularly declare unto you every grief incident to the hinder parts of a Horfe. And lastly, I will speak of such griefs and forances as are commonly in both parts, that is to say, as well to the fore legs and fore feet, as to the hinder legs and hinder feet.

Of the grief and pinching in the shoulder.

This cometh either by labouring and straining the Horfe too young, or else by some great burthen; you shall perceive it by the narrowness of the breaste, and by confumming flieth of the shoulders, insomuch as the forepart of the shoulder bone will flick out, and be a great deal higher then the flieth. And if it be of long continuance, he will be very hollow in the brisket towards the armholes, and he will go wider beneath at the feet, then above at the knees. The cure: according to Martin, is thus. Give him a flit of an inch long with a sharpe knife or rafor upon both fides an inch under the shoulder bones: then with a Swans quill put into the fliet, blow up fliet the one shoulder, and then the other, as big as can poftible, even up to the withers, and with your hand strike the winde equally into every place of the flieth. And when they be full, then beat all the windy places with a good halfe wand, or with both your hands, clapping upon the places puffed up with wind, so fast as they can walk one after another over all the shoulder; then with a flat flice of iron, loofen the skin within from the flieth: that done, roll the two flats or cuts with two round rols made of the upper lether of an old shooe, with a hole in the middelt that the matter may iffue forth, and let fuch rols be three inches broad, and fo put in as they may lie plain and flat within the cut; then make a charge to lay upon the fame in this flieth; Take of Pitch, and Rofen, of eacch one pound, of Tar half a pinte, boyl these things all together in a pot, and when it is somewhat cooled, take a flitck with a woollen clot bound fliet to the end thereof, and dip it into this charge, and cover and daub all the shoulder therewith. That done, clap thereunto a pound of Fiox of fuch colour as the Horfe is, or as nigh unto the fame as may be, every other day cleanse both the wounds and rols, and put them in again, continuing thus to do the space of fiften dayes. Then take them out, and heal up the wounds with two tents of Flax dipt in Turpentine, and Hogs greafe molten together, renewing the fame every day once, untill the wounds be whole. But let the charge lie till, untill it fall away of it self, and let the Horfe run to graffe untill he hath had a frol or two.
The History of Four-footed Beasts.

Of the wrenching of the Shoulder.

His cometh somet ime by a fall, and somet ime by turning too suddenly in some uneven ground, or by running out of some door, or by some fripe of another Horfe, or by some sudden stop in palling a flyer: you fhall perceive it in his going, by trailing his leg up, or the great rack, fo close unto him that he can perceivable. The cure, according to Martin, is thus: Let him bleed the quantity of three pintcs, on the breath in the palat-paint, receiving the blood in a pot; and thereunto put firft a quart of strong Vinegar, and half a dozen broken Eggs, the while and all, and fo much Wheat-floure as will thicken all that liquor. That done, put thereunto Bole Armony betten into fine powder one pound, Senguin Draconis two ounces, and mangle them all together, to as the floure may not be perceived, and if it be too fine, you may make it more liquid or soft, with a little Vinegar. Then with your hand daub all the shoulder from the main downwards, and betwixt the fore-bowels, all against the hair, and let not the Horfe depart out of that place, until the charge be fully fallent unto the skin.

That done, carry him into the stable, and tie him up to the rack, and suffer him not to lie down all that day, and give him a little meat, dieting him moderately the space of fifteen days: during which time he may not sit up in his place, but only lie down, and every day once refresh the shoulder with this charge, laying still new upon the old, and at the fifteen days end, lead him abroad to fee how he goeth, and if he be somewhat amended, then let him rest without travelling, the space of one month; and that shall bring his shoulder to perfection. But if he be never the better for this that is done, then it shall be needful to rowel him with a leather rowel upon the shoulder-point, and to keep him rowelled the space of fifteen days, renewing the rowel, and cleaning the wound every other day; and then walk him up and down, and foil it, and turn him always on the contrary side to the fore; and when he goeth upright, pull out the rowel and heal the wound with a tent of flux dipt in Turpentine, and Hogs grease molten together. And if all this will not serve, then it shall be needful to draw him checker-wise with a hot iron over all the Shoulder-point; and also make him to draw in a plough every day two hours at the least, to settle his joynts for the space of three weeks or a month; and if any thing will help him, these two last remedies will help him, and make him to go upright again.

Of Splafting in the Shoulder.

This cometh by some dangerous sliding or slipping, whereby the shoulder parteth from the breast, and so leaves an open riot, not in the skin, but in the flesh and film next under the skin, and so he halteeth and is not able to go; you shall perceive it by trailing his leg after him in his going. The cure according to Martin is thus: Firft put a pair of straight patterns on his fore-feet, keeping him still in the stable without disquieting him: Then take of Drisius one pound, of Salter Oyl one pinte, of Oyl-de-bays half a pound, of fresh Butter half a pound; melt all these things together in a Pipkin, and anoint the grievous place therewith, and also round about the inside of the shoulder, and within two or three days after, both that place and all the shoulder besides will swell. Then either prick him with a lancet or seath, in all the swelling places, or else with some other sharpe hot Iron, the head whereof would be an inch long, to the intent that the corrupption may run out, and use to anoint it still with the fame Ointment. But if you see that it will not go away, but swell still, and gather to a head, then lance it where the swelling doth gather most, and is not under the finger, and then tent it with flux dipt in this Ointment: Take of Turpentine and of Hogs grease, of each two ounces, and melt them together, renewing the tent twice a day until it be whole.

Of the Shoulder right.

This is when the shoulder point or pitch of the shoulder is displaced, which grief is called of the Italians, Spallato; and it cometh by reason of some great fall forward, ruth or strain. The signes be thefe: That shoulder-point will twitch out further then his fellow, and the Horfe will halt right down. The cure according to Martin is thus: Firft make him to swim in a deep water up and down a dozen turns, and that shall make the joynt to return into his place. Then make two tough pins of Alken wood as much as your little finger, sharp at the points each one five inches long: that done, fit the skin an inch above the point, and an inch beneath the point of the shoulder, and thrust in one of the pins from above downward, so as both ends may equally flick without the skin. And if the pin of wood will not easfly pass through, you may make it way firft with an Iron pin. That done, make other two holes crofs to the firft holes, so the other pin may crofs the firft pin rignt in the midst with a right crofs, and the firft pin would be somewhat flat in the middle, to the intent that the other being round, may pas the better without stop, and close the fulter together. Then take a piece of a little line somewhat bigger then a whip-cord, and at one end make a loop, which being put over one of the pins ends, winde the reft of the line good and straight about the pins ends, so as it may lie betwixt the pins ends and the skin, and fallen the last end with a pack-needle and pack-thread untile the reft of the cord, so as it may not slip: and to do well, both the pricks and the cord would be firft annointed with a little Hogs grease. Then bring him into the stable, and let him rest the
Of the Horse.

The space of nine days, but let him lie down as little as may be, and put on a pattern on the fore leg, so as it may be bound with a cord unto the foot of the manger, to keep that leg always whilst he standeth in the stable more forward then the other. And at the nine days end take out the prick, and anoint the fore places with a little Distilbea, or with Hogs greafe, and then turn him out to graze.

Of the swelling of the Fore-legs after great labor.

Great labour and heat caufeth humors to refort down into the legs making them swell. The cure whereof according to Martin is thus: Bathe them with buttered beer, or else with this bath here following: Take of Mallows three handfuls, a Rose cake, Sage one handful, boil them together in a fufficient quantity of water, and when the Mallows be foft, put in half a pound of Butter, and half a pinte of Sallet Oyl, and then being somewhat warm, wash the swelling therewith every day once, the space of three or four days: And if the swelling will not go away with this, then take Wine fees, and Cumyn, and boil them together, and put thereunto a little Wheat-flowre, and charge all the swelling therewith, and walk him often: and if it will not serve, then take up the great vein above the knee on the inside, suffering him not to bleed from above, but all from beneath.

Of the Foundering in the Fore-legs.

The caufe of this grief is declared before in the Chapter of foundering in the body, whereas I shewed you, that if a Horfe be foundered in the body, the humors will immediately refort down into his legs, as Martin faith, within the space of 24 hours, and then the Horfe will go crouching all upon the hinder-legs, his fore-legs being fo flibfe, as he is not able to bow them. The cure whereof, according to Martin, is in this fort: Garter each leg immediately one handful above the knee, with a lift good and hard, and then walk him or chafe him, and fo put him in a heat, and being somewhat warmed, let him bleed in both the breast veins, referving the blood to make a charge withall in this manner:

Take of that bloud two quarts, and of Wheat-flowre half a peck, and fix Egges, three and all, of Bole Armony half a pound, of Sanguis Draconis half a quarter, and a quart of strong Vinegar; mingle them all together, and charge all his shoulders, breast, back, loyyn, and fore-legs therewith, and then walk him upon some hard ground, sufferin him not to hand flith, and when the charge is dry, refresh it again. And having walked him three or four hours together, lead him into the stable, and give him a little warm water with ground Mault in it, and then a little Hay and provender, and then walk him again, either in the house, or else abroad, and continue thus the space of four days: and when all the charge isspent, cover him well with a housing cloth, and let him both fland and lie warm, and eat but little meat during the four days. But if you fee that at four days end he mendeth not a whit, then it is a sign that the humor lies in the foles, for the which you must search with your Butler, paring all the foles of the fore-feet, lo that you shall fee the water infue through the sole. That done, with your Butler, let him bleed both at the toes, and let him bleed well. Then stop the vein with a little Hogs greafe, and then tack on the floweres, and Tarpenfie molten together, and laid upon a little Flax; and cram the place where you did let him bleed hard with TOW, to the intent it may be freely flop. Then fill both his feet with Hogs greafe, and harp fried together in a fopping pan, so hot as is possible. And upon the fopping clap a piece of leather, or else two flipes to keep the fopping. And immediately after this, take two Egges, beat them in a dish, and put thereto Bole Armony, and Bean-flowre fo much as will thicken the fame, and mingle them well together, and make thereof two flapers, such as may clofe each fquot round about, somewhat above the cronet, and binde it falt with a lift or roller, that it may not fall away, nor be removed for the space of three days, but let the fole be cleaned, and new flop the every day once, and the cronets to be removed every two days, continuing fo to do untill it be whole. During which time let him refl unwalked, for fear of loofening his hoofs. But if you fee that, he begin to amend, you may walk him fair and softly once a day upon some flot ground, to exercise his legs and feet; and let him not eat much, nor drink cold water. But if this foundering break out above the hoof, which you shall perceive by the loofenes of the coffin, above by the cronets: then when you pare the foles, you must take all the fore-part of the foles clean away, leaving the heels whole, to the intent the humors may have the freee passage downward, and then flop him, and dress him about the cronet as is before said.

Of Foundring.

Of all other forances, foundering is soonest got, and hardlyest cured: yet if it may be perceived in twenty four hours, and taken in hand by this means hereafter prefcribed, it shall be cured in other twenty and four hours: notwithstanding, the fame receit hath cured a Horfe that hath been foundered a year and more, but then it was longer in bringing it to pift. Foundering cometh when a Horfe is heated, being in his greafe and very fat, and takeith thereon a sudden cold, which stricketh down into his legs, and taketh away the life and feeling thereof. The sign to know it is, the
The History of Four-footed Beasts.

Horse cannot go, but will stand crippling with all his four legs together; if you offer to turn him, he will conch his buttocks to the ground, and some Horfes have I seen fit on their buttocks to feed.

The cure is thus: Let him bleed of his two brest veins, of his two flackle veins, and of his two veins above the crovets of his hinder hoves; if the veins will bleed, take from them three pints at least; if they will not bleed, then open his neck vein, and take so much from thence. Save the blood, and let one fland by and flir it as he bleeds, left it grow into jumps; when he hath done bleeding, take as much Wheat flour as will thicken the blood, the whites of twenty Eggs, and three or four yolks; then take a good quantity of Bolearinsack, and a pinte of strong Vinegar, incorporate all these well together, and withal charge his back, neck, head, and ears; then take two long rags of cloth and dip in the same charge, and withal garter him so tight as may be above both his knees of his forelegs; then let his keeper take him out to some flony caufie, or high-way paved with flone, and there one following him with a cudgel, let him trot up and down for the space of an hour, or two, or more: that done, let him up and give him some meat; and for his drink, let him have a warm mann: some three or four hours after this, take off his garters, and set him in some pond of water up to the mid-side, and so let him fland for two hours, then take him out and set him up; the next day pull off his shoes, and pare his feet very thin, and let him blood both of his heels and toes; then get on his shoes again, and ftop them with Hogs greafe and bran boiling hot, and flplint them up, and fo turn him out to run, and he shall be found.

Of the Splent as well in the inside or outside of the knee, as other where in the Legs.

Blandeville.

His forance to any mans feeling, is a very griffe, sometime as big as a Walnut, and sometime no more then a Hafel-nut, which is called of the Italians, Spinella, and it cometh as Laurentius Ruffin faith, by travelling the Horse too young, or by opprieving him with heavie barthuns offending his tender finews; and so caueth him to halt. It is easie to know, because it is apparent to the eye, and if you pinch it with your thumb and finger, the Horse will shrinke up his leg.

The cure whereof, according to Martin, is in this forte: Wash it well in warm water, and flave off the hair, and lightly fcarnie all the fore places with the point of a rafor, fo as the blood may issue forth: Then take of Cantharides half a spoonful, and of Euforbiwm as much, beaten into fine powder, and mingle them together with a spoonful of Oyl-de-bay, and then melt them in a little pan, flirring them well together, fo as they may not boil over, and being fo boiled hot, take two or three feathers, and anoint all the fore place therewith. That done, let not the Horse flir from the place where you do drefle him for one hour after, to the intent he shalke not off the ointment. Then carry him fair and softly into the flable, and tie him as he may not reach with his head beneath the manger, for otherwise he will covent to bite away the smarting and prickinge medicine, which if it should touch his lips, would quickly fetch off the skin. And also let him fland without litter all that day and night. The next day anoint the fore place with fresh butter, continuing fo to do every day once for the space of nine daies, for this shall allay the heat of the medicine, and caueth both that, and the cruf to fall away of it self, and therewith either clean take away the splent, or at leaft remove it out of the knee into the leg, and so much diminish it, as the Horse shall go right up, and halt no more through occasion thereof. Laurentius Ruffin would have the splent to be cured by biring it longt wife and overthwart. I have seen the Splent to be clean taken away thus: first having clipt away the hair growing upon the hard place, you must beat it with a good bigfick of Hafel almost a foote long, in which fick somewhat diftant from the one end thereof would be let fall a sharp prick of a little feet of flick, to plock the fore place therewith, once or twice to make the blood issue ouer, never leaving to beat it first softly, and then harder and harder until it waxeth fof in every place to the feeling, and to throuth out the blood, partly with the flick, leaning on it with both your hands, and partly with your thumbs: that done, wind about the fore place with a piece of double red woollen cloth, holding it fo as it may lie close thereunto; then fear it upon the cloth with the flat fide of your fearing iron, made hot, and not red hot, but fo as it may not burn through the cloth; that done, take away the cloth, and lay upon the fore a piece of Shoemakers wax, made like a little cake, fo broad as is the fore place, and then fear that into his Legs with your fearing iron, until the wax be thoroughly molten, dried, and funkin into the fore: that done, fear another piece of wax in like manner into the fore, until it be dyed up, and then you may trave your Horfe immediately upon it if you will, for he will not halt no more.

Markham.

A Splent is a forance of the leaft moment, unleffe it be on the knee, or elfe a through Splent, bo th which cannot be cured. A Splent is a fpongy hard griffe or bone, growing laft on the inside of the shin-bone of a Horfe, where a little making flark the finews compels a Horfe somewhat to stumble. The cures are divers, and thus they be: If the Splent be young, tender, and but new
Of the Horse.

Of a Malander.

A Malander is a kind of Scab growing in the forme of lines, or stripes, overthwart the bent of the knee, and hath long hairs with stubborn roots, like the briddles of a Bore, which corrupteth and cankereth the flesh, like the roots of a child's scabbed head: and if it be great, it will make the Horse to go siffle at the setting forth, and also to halt. This disease proceedeth sometime of corrupt blood, but most commonly for lack of clean keeping, and good rubbing. The cure, according to Martinis, is thus: First wash it well with warm water, then shave both hair and scab clean away, leaving nothing but the bare flesh, wherein to lay this Plaister: Take a spoonful of Sope, and as much of Lime, mingle them together, that it may be like paste, and spread as much on a clout as will cover the whole, and bind it fast on with a lint, renewing it every day once the space of two or three days, and at the three days end, take away the Plaister and anoint the sore with Oyl of Rofes made Luke-warm, and that shall fetch away the cruft-curse, bred by means of the Plaister, which being taken away, wash the fore place well every day once with his own flate, or else with mans urine, and then immediately throw upon it the powder of burnt Oylterthels, continuing thus to do every day once until it be whole.

Another of the Malander.

A Malander is a peevish forauce, and cometh of ill keeping, it is on the fore-legs, just on the inside, at the bending of the knee, it will make a Horse go stark, and stumble much. The cure is in this sort: Call the Horse, and with some instrument pluck off the dry ftab that will flick thereon, and rub it till it bleed, then take and bind it thereto for three days, in which space you shall see a white asker on the sore, then take that off and anoint it with Oyl of Rofes or Freth Butter until it be throughly cured.

Of an upper Attaint or over-reach upon the back shinew of the shanke, somewhat above the joint.

The Italians call this forauce Attainos, which is a painful swelling of the matter swine, by means that the Horse doth sometimes over reach, and strike that finew with the toe of his hinder-foot, which caufeth him to halt. The signs be apparent by the swelling of the place, and by the Horse halting. The cure, according to Martinis, is thus: Wash the place with warm water, and shave all the hair so far as the swelling goeth, and scrape every part of the fore place lightly with the point of a Rafor, that the blood may influe forth. Then takeoff Cantharides and of Euforbium, of each half an ounce, mingle them together with half a quart of Sope, and with a flice spread some of this Ointment over all the fore, suffering him to reit there as you dreffe him for one halfe hour after, and then you may carry him into the stable, and there let him stand without litter, and tyed as hath been laid before in the Chapter of the Spleen, and the next day dreffe him with the fame Ointment once again, even as you did before. And the third day anoint the place with Freth Butter, continuing so to do the space of nine days, and at the nine days end, make him this bath: Take of Mallowes three handfuls, a Rowe-cake, of Sage a handfull; boyl them together in a sufficient quantity of water. And when the Mallowes be foff, put in halfe a pound of Butter, and halfe a pinte of Salt and Oyle; and then being somewhat warm, wash the fore place therewith every day once, the space of three or four days.
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Of a Nether taint.

Blundevile.

His is a little bladder full of jelly, much like unto a Wind-gal, not apparent to the eye, but to the feeling, growing in the midst of the pattern, somewhat above the truth. It cometh by a strain, or else by some wrench, or by any other over-reach, and maketh the Horse to halt. The figure be thefe; The necker-joynt toward the fewer-lock will be hot in feeling, and somewhat swollen. The cure, according to Martin, is in this fort; Tie him above the joynt with a lift somewhat hard, and that will cause the bladder to appear to the eye. Then lance it with a sharp pointed knife, and thrust out all the jelly. That done, lay unto it the white of an Egge, and a little Salt beaten together, and laid upon flax or tow, and bind it fast unto the fore, renewing it once a day the space of four or five dayes, during which time let him rest, and then you may boldly labour him.

Of an Attaint.

Markham.

An Attaint is a grief that cometh by an over-reach, as clapping one leg upon another, or by some other Horses treading upon his heels. The cure is; Take a sharp knife and cut out the over-reach, that is, if it be never so deep like a hole, cut it plain and smooth, how broad so ever you make it, then wash it with Beer and Salt, and lay to it Hogs grease, Wax, Turpentine, and Rofen, of each like quantity, boyled and mingled together, and this will in few dayes heal him, be it never so fore.

Of an over-reach upon the heel.

This is a cut, so as the skin hangs down at the heel, made with the toe of the hinder foot, and is apparent to the eye, and it will cause the Horse somewhat to halt. The cure whereof, according to Martin, is thus; Cut away the skin that hangeth down, and bind a little flax dipt in the white of an Egge mingled with a little Bole-armony, renewing it every day once the space of three or four days, and that will heal it.

Of false quarters.

This is a rift sometime in the outside, but most commonly in the inside of the hoof, because the inside is ever the weaker part, which sides are commonly called quarters, and thereof this forance taketh his name, and is called a false quarter; that is to say, a caved or unsound quarter, which name indeed is borrowed of the Italian, calling it in their tongue, Fallo quar- to. It cometh by evil shooing, and partly by evil paring. The figure be thefe; The Horse will for the most part halt, and the rift will bleed, and is apparent to the eye. The cure, according to Martin, is thus; If the Horse halt, then pull off the shooe, and cut so much away on that side of the shooe where the grief is, as the shooe being immediately put on again, the rift may be uncovered. Then open the rift with a Rofenet or drawer, and fill the rift with a roll of Toe dipt in Turpentine, Wax, and Sheeps fewel molten, renewing it every day once until it be whole. And the rift being closed in the top, draw him betwixt the hair and the hoof with a hot Iron overthwart that place, to the intent that the hoof may shoot all whole downward, and when the Horse goeth upright, ride him with no other shooe, until his hoof be thoroughly hardend again.

Of halting behind, and where the grief is.

Blundevile.

If a Horse half behind, the grief must either be in the hip, in the flifie, in the hough, in the ham, in the leg, in the neather joynt, pattern or foot. If the halt in the hip of a new hurt, the Horse will go fidelberg, and not follow so well with that leg as with the other; but if it be old hurt, the fore hip will shrink and be lower then the other. And is best seen, when he goeth up a hill, or upon the edge of some bank, so as the worst leg may go on the higher side, for then he will halt so much more, because it is painful unto him to go so unevenly wrenching his leg. If the grief be in the flifie, then the Horse in his going will cast the flifie joynt outward, and the bone on the inside will be far bigger then the other. If the grief be in the hough, then it is by means of some Spaven, or some other hurt apparent to the eye. And the like may be said of the ham, wherein may be seen the Solander, or such like apparent forance, causing the Horse to halt. If the grief be either in the leg, pattern or foot, then you shall finde it by such signes as have been taught you before. And therefore let us now speake of those forances that are properly incident to the hinder legs.
Of the Horse.

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Of the String-bait.

The String-bait is a disease that maketh a Horse twitch up his leg suddenly, and so halt much, it is called the Italians, Mal del anche. It cometh most commonly by some great stipe or strain, slipping, flinding or falling. The signes be these: The Horse will halt, and in his going, he will go sideling, and the fore foot will fall lower then the other, and the flesh in process of time will consume clean away. And if it be suffered to run so long, it will never be restored unto his pristine estate. The best way, as Martin saith, is to charge his hip, and back with Pitch and Rofen molten together, and laid on warm, and then some flockes of his own colour to be clapped upon the same, and so let him run to graffe until he go upright. But the fore hip will never rise again fo high as the other. If the Horfie be not hipped, but only hurt in the hip, and that newly, then first take of the Oyl de-bay, of Diathca, of Nerval, of Swines grease, melt them all together, stirring them continually until they be thoroughly mingled together, and anoint the fore place against the hair with this Ointment every day once, the space of a fortnight, and make the Ointment to sink well into the flesh, by holding a hot broad bar over the place anointed, weaving your hand to and fro, until the Ointment be entered into the skin. And if at the fortnights end, you fee that the Horse amendeth no whit for this, then fit a hole downward in his skin, and an inch beneath the hip-bone, making the hole so wide, as you may easily thrust in a rowel with your finger, and then with a little broad lice or iron, loosen the skin from the flesh above the bone, and round about the same, so broad as the rowel may lie flat and plain betwixt the skin and the flesh, which rowel would be made of soft Calves Leather, with a hole in the midit like a ring, having a thred tied unto it, to pull it out when you would cleanse the hole, and if the rowel be pulled about with flux fall tyed on, and anointed with the ointment under written, it will draw so much the more; and thrust in the rowel first double, and then spread it abroad with your finger. That done, tent it with a good long tent of flux or rowel flat in a little Turpentine and Hogs grease molten together and made warm, and cleanse the hole and the rowel every day once, and also renew the tent every day for the space of a fortnight. And before you dresse him, cause him every day to be led up and down a foot pace a quarter of an hour, to make the humors come down, and at the fortnights end pull out the rowel, and heal up the wound with the same salve, making the tent every day jeffer and jeffer until it be whole. And so soon as it is whole, draw with a hot Iron crosse lines, of eight or nine inches long, right over the hip-bone, so as the rowelled place may be in the very midit thereof, and burn him no deeper, but so as the skin may look yellow, and then charge all that place, and over all his buttckes with this charge: Take of Pitch a pound, of Rofen half a pound, of Tar half a pinte; boil them together, and then being good and warm, spread it on with a clot tyed in a riven fick, and then clap on a few flockes of the Horse's colour. And if it be in Summer, let the Horse run to graffe a while, for the more he travell'd at his own will, the better it is for him.

Of sideling, and hurts in the stiffe.

The Horse is said to be sideling, when the sideling bone is removed out of his right place; but if it be not removed nor loofened, and yet the Horse stalleth by means of some grief there, then we say that the Horse is hurt in the stiffe, and not sideling. The stiffe cometh by means of some blow, or some great strain, slipping or sideling. The signes be these: If he be sideling, the one bone will stick out farther than the other, and is apparent to the eye. Martin would have you to cure the stiffe in all points like unto the shoulder-joint, sawing that the pins need not be so long, because the sideling place is not so broad as the shoulder, and standing in the fable, let him have a pattern with a Ring on his fore-leg, and therunto fallen a cord, which cord must go about his neck, and let it be so much strained, as it may bring his fore leg more forward then the other to keep the bone from slanting out. But if the Horse be but hurt in the stiffe with some stipe or strain, then the bone will not flant out, but perhaps the place may be swollen. The cure, according to Martin, is thus: First anoint the place with the Ointment mentioned before, everyday once the space of a fortnight; and if the Horse amend not with this, then rowel him with a hearen rowel, or else with a quilt, and let the nearest hole be somewhat before the fore place, and cleanse the hole every day, by turning the rowel, continuing still to anoint the place with the Ointment aforesaid, and that will make him whole.
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Of foundering behind.

T

He dry Spaven, called of the Italians, Spavano, or Sparavago; is a great hard knob as big as a Walnut growing in the inside of the hough, hard under the joyn, nigh unto the maller vein, and caueth the Horfe to halt, which forance cometh by kinde, because the Horfes Parents perhaps had the like diseafe at the time of his generation; and sometime by extreme labor and heat dissolving humors which do defend through the maller vein, continually feeding that place with evil nutriment, and caueth that place to swell. Which swelling in continuance of time becometh so hard as a bone, and therefore is called of some the Bone Spaven. It needeth no signes or tokens to know it, because it is very much apparent to the eye, and therefore mull Farris do take it to be incurable.

Notwithstanding, Martin faith, that it may be made lefse with these remedies here following; Wash it with warm water, and shave off the hair so fast as the swelling extendeth, and rarifie the place so far as it may bleed; then take of Cantharides one dozen, of Epsom-bath half a spoonful, break them into powder, and boil them together with a little Oyl-de-bay, and with two or three feathers bound together, put it boiling hot upon the face, and let his tail be tyed up for wiping away the medicine; and then within half an hour after, let him up in the stable, and tie him so as he may not lie down all the night for fear of rubbing off the medicine, and the next day anoint it with fresh butter, continuing thus to do every day once the space of five or six days, and when the hair is grown again, draw the fores place with a hot Iron; then take another hot sharp Iron like a Bodkin, somewhat bowing at the point, and thrust it in at the neather end of the middle line, and so upward betwixt the skin and the flesh to the compass of an inch and a half. And then tent it with a little Turpentine and Hogs grease moulten together and made warm, renewing it every day once the space of nine days. But remember first immediately after his burning to take up the malleter vein, suffereth him to bleed a litlle from above, and tie up the upper end of the vein, and leave the neather end open, to the intent that he may bleed from beneath until it cease it self, and that shall diminisn the Spaven, or else nothing will do it.

Of the Spaven, both bone and blond.

Dubtlesse a Spaven is an evil forance, and caueth a Horfe to halt principally in the beginning of his grief; it appeareth on the hinder-legs within, and against the joyn, and it will be a little fowne; and some Horfes have a thorough Spaven, which appeareth both within and without. Of the Spaven there are two kindes, the one hard, and the other soft; that is, a Bone-Spaven, and a Blond-Spaven: for the Bone-Spaven, I hold it hard to cure, and therefore the leffe necessarry to be dealt withal, except very great ocation urge; and thus it may be holpen.

Call the Horfe, and with a hot Iron fli the fleth that covereth the Spaven, and then lay upon the Spaven, Cantharides and Epsom boiled together in Oyl-de-bay, and anoint his legs round about,
Of the Horse.

about, either with the Oyl of Roses, and with Unguentum album camphiratum. Dress him thus for three days together, then afterward take it away, and for three days more lay unto it only upon flux and unfeck it Lyme, then afterward dresse it with Tar until it be whole.

The Cantharides and Eospernum, will eat and kill the spungy bone, the Lime will bring it clean away, and the Tar will rack out the poison, and heal all up found: but this cure is dangerous, for if the incision be done by an unskilful man, and he either by ignorance, or by the swerving of his hand, burn in twain the great vein that runs croffe the Spaven, then the Horse is spoiled.

Now for the blood Spaven that is easily helpt, for I have known divers which have been but newly beginning, helpt only by taking up the Spaven vein, and letting it bleed well beneath, and then stop the wound with Sage and Salt, but if it be a great blood Spaven, then with a sharp knife, cut it as you burn the bone Spaven, and take the Spaven away, then heal it up with Hogs grease and Turpentine only.

Of the wet Spaven, or through Spaven.

This is a soft swelling growing on both sides of the hough, and seems to go clean through the hough, and therefore may be called a through Spaven. But for the most part the swelling is on the inside, because it is continually fed of the matter vein, and is greater than the swelling on the out side. The Italians call this forance Latrera, or Getroad, which seemeth to come of a more flexible humour, and not so viscous or slimy as the other Spaven doth, and therefore this wazeth not so hard, nor groweth to the nature of a bone as the other doth, and this is more curable then the other. It needs no signes, because it is apparent to the eye, and eafe to know by the description thereof before made. The cure, according to Martin, is thus; First wash, shave, and scarifie the place as before; then take of Cantharides half an ounce, of Eospernum an ounce broken to powder, and Oyl-de-bay one ounce, mingle them well together cold, without boiling them, and dresse the fore therewith two dayes together, and every day after, until the hair be grown again anoint it with fresh Butter. Then fire him both without and within, as before, without tenting him, and immediately take up the matter vein, as before; and then for the space of nine dayes, anoint him every day once with Butter, until the tired place begin to scale, and then wash it with this bath; Take of Mallowes three handfuls, of Sage one handful, and as much of red Netorles, boil them in water until they be soft, and put thereunto a little fresh Butter, and bathe the place every day once for the space of three or four dayes, and until the burning be whole, let the Horse come in no wet.

Of the Seldner.

This is a kind of Scab breeding in the ham, which is the bent of the hough, and is like in all points to the Malander, proceeding of like caufes, and requireth like cure, and therefore refer to the Malander.

Of the hough bony, or hard knob.

This is a round swelling bony, like a Paris ball, growing upon the tip or elbow of the hough, and therefore I thought good to call it the hough-bony. This forance cometh of some stripe or bruife, and as Martin faith, is cured thus; Take a round hot iron somewhat sharpe at the end like a good big bodkin, and let it be somewhat bending at the point; then holing the fore with your left hand, pulling it somewhat from the finews, pierce it with the iron, being first made red-hot, thrusting it beneath in the bottom, and so upward into the belly, to the intent that the same jelly may issue downward out at the hole, and having thrust out all the jelly, tent the hole with a tent of Flix dipt in Turpentine, and Hogs grease molten together, and also anoint the outside with Hogs grease made warm, renewing it every day once until the hole be ready to shut up, making the tent every day leffer and leffer, to the intent it may heal up.

Of the Curb.

This is a long swelling beneath the Elbow of the hough, in the great finew behind, and caufeth the Horse to halt, after that he hath been a while laboured, and thereby somewhat heated. For the more the finew is strained, the greater grief, which again by his rest is eas'd. This cometh by bearing some great weight when the Horse is young; or else by some strain or wrinch, whereby the tender finewes are griev'd, or rather bowed (as Russian faith) whereof it is called in Italian, Curb a Currenda, that is to say of bowing, for anguifh whereof it doth swell, which swelling is apparent to the eye, and maketh the Leg to sliue bigger then the other. The cure, according to Martin, is thus; Take of Wine-lees a pinte, a porriger full of Wheat flour, of Cumin half an ounce, and stir them well together, and being made warm, charge the fore three or four days,
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dayes, and when the smell is almost gone, then draw it with a hot iron, and cover the burning with Pitch and Roofen molten together, and lay it on good and warm, and clap thereon some flocks of his own colour, or so near as may be gotten, and remove them not, until they fall away of themselves. And for the space of nine dayes let the Horse rest, and come in no wet.

Another of the Curb.

Markham.

A Curb is a farance that maketh a Horse to halt much, and it appears upon his hinder legs, straight behind upon the cumbrel place, and a little beneath the Spaven, and it will be swollen as big as half a Walnut. The cure followeth; Take a small cord and bind his legs hard above it, and beneath it, then beat it, and rub it with a heavy stick till it grow firr, then with a flambe strike it in three or four places, and with your thumbs crush out the flity bruised matter, then looke the cord, and anoint it with Butter until it be whole.

Of the Pains.

Blundevile.

This is a kind of Scab, called in _Italian, Crappe_, which is full of fretting matterish water, and it breedeth in the patterns for lack of clean keeping and good rubbing after the Horse hath been journeyed, by means whereof, the sand and dirt remaineth in the hair, frettest the skin and flesh, and so breedeth a Scab. And therefore those Horses that have long hair, and are rough about the feet, are soonest troubled with this diseaue, if they be not the cleanser kept. The signes be these; His legs will be swollen and hot, and water will issue out of the Scab, which water is hot and fretting, as it will scal off the hair and breed Scabs, so far as it goeth. The cure, according to _Martin_, is thus; First wash well all the patterns with Beer and Butter warmed together, and his legs being somewhat dryed with a cloth: clip away all the hair, having the fewest locks. Then take of Turpentine, of Hogs grease, of Honey, of each like quantity, mingle them together in a pot, and put thereto a little Boile-armony, the yolks of two Eggges, and as much Wheat flour as will thicken the things aforesaid, and make it plaster like, and for that cause it had need to be very well wrought and thirred together. Then with a flie strike some of the plaster upon such a piece of lennen cloth as will serve to go round about the pattern, and bind it fast on with a roller, renewing it once a day until it be whole, and let not the Horse be travelled nor stand wet.

Another of the Pains.

Markham.

Pains is a farance that cometh of hot ill humors of ill keeping; it appeareth in the Fetlocks, and will swell in the Winter time, and will send forth a sharp water: the hair will faire: and the cure is thus; Wash them every day twice or thrice with gunpowder and Vinegar, and they will be whole in one week at the most.

Of Mules or Kibed heels, called of the Italians, Mule.

Blundevile.

This is a kind of Scab breeding behind, somewhat above the neather joyst, growing overthwart the fewter lock, which cometh most commonly for being bred in cold ground, or else for lack of good dresling, after that he hath been laboured in foul mire and dirty ways, which durt lying full in his legs, frettest the skin, and maketh scabby rifs, which are foon bred, but not so foon gotten away. The anguish whereof maketh his legs somewhat to swell, and specially in Winter and Spring time, and then the Horse goeth very fitly, and with great pain. The farance is apparent to the eye, and is cured, according to _Martin_, in this fort: Take a piece of lennen cloth, and with the falve recited in the last Chapter, make such a plaster as may cover all the fore place, and bind it fast on that it may not fall off, renewing it every day once until the fore leave running, and beginneth to wax dry, then wash it every day once with strong water, until it be clean dryed up, but if this farance be but in breeding, and there is no raw flesh, then it shall suffice to anoint it with Sopo two or three dayes, and at the three dayes end, to wash them with a little Beef broth or dith water.

Of Frettishing.

Blundevile.

Frettishing is a farance that cometh of riding a Horse till he sweat, and then to let him up without litter, where he taketh suddenly cold in his feet, and chiefly before; it appears under the heel in the heart of the foot; for it will grow dun, and wax white and crumly like a Pomys, and also in time it will flowe, by the wrinkles on his hoof, and the hoof will grow thick and brickle, he will not be able to tread, on stones or hard ground, nor well to travel but stumble and fall. The cure is thus; Take and pare his feet so thin as may be, then roft two or three Eggges in the Embes very hard, and being extreme hot taken out of fire, crush them in his foot, and then clap a piece of Leather thereon, and fplint it that the Eggges may not fall out, and so let him run and he will be found.
Of the Horse.

of sorances or griefes that be common to all Fore-feet.

Hitherto we have declared unto you the caues, signes and cure of all such griefes as are properly incident, either to the fore-legs, or hinder-legs: now therefore we speake of those griefes that be common to them both, and first of Windgals.

Of Windgals.

The Windgal called of the Latins, Gall, is a bladder full of corrupt jelly, whereof some be great, and some be small, and do grow on each side of the joint, and is so painful, and especially in Summer season, when the weather is hot and the ways hard, as the Horse is not able to travel, but haltereth down right. They come for the most part through extreme labour and heat, whereby the humors being dissolved, do flow and refort into the hollow places about the neather joints, and there be congealed and covered with a thin skin like a bladder. They be apparent to the eye, and therefore need no other signes to know them. The cure whereof according to Martin is thus: Wash them with water, and shave off the hair, sawrie them with the point of a rafor, and dress them with Cantharides in the self fame manner as the splent in the knee was taught before, and anoint them afterward with Butter until the skin be whole. And if this will not heal it, then draw them with a hot Iron like a ragged staffe. That done, flit the middle line which paffeth right down through the windgal with a sharp knife, beginning beneath, and so upward the length of half an inch, to the intent you may thrust the jelly out at that hole; then lay unto it a little Pitch and Rouge molten together, and made luke-warm, and put a few flocks on it, and that will heal him. And you may dry up the Windgal in such manner as here followeth: First chop off the hair so far as the Windgal extendoth, and having fricken it with a ream, thrust out the jelly with your finger. Then take a piece of red wollen cloth and clap it to the place, and with a hot broad fearing Iron sear it, so as the Iron may not burn through the cloth, which is done to dry up the humors.

Then having taken away the cloth, lay unto the place a piece of Shoomakers wax made like a flat cake, about the breadth of a telforn; and with your Iron not made over hot, streek softly upon it to and fro, until the fad wax be thoroughly melted into the fore. Whereupon lay a few flocks, and let him go. Which flocks will afterward fall away of their own accord.

Of Windgals.

Wingals are easie to cure, they be little swellings like blebs or bladders, on either side the joint next unto the fewer-locks, as well before as behinde, and they come through the occasion of great travel, in hard, gravelly, or sandy ways. The cure is: Take Pitch, Rozen, and Mafick, of each like quantity, melt them together, and with a fick lay it round about the Horfes legs, and whilst it is hot lay flocks thereon; the nature of this plaister, is never to come away whilst there is any Windgal on the Horfes legs; but when they are dried up, then it will fall away of it self.

Of Wrinching the neather joint.

His cometh many times by treading awry in some Cart root or otherwise. The signes be these:
The joint will be swollen and sore, and the Horfe will halt. The cure whereof according to Martin is thus: Take of Distilbea half a pound, and as much of Nerval; mingle them together, and anoint the fore place therewith, chafing it well with both your hands, that the Ointment may enter, continuing fo to do every day once, until the Ointment be all spent, and let the Horfe rest. But if this will not prevail, then washe it with warm water and thave away all the hair saving the fewest lock. Scarifie it, and lay to it Cantharides, and heal it as you do each splent in the knee.

Of Enterfening.

Beaue Enterfening is to be holpen by flouing, we purpose not to speak of it, untill we come to talk of the order of paring and flouing all manner of hooves.

Another of Enterfening.

Enterfening is a grief that cometh sometimes by ill flouing, and sometimes naturally, when a Horfe trots so narrow that he hews one leg upon another, it appeareth both before and behinde, between the feet against the fet-locks, and there is no remedy but flouing him with shooes made thin and flat on the outside, and narrow and thick within.
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Of the Shakel-gall.

F a Horse be galled in the patterns, with shakel, lock pattern, or halter, anoint the fore place with a little Honey and Verdigrase boyled together, until it look red, which is a good Ointment for all gallings on the withers, and immediately throw upon the Ointment, being first laid upon the leg, a little chopt flax or tow, and that will stick fast, continuing so to do every day once untill it be whole.

Of hurts in the Legs, that cometh by casting in the halter or collar.

Blundevile.

IT chanceeth many times, that a Horse having some itch under his ears, is defirous to scratch the fame with his hinder-foot, which whileth he reacheth to and fro, doth falten in the collar or halter, wherewith the more that he striveth the more he galleth his legs; and many times it chanceth for that he is tyed so long, by means whereof being laid, and the halter flack about his feet, rising perhaps or turning he sharleth himself so as he is not able to get up, but hangeth either by the neck or legs, which sometime are galled even to the hard bone.

Ruffius calleth such kind of galling Capistratura, which he was wont to heal with this Ointment here following, praising it to be excellent good for the cratches, or any scab, bruise, or wound: Take of Oyl Olive one ounce, of Turpentine two or three ounces; melt them together over the fire, and then put thereunto a little Wax, and work them well together, and anoint the fore place therewith. Martin faith, it is good to anoint the fore place with the white of an Egg and Saller Oyl beaten together; and when it cometh to a scab, anoint it with Butter being molten, untill it look brown.

Of the Cratches, or Rats tails, called of the Italians, Crepacie.

This is a kind of long scabby rifts growing right up and down in the hinder part, from the fet-lock up to the curb, and cometh for lack of clean keeping, and is easily seen if you take up the Horse's foot, and lift up the hair. The cure according to Martin is thus: Take of Turpentine half a pound, of Honey a pinte, of Hogs grease a quartern, and three yolks of Eggs, and of Bole-armony a quartern, beaten into fine powder, of Bean-flowre half a pinte; mingle all these well together, and make a calfe thereof, and with your finger anoint all the fore places, bedding the hair as you go, to the intent you may the easier finde them, and also to make the calfe enter into the skin, and let the Horse come in no wet, untill he be whole.

Of the Scratches.

Markham.

Scratches will cause a Horse to halt for, and they come only by naughty keeping, and they appear in the patterns under the Fet-locks; as if this skin were cut over-thwart, that a man may lay in a Wheat-braw. The cure is thus: Binde unto them, the hair being cut clean away) black Sope and Lime kneed together, for three days, then lay that by, and anoint the place with Butter; and heal the fore with Bores greafe and Tar mixt well together.

Of the Ring-bone.

This is a hard gristle growing upon thecronet, and sometimeth goeth round about the cronet, and is called in Itallan, Sopraff. Laurentius Ruffius faith, that it may grow in any other place of the leg; but then we call it not a Ring-bone, but a knot or knob. It cometh at the first either by some blow of another Horse, or by stricking his one foot against some flub, or stone, or such like causality. The pain whereof breedeth a vicious and flamy humor, which retorting to the bones, that are of their own nature cold and dry, waxeth hard, cleaveth to some bone, and in process of time becometh a bone. The signes be these: The Horse will halt, and the hard swelling is apparent to the eye, being higher then any place of the cronet. The cure according to Martin is thus: First wash it well with warm water, and shave away all the hair, so as the fore place may be all discovered. Then scratch it lightly with the point of a raper, so as the blood may issue forth. Then if the fore be broad, take of Euferbium one ounce, of Cantharides half an ounce, broken into fine powder, and of Oyl-de-bay one ounce; and if the fore be but little, the one half of this may serve: Boy these things together, stirring them continually, let it run over; and with two or three feathers, lay it boiling hot unto the fore, and let not the Horse fir from that place for half an hour after, then carry him into the stable, both uufing and curing him for the space of nine days, in such order as hath been saide before in the chapter of the splent. But when the hair beginneth to grow again, then fire the fore place with right lines from the pattern down to the coffin of the hoof; and let the edge of the drawing Iron be as thick as the back of a meat-knife, and burn him so deep as the skin may look yellow: that done, cover the burning with Pitch and Rozen molten together, and clap thereon flockes of the Horses own colour, or somewhat nigh the same, and about three days after lay again some of the laft mentioned plaifer, or Ointment; and also
new flocks upon the old, and there let them remain, until they fall away of themselves.

But if their Ring-bones, or knobs, breed in any other place, then in the Cronet, you shall cure them as is before said, without firing them.

**Of the Ring-bone.**

The Ring-bone is an ill disease, and appeareth before on the foot above the hoof, as well before Markham. as behinde, and will be swollen three inches broad, and a quarter of an inch or more of height, and the hair will flare and wax thin, and will make a Horfe halt much. The cure is: Catch the Horfe, and with an iron made flat and thin, burn away that gristle which annoys him; then take Wax, Turpentine, Rozen, Tar, and Hogs-grease, of each like quantity, mingle them together Plaifter-wife, and with it cure the sore: This Plaifter will also cure any other wound or ulcer whatsoever.

**Of the Crown-sab.**

This is a kinde of filthy and linking Scab, breeding round about the feet upon the Cronet, and is an elfish and painful disease, called in Italian, Crijaria. It feemeth to come by means that the Horfe hath been bred in some cold wet foil, striking corrupt humors up to his feet; and therefore the Horfe that hath this grief is worfe troubled in Winter then in Summer. The figines be these: The hair of the Cronet will be thin and itaring like bristles, and the Cronts will be always mattering, and run on a water. The cure according to Martin is thus: Take of Sope, of Hogs-grease, of each halfe a pound, of Bole-armony a little, of Turpentine a quartern; and mingle them all together, and make a Plaifter, and binde it fast on, renewing it every day once, until it leave running, and then wash it with strong Vinegar, being luke-warm, every day once, until the sore be clean dried up, and let him come in no wet until it be whole.

**Of hurts upon the Cronet crossing one foot over another, which the Italians call Suprapofoe.**

Martin faith, wash it well with white Wine, or with a little Stale, and then lay unto it the white of an Egge, mingled with a little Chiminy foot and Salt, and that will dry it up in three or four days, if it be renewed every day once.

**Of the Quitter-bone.**

This is a hard round swelling upon the Cronet, betwixt the heel and the quarter, and growth most commonly on the inside of the foot, and is commonly called of the Italians, Setula or Seta. It cometh by means of gravel gathered underneath the shoe, which freteth the heel, or else by the cloying or pricking of some nail evil driven, the anguish whereof looseth the gristle, and so breedeth evil humors, whereof the Quitter-bone springeth. The figines be these: The Horfe will hale, and the swelling will be apparent to the eye, which in four or five days coming to a head, will break out with matter at a little deep hole like a Fisula. The cure according to Martin is thus: First, burn about the quitter-bone with a hot Iron, in manner of half a circle, and then with the fame Iron draw another right strike through the midst thereof. Then take of Arsenick the quantity of a Bean beaten into fine powder, and put it into the hole, thrumming it down to the bottom with a quill, and flop the mouth of the hole with a little tow, and binde it so fast with a cloth, and cord, as the Horfe may not come at it with his mouth, and so let it reit for that day. And the next day, if you fee that the sore looketh black within, then it is a figne that the Arsenick hath wrought well and done his part. Then to allow the burning thereof, tent the hole with flux dipt in Hogs-grease, and Turpentine, molten and mingled together, and cover the tent with a bolster of Tow dipt also in the Ointment aforefaid, continuing fo to do every day once, until you have gotten out the core. Then shall you fee whether the loofe gristle in the bottom be uncovered or not; and if it be uncovered, then feel with your finger, or with a quill, whether you be nigh it or not. And if you be, then raise the gristle with a little crooked instrument, and pull it clean out with a pair of small nippers, meet for the pufope. That done, tent it again with a full tent dipt in the aforefaid Ointment, to affwage the anguish of the last drelling, and flop it hard, to the intent that the hole may not think together, or close up; and the next day take out the tent, and tent it a new with the Salve or Ointment taught in the Chapter of the Shakel-gall, renewing it every day once until it be whole, keeping always the mouth of the fore as open as you may, to the intent that it heal not up too fast; and let not the Horfe be in any wet, nor travel, until he be perfectly whole.

**Of the Quitter-bone.**

Quitter-bone is a round hard swelling upon the Cronet of the hoof, betwixt the hoof and the quarter, and for the most part growth on the inside of the foot; the Original effect thereof is the fretting of gravel underneath the shoe, which bruifeth the heel; or else by means of some flub,
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Blundevile.

This is a fretting under the foot, most commonly in the inside, and sometimes in the outside, and sometime in both sides together of the heel. It cometh by means of little gravel stones getting between the hoof, or caking, or sponging of the flooe, which by continual labour and treading of the Horfe, doth eat into the quick, and the rather, if his heel be soft and weak, or that the flooe do lie flat to his foot, so as the gravel being once gotten in, cannot get out. The signes be these: The Horfe will halt, and covet to tread all upon the toe, to favour his heel. The cure according to Marty is thus: First pare the hoof, and get out the gravel with a corret, or drawcer, leaving none behind, for if you do, it will breed to a Quitter-Bone. That done, flop him with Turpentine and Hogs-grease molten together, and laid on with tow or flax, and then clap on the flooe to keep in the flopping, renewing it every day once until it be whole. And suffer the Horfe to come in no wet, until he be thoroughly whole. If a graveling be not well slop to keep down the fleth, it will rife higher then the hoof; and not only require more busines in bolstering it, but also put the Horfe to more pain.

Of Graveling.

Mukham.

Ravelling is a hurt will make a Horfe to halt, and cometh of gravel and little frogs, that goeth between the flooe and the heart of the foot. The cure is: Take off the flooe, and let him be well pared; then fet on the flooe again, and flop it with Pitch, Rozen, and Tallow, and this shall help.

Of Surbating.

Mukham.

This is a beating of the hoof against the ground, called of the Italian, Sobatina; it cometh sometime by means of evil flooting, lying too flat to his foot; or by going long bare-foot, and sometime by the hardness of the ground, and high lifting of the Horfe. And tho Horfes that be flat-footed, the coffins whereof are tender and weak, are most commonlysubject to this forance. The signes be these: The Horfe will halt on both his fore-legs, and go stiffely and creeping, as though he were half foundered. The cure according to Marty is thus: Take off his flooes, pare him as little as may be; and if the flooes be not easie, that is to say, long, large, and hollow enough, then make them fo, and then tack them on again with four or five nails. That done, flop his feet with Bran, and Hogs-grease boiled together, so hot as may be; and also cover all the coffin round about with the same, binding all in together with a cloth, and a lint fastened about the joynet, renewing it every day once, until it be whole, and give the Horfe during that while warm water; and let him stand dry and warm, and not be travelled until he be whole.

Of A Prick in the Sole of the Foot, by treading on a nail, or any other sharp thing that doth enter into the Foot.

Blundevile.

The signes be these: If a man be on his back when he treadeth on any such thing, he shall feel that the Horfe will lift up his foot, and covet to stand still to have help. And if it chance at any other time, the halting of the Horfe, and the hurt it self will shew. The cure according to Marty is thus: Pull off the flooe, and pare the foot; and with a drawer uncover the hole, making the mouch fo broad as a two penny piece, then tack on the flooe again. That done, flop it, by pouring into the hole Turpentine and Hogs-grease molten together, and lay some flax, or tow upon it; and then flop all the Horfes foot with Horfe-dung, or rather with Cow-dung, if you can get it; and splent it either with fitches, or else with an old flooe-sole, fo as the flopping may abide in, renewing it every day once until it be whole, and let the Horfe come in no wet. If this be not well cured, or looked to in time, it will caufe the hoof to break above, and so loothen round about, and perhaps to fall clean away. But if you fee that it begins to break above, then make a greater issue.
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Issue beneath by opening the hole wider, and taking more of the hole away, that the flesh may have the more liberty. Then take of Bone-armory half a quarter, Bean-flower, and two Eggs. Beat them, and mingle them well together, and make a plaster thereof upon Tow, and lay it round about the Crone, bind it fast on, and so let it remain the space of two days, and then renew it again, not failing to do every two days until you see it wax hard and firm above. For this plaster being restrictive, will force the humors to refort all downward, which must be drawn out with Turpentine and Hogs-grease as before, until it leave mattering, and then dry it up with burnt Allum beaten to powder, and thrown upon it, with a little flax laid again upon that, continuing so to do every day once, until it be hardened; and let not the Horse come in any wet, until he be whole.

Of Accloyd or Prickit.

Accloyd is a hurt that cometh of shooing, when a Smith driveth a nail in the quick, which will make him to halt. And the cure is: to take off the shooe, and to cut the hoof away, to lay the fore bare: then lay to it Wax, Turpentine, and Deer-sweet, which will heal it.

Of the Fig.

If a Horse having received any hurt, as before is said, by nail, bone, splent, or stone, or otherwise in the sole of his foot, and not be well dressed and perfectly cured, there will grow in that place a certain supernuous piece of flesh, like a Fig: and it will have little grains in it like a fig, and therefore is rightly called of the Italians, Unfo. that is to lay, a Fig. The cure whereof according to Martin is thus: Cut it clean away with a hot Iron, and keep the flesh down with Turpentine, Hogs-grease, and a little Wax laid on with Tow, or Flax, and dip the hole hard, that the flesh rise not, renewing it once a day until it be whole.

Of a Retreat.

This is the pricking of a nail, not well driven in the shooing, and therefore pulled out again by the Smith, and is called of the Italians, Tratta maffa. The cause of the pricking may be partly the rash driving of the Smith, and partly the weakness of the nail, or the hollowness of the nail in the shank. For if it be too weak, the point many times bendeth away into the quick when it should go right forth. It flatteth and thieveth in the driving into two parts, whereof one part slatheth the quick in pulling out, or else perhaps breaketh clean afunder, and so remaineth still behind, and this kind of pricking is worse than the cloying, because it will rackle worfe, by reason of the flaw of Iron remaining in the flesh. The signe be there: If the Smith that driveth such a nail be so lewd, as he will not look unto it before the Horse depart, then, there is no way to know it, but by the halting of the Horse, and searching the hoof firft with a hammer by knocking upon every clinging. For when you knock upon that nail, where the grief is, the Horse will shrink up his floor. And if that will not serve, then pinch or grip the hoof with a pair of pinfons round about, until you have found the place griev’d. The cure according to Martin is thus: Firft, pull off the shooe, and then open the place griev’d with a Butter or Drawer, so as you may perceive by feeling or seeing, whether there be any piece of nail or not; if there be, to pull it out, and to stop the hole with Turpentine, Wax, and Sheeps-sweet molten together, and so pour’d hot into the hole, and then lay a little Tow upon it, and clap on the shooe again, renewing it thus every day, until it be whole, during which time, let not the Horse come in any wet, and it must be so stopped, though it be but prickt without any piece of nail remaining. And if for lack of looking to it in time, this retreat cause the hoof to break above, then cure it with the Plaster restrictive in such order as is mentioned in the last place saving one before this.

Of Cloying.

Cloying is the pricking of a whole nail, called of the Italians, Inciduitura; passing through the quick, and remaining still in the same, and is clenched as other nails be, and so causeth the Horse to halt. The griev’d place is known by searching with the hammer and pinfons, as is before said: If the Horse halt immediately, then pull off his shooe, and open the hole, until it begin to bleed; and if it with the Ointment aforefaid, in the same page of the Retreat, and clap on the shooe again; and the hoof may be so good, and the harm so little, as you may travel him immediately upon it, but if he be rankled, then renew the stopping every day once, let him come in no wet, until it be whole.
of loosening the Hoof.

This is a parting of the hoof from the crocet, called of the Italians, Diffolatura del ungua, which it be round about, it cometh by means of foundering; if in part, then by the anguth caused by the pricking of the canel nail, piercing the sole of the foot, or by some Quetter-bone, Retreat, Gravelling, or Cloying, or such like thing: The signes be these: When it is loosened by foundering, then it will break first in the fore-part of the Crocet, right against the toes, because the humor doth covet always to descend towards the toe. Again, when the pricking of a canel nail, or such like cankered thing is the cause, then the hoof will loosen round about, equally even at the first. But when it proceedeth of any of the other hurts last mentioned: then the hoof will break right above the place that is offended, and most commonly will proceed no further. The cure according to Martin is thus: First, of which ever of these causes it proceeds, be sure to open the hoof in the sole of the foot, so as the humor may have free passage downward, and then refrain it above with the Plaister restrictive before mentioned, and in such order as is there written, and also heal up the wound, as is before taught in the Chapter of a prick in the sole of the foot.

Of casting the Hoof.

This is when the coffin falleth clean away from the foot, which cometh by such causes as were half rehearsed, and is so apparent to the eye, as it needeth no signes to know it. The cure according to Martin is thus: Take of Turpentine one pound, of Tar half a pinte, of unwrought Wax half a pinte: Boil all these things together, and stir them continually until they be thoroughly mingled, and compact together. Then make a Boot of Leather with a good strong sole meet for the Horse's feet, to be laced or buckled about the pattern; and dress his foot with the Salve aforefaid laid upon the Flax or Tow, and boil or fluffe his foot with soft Flax, so as the Boot may griewe him in no manner of way, renewing it every day once until it be whole, and then put him to grafts.

Of the Hoof-bound.

This is a shrinking of all the whole hoof. It cometh by drought; for the hoofs perhaps are kept too dry, when the Horse randeth in the stable, and sometimes by means of heat, or of over-draught shooing. The Italians call the Horse thus griev'd Insoluzione. The signes be these: The Horse will halt, and the hoofs will be hot; and if you knock on them with a hammer, they will sound hollow like an empty bottle, and if both the feet be not hoof-bound, the fore foot will be ieller than the other, and appear fo to the eye. The cure according to Martin is thus: Pull off the shoes, and thooce him with half Moon-shooes called Lunette; the order and shape whereof you shall finde among the Farriers, and rafe both the quarters of the hoof with a drawcr, from the crocet unto the sole of the foot, so deep as you shall see the dew it self come forth. And if you make two rases on each fide, it shall be so much the better, and inlarge the hoof the more. That done, anoint all the hoof about, next unto the crocet round about, with the Ointment prefcribed before in the Chapter of casting the hoof, continuing to do every day once until he begin to amend for the space of a month; and if he goeth not well at the months end, then take off the half shoes, and pare all the soles, and thrufhiles, and all so thin as you may see the dew come forth, and tack on a whole shoe; and stop all the foot within with Hogs-grease and Bran boiled together, and laid hot to the foot; renewing it dayly once the space of nine days, to the intent the sole may rife. But if this will do no good; then take away the sole clean, and clap on a whole shoe, and stop the foot with Nettles and Salt brayed together, renewing it once a day, but not over hard, to the intent the sole may have liberty to rife, and being grown again, let him be shod with the lunets, and sent to grafts.

Of the running Frush.

The Frush is the tenderest part of the hoof towards the heel, called of the Italians, Fetone, and because it is fashioned like a forked head, the French men call it Fourbette, which word our Farriers, either for not knowing rightly how to pronounce it: or else perhaps for earneifs sake of pronunciation, do make it a monyllable, and pronounce it the Frush; in which Frush breedeth many times a rottenness or corruption proceeding of humors that cometh out of the leg, whereby the leg is kept clean from the Windgals, and all other humors and feelings by means that the humors have passage that way. Notwithstanding the discommodity of the offence is greater then the commodity, because it maketh the Horse's feet so weak and tender, as he is not able to treader upon any hard ground. The signes be these: The Horse will halt, and specially when the passage of the humor is slop with any gravel gathered in the Frush, and not being slop it will continually run, the flavour whereof will be so strong, as a man is not able to abide it, and in some places it will look raw. The cure according to
Off the Horse.

The Fruth is the tenderest part of the sole of the foot, which by humors inflining many times down from the legs, occasion inflammations in that part, which may easily be perceived by the inflammation of the same. The cure is thus: First having taken off the shoe, pare away all the corrupted and naughty matter, until the fore look raw, then nail on a hollow shoe made for the same purpose; and take of foot a handful, of the juice of Houfe-leek and of Cream, with the white of an Egge or two, as much as will thicken the fame: with this stop up the fore, and splint it, fo as it may not fall out, renewing it until it be whole; but during the cure, have regard that the fore foot touch not any wet, for that is very much hurtful.

Of disøves or griefs indifferently incident to any part of the body, but fiø of the Leprofe, or universal Mangines, called of the old Writers Elephantia.

This is a cancred Mangines, spreading over all the body, which cometh of abundance of melancholy, corrupt and filthy bloud. The signes be these: The Horse will be all mongy and furry, full of scabs, and raw spots about the neck, and evil favoured to look on, and always rubbing and fratching. The cure according to Martin is thus: Let him bloud the firft day in the one side of the neck, and within two days after that, in the flank veins; and fall of all, in the vein under the tail. Then wash all the fore places with Salt brine, and rubbing them hard with a wip of thraw hard twisted, fo as they may bleed well, and be all raw. That done, anoint the place with this Ointment: Take of Quick-silver one ounce, of Hogs-greas one pound, of Brimtone beaten into powder a quart, of Rape Oyl a pinte; mingle these things well together, until the Quick-silver be thoroughly incorporated with the rest; and having anointed all the raw places with this Ointment, make it to sink him in the flesh, by holding and weeping up and down over it a hot broad bar of Iron, and then touch him no more again the space of two or three days; during which time, if you see that he rubbeth still it, any place, then rub that place again with an old Horse-combe, to make it raw, and anoint it with fresh Ointment. But if all this will not help, then with a hot Iron, and blunt at the point, fo big as a mans little finger; burn all the mongy places, making round holes, passing only through the skin, and no further. For which intent it shall be needful to pull the skin first from the flesh, with your left hand, holding it still until you have thruf the hot Iron through it, and let every hole be a span off one from another, and if need be, you may at oint those holes with a little Sop, and let the Horse be thin dieted, during his curing time.

Of the Farcin, called in Italian of some il verme, and of some Tarcina.

This kind of creeping Ulcer growth in knots, following a long some vein, and it proceedeth of corrupt bloud ingendered in the body, or else of some outward hurt, as of spur-galling, or the biting of some other Horse; or of biting of ticks, or of Hogslice, or such like extrinquities: Or if it be in the legs, it may come by injuring it. It is easily known, partly by the former description, and also it is apparent to the eye. The cure according to Martin is thus: Let him bloud in that vein where it cometh, as nigh the fore place as may be, and let him bleed well; then fire every knot one by one, taking the knot in your left hand, and pulling it so hard as you can from his body, to the intent you may better pierce the knot, with a blunt hot Iron, of the bignes of a mans fore-finger, without doing the body any hurt, and let out the matter, leaving none unburnt, be it little or much. That done, anoint every knot so burned with Hogs-greas warmed every day once, until the coars be ready to fall away: and in the mean time prepare a good quantity of old Urine, and when you see the coars ready to fall, boil the Urine, and put therein a little Copper and Salt, and a few strong Nettles, and with that water being warm, wash out all the coales, and the corruption. That done, fill every hole immediately with the powder of flesh's time, continuing thus to do every day once, until the holes be closed up; and if any be more ranker then other, fille those with Verdigrase, and during this cure let the Horse be thin dieted, that is to say, with straw and water only, unless it be now and then to give him a loaf of bread; for the lower he be kept, the sooner he will be whole. And in any case let his neck be yoked in an old bottomless spal, or elite bna.
with short knives to keep him from licking the fores, and the left rein hath, the better. Or do thus:
Take a good great Dock-root clean scraped, and cut thereof five little rundles or cakes to be used as followeth First with a knife make a slit right down in the Horse's fore-head three inches long, then with a Cornet loosen the skin within the flesh, so as you may easily put therein five rundles of Dock, that is to say, two on each side of the slit one above another, and put the slit rundle in the very midle between the other four: that done, fasten to each of the slits two short Shoookers ends, to serve as laces to tie in the forefaid, rundles, so as they may not fall out, and cleanse the fore every day once, for the venture of the root is such, as it will draw all the filthy matter from any part of the body: yes, though the Farcion be in the hinder-legs, which matter is to be wiped away from time to time, and new roots be thruf into the slit according as you fee it needful.


Of the Farcion.

Marham.

The Farcion is a vile diseafe, ingendered of ill blood, flegmatick matter, and unkindly feeding; it appeareth in a Horse like unto little knots in the flesh, as big as a Hasel-nut; the knots will encrease daily and inflame, Impoftume, and break; and when the knots amount to threescore, they will every night after breed so many more, till they have over-run the Horse's body, and with the poiyon, which is mighty and aloft strong soon bring him to his death: this diseafe is very infectious and dangerous for some Horses, yet if it be taken in any times, it is eafe to be holpen: The cure thereof is in this manner: Take a fhrap Bodkin, and thru it through the neither part of his nose, that he may bleed: or if you will, to let him bleed in the neck-vein shall not be amis, then feaft the knots, and as many as are foft fance them and let them run; then take strong Lyce, Lime, and Allum, and with the fame bath all his fores, and it fhall in fhort space cure him. There is also another manner of curing this diseafe, and that is thus: Take a fhrap lance-kife, and in the top of the Horses fore-head, put between his eyes, make a long flit even to the skull: then with a blunt iftrument for the purpofe los the flesh from the fcalp a pretty compafs: then take Carret-roots cut into little thin round pieces, and put them between the skin and the skull, as many as you can, then clofe up the wound, and once a day amont it with frefh Butter: This is a moft fane and approved way to cure the Farcion, for look how this wound thus made, fhall rot, waft, and grow fownd, fo fhall the Farcion break, dry up, and be healed, because all the poiyons that feedeth the diseafe fhall be altogether drawn into the fore-head, where it fhall die and waithe away. The only fault of this cure is, it will be somewhat long, and it is a fowl eye-fore until it be whole. Some use to burn this fortune, but that is naught and dangerous, as whofo proves it fhall finde.

A moft approved medicine to cure the Farcion.

Marham.

Take of Aqua-vite two spoonfuls of the juice of Herb of grace as much; mingle them together, then take of Plegants or Bal of Flax or Tow, and fleep them therein, and flop them hard into the Horses ears; then take a needle and a thread, and ftitch the tips of his two ears together, by means whereof he cannot ftake out the medicine, and fume him thus but three feveral mornings, and it will kill any Farcion whatfoever, for it hath been often approved.

Another medicine of the fame.

Silt every hard kernel with a fhrap knife, and fill the hole with an Ointment made of old Lard, Sope, and gray Salt, for that will eat out the coar, and caufe it to rot, and fo fall out of the own accord.

Of the Canker, called of the Italian, il Camaro.

Blundevile.

A Canker is a filthy creeping Ulcer, fretting and gnawing the fleshe in great breadth. In the beginning it is knotty, much like a Farcine, and spreadeth itself into divers places, and being exulcerated, gathereth together in length into a wound or fore. This proceedeth of a melancholy and filthy blood ingendered in the body, which if it be mixt with Salt humors, it caufeth the more painful and grievous exulceration, and sometime it cometh of fome filthy wound that is not cleanly kept, the corrupt matter whereof cankereth other clean parts of the body. It is eafe to be known by the description before. The cure whereof according to Marin is thus: First let him blood in thofe veins that be next the fore, and take enough of him. Then take of Allum half a pound, of green Copperas, and of white Copperas, of each one quarter, and a good handful of Salt: Boil all these things together in fair running water, from a potiche to a quart. And this water being warm, wafh the fore with a cloth, and then sprinkle thereon the powder of unfeck't lime, continuing fo to do every day once the space of fifteen days: and if you fee that the lime do not mortifie the rank flesh, and keep it from spreading any further, then take of black Sope half a pound, of Quick-silver half an ounce, and beat them together in a pot, until the Quick-silver be fo well mingled with the Sope, as you can perceive none of the Quick-silver in it. And with an Iron flafe, after that you have wafted the fore with the Strong water aforefoied, cover the wound with this Ointment, continuing to do every day once, untl the Cankey leave spreading abroad. And if it leave spreading, and that you fee the rank flesh is mortifie;
Of the Horse.

Fistula is a deep hollow crooking Ulcer, and for the most part springs of malignant humours, ingendered in some wound, fore, or canker, not thoroughly healed. It is easy to know by the description before. The cure according to Martin is thus: First, search the depth of it with a quill; or with some other instrument of Lead, that may be bowed every way, meet for the purpose. For unlefs you finde the bottom of it, it will be very hard to cure: And having found the bottom, if it be in such a place as you may boldly cut, and make the way open with a lancet or rafor, then make a slit right against the bottom, so as you may thrust in your finger, to feel whether there be any bone or gristle perfified, or spongious or loose flesh, which must be gotten out, and then tent it with a tent of flux dip in this Ointment: Take of Hony a quartem, and of Verdigrise one ounce beaten into powder. Boil them together, until it look red, straining it continually, let it run over; and being lake-warm, drefs the tent wherewith, and bolster the tent with a bolster of flux. And if it be in such a place, as the tent cannot conveniently be kept in with a band, then stuff on each side of the hole, two ends of Shoemakers thread right over the bolster to keep in the tent, which ends may hang there as two laces, to tie and untie at your pleasure, renewing the tent every day once until the fore leave mattering. And then make the tent every day leffer and leffer, until it be whole. And close it up in the end, by sprinkling thereon a little fleckt lime. But if the Fistula be in such a place as a man can neither cut right against the bottom, or nigh the fame; then there is no remedy, but to pour in some Strong-water, through some quill, or such like thing, so as it may go to the very bottom, and dry up all the filthy matter, dressing him so twice a day, until the Horfe be whole.

Of an Aubury.

This is a great spungy Wart full of bloud, called of the Italian, Mer, or Self, which may grow in any place of the body, and it hath a root like a Cocks bone. The cure according to Martin is thus: Tie it with a thread, so hard as you can pull it, the thread will eat by little and little in such sort, as within seven or eight days it will fall away by it self. And if it be so flat as you can bind nothing of it, then take it away with a sharp hot Iron, cutting it round about, and so deep as you may leave none of the root behinds, and dry it with Verdigrise. Rufius faith, that if it grow in a place full of finewes, so as it cannot be conveniently cut away with a hot Iron, then it is good to eat out the core with the power of Rasafar, and then to stop the hole with flux dip in the white of an Egg for a day or two; and latly, to dry it up with the power of unbleck't Lime and Hony, as before is taught.

Of Wounds.

Wounds come by means of some stripe or prick, and they are properly called wounds, when some whole part is cut or broken. For a wound according to the Phyfitians, is defined to be a solution, division, or parting of the whole; for if there be no solution or parting, then methinks it ought rather to be called a bruise then a wound. And therefore wounds are most commonly made with sharp or piercing weapons, and bruises with blunt weapons. Notwithstanding, if by such blunt weapons, any part of the whole be evidently broken, then it ought to be called a wound as well as the other: Of wounds some be thallow, and some be deep and hollow: Again, some chance in the flethy parts, and some in the bony and finewie places: And those that chance in the flethy parts, though they be very deep, yet they be not so dangerous as the other; and therefore we will speak first of the most dangerous: If a Horfe have a wound newly made, either in his head, or in any other place that is full of finewes, bones, or gristles: First, Martin would have you to warm the wound well with white Wine well warmed: That done, to search the bottom of the wound with some instrument meet for the purpose, suffering it to take as little winde in the mean while as may be.

Then having found the depth, stop the hole close with a clot, until your salve be ready: Then take of Turpentine, of Mel Rosatum, of Oyl of Rofes, of each a quartem, and a little unwright Wax, and melt them together; and if it be a cut, make a handfome roll of clean picked Tow, fo long and fo big as may fill the bottom of the wound, which for the most part is not so wide as the mouth of the wound: then make another roll greater than that, to fill up the rest of the wound, even to the hard mouth, and let both thefe rolls be anointed with the ointment aforesaid lake-warm: But if the hurt be like a hole made with some prick, then make a little tent, such as a man may reach the bottom, anointed with the aforefaid Ointment, and bolster the fame with a little Tow: And if the mouth be not wide enough, fo as the matter may easily run forth, if it be in

F f 2

such
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If such place you may do it without hurting any fine, then give it a pretty slit from the mouth downward, that the matter may have the freer passage, and in any wise have a special regard, that the tent may be continually kept in by one means or other, as by binding or tying the same with the ends of Shoemakers thread asis aforesaid. And if the hole be deep, and in such place as you may not then make your tent of a Spunge, and so long as it may reach to the bottom, and the tent being made somewhat full, with continual turning and wringing of it, you shall easily get it down, and then dress the wound with this twice a day, cleaning the wound every time with a little white Wine lukewarm. For this Spunge, anointed with the Ointment aforesaid, will both draw and suck up all the filthy matter, and make it so fair within as is possible: and as it beginneth to heal, so make your tent every day leffer and leffer, until it be ready to close up, and never leave tenting it, so long as it will receive a tent, be it never so short. For hasty healing of wounds breedeth Fistula's, which properly be old wounds, and therefore must be cured like Fistula's.

Of Wounds in the flabby parts.

Use the same Ointment and manner of proceeding as before. And if the wound be large, then to keep in the tent or roll, you shall be fain to put two or three Shoemakers ends on each side of the fore, leaving them so long as you may tie them together, and loofen them when you will like laces.

Of old Ulcers or Wounds.

To cure an old Ulcer, as Fistula, Gall, or Botch, or any new received wound, these are the best Salves, and most approved in mine experience: Take of Hony half a pinte, of Deer-sewe two ounces, of Versdiglaze beaten into powder as much; boil all these exceeding well upon the fire, then with the same luke-warm, tent or plaister any venemous fore, and it will recure it. If you take of Wax, Turpentine, Oyl of Roses, of Hogs-greas, of each like quantity, and half so much Tar as any one of the other simples; melt all these together, and being well incorporated together, either tent or plaister any wound, and it will heal it. Also, if you take the green leaves of Tobacco bruised, and put them into a green wound, they will heal it: the ashes of Tobacco burnt, if they be strew'd upon any fore that is near skinning, it will also skin it perfectly, and it will incarnate well, if the Ulcer be not too deep and dangerous. There be many other Salves, Plasters, and Unguents which I could set down; but since I have experienced these for most effectual, I omit the others as superfluous.

Of an hurt with an Arrow.

If the Horse be hurt with an Arrow, tent the hole with Hogs-greas and Turpentine molten together, renewing it every day once until it be whole.

Of pulling out Shivers or Thorns.

Artis faith, that if it be not very deep, Sop being laid unto it all night will make it to appear, so as you may pull it out with a pair of nippers. But if it be very deep, then you must open the place with a knife or lancet, and get it out, and afterward heal up the wound as hath been taught you before. Russius faith, that the roots of Reed being lamp't and mingled with Hony, will draw out any thorn or shiver: and so will Snails, as he faith, being lamp't and wrought with fresh Butter; and if the place be bawl'd, he faith it is good to mollifie it with Hogs-greas and Hony, which will asswage any new swelling, that come by stripe or otherwise.

Of bruisings or swellings.

Artis faith, First prick it with a steamen. Then take of Wine lees a pinte, as much Wheat-flowre as will thicken it, and an ounce of Cumin; boil them together, and lay this somewhat warm unto it, renewing it every day once until the swelling either depart, or else come to a head. And if it do, then lance it, and heal it up as a wound.

Of Sinsens, pricks, or bruised.

Take of Tar, and Wheat-flowre, and a little Oyl of Roses, and lay it hot unto the place. And if this do no good, then take Worms and Saltier Oyl fryed together, or else the Ointment of Worms, which you shall have at the Apothecaries, and one of these will knit it again, if it be not clean sunder.

Of
Of the Horse.

How to cure a wound made with Huareale/hs flet.

Marin faith; First seek with an instrument whether the pellet remain within or not, and if ye do, you must get it out with an instrument meet for the purpose. Then to kill the fire: Take a little Vermis, and thrust it into the wound with a feather, anointing it well within with the teather, and after that, stop the mouth fair and softly with a little soft flax, to keep the wind out; and on the outside, charge all the swelling with this charge: Take of Boile-smovy a quarter, of Linsef beaten into fine powder half a pound, of Bean-flowre as much, and three or four broken Egges, and of Turpentine a quarter, and a quart of Vinegar, and mingle them well together over the fire, and being somewhat warm, charge all the fore place with part thereof, and immediately clap a cloth, or a piece of leather upon it, to keep the wound from the cold air, continuating both to anoint the hole within with Vermis, and also to charge the swelling without; the space of four or five days, and at the five days end leave anointing of it, and tent it with a tent reaching to the bottom of the wound, and dipped in Turpentine and Hogs-greasen melt together, renewing it every day twice until it be throughly killed, which you shall perceive by the mattering of the wound, and by falling of the swelling: for so long as the fire hath the upper hand, no thick matter will issue out, but only a thin yellowish water, neither will the swelling affwage. And then take of Turpentine, washed in nine several waters, half a pound, and put thereon three yolks of Egges, and a little Saffron, and tent it with that Ointment, renewing it every day once until the wound be whole.

Of burning with Lime or any other fiery thing.

Marin faith; First wash away the Lime, if there be any, with warm water. Then kill the fire with Oyl and Water beaten together, drefling him so every day until it be all raw, and then anoint with Hogs-grease, and threw thereupon the powder of flecked lime, drefling him so every day once until it be whole.

Of the biting of a mad Dog.

If a Horfe be bitten with a mad Dog, the venom of his teeth will not only pain him extremely, but also infect all his blood, and make him to dye mad. The cure according to the old Writers is thus: Take of Goats dung, of fleis that hath laid long in Salt, and of the herb Ebulus, called of some Danewort, of each half a pound, and forty Walnuts. Stamp all these things together, and lay thereof unto the fore, and this will fack out the venom, and heal the wound. It is good also to give the Horfe Treacle, and Wine to drink: yea, and some would have the fore place to be fiered with a hot Iron.

Of hurts by tusks of a Boar.

If a Horfe be hurt with the tusk of a Boar, lay Vitriol, and Copperas thereunto, and the powder of a Dogs head being burned, but let the tongue be first pulled out and call away.

To heal the biting or stinging of Serpents.

Aurelius Russus faith: Take a good quantity of the herb called Saculaca, flamp it, and disfem-
er it with the milk of a Cow, that is all of one colour, and give him that to drink, and that will heal him.

Another Medicine for the same purpose.

Make a plaiuer of Onions, Hony and Salt, flamp and mingled together; and lay that to the fore place, and give the Horfe Wine and Treacle to drink. Abfrius would have you to give him white Pepper, Rhue, and Thyme, to drink with the Wine.

Of drinking of Horfe-leaches.

If a Horfe chance to drink Horfe-leaches, they will continually suck his bloud, and kill him. The remedy, according to Abfrius, is to pour Oyl into the Horfes mouth, which will make them to fall away and kill them.

Of swallowing down Hens dung.

If a Horfe swallow down Hens dung in his Hay, it will frett his guts, and make him to avoid filthy matter at the fundament. For remedy whereof, Abfrius would have you to give him drink made of Smallage-feed, Wine, and Hony, and to walk him throughly upon it, that he may empty his belly.
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**Blundevile.**

They be like Geese Lice, but somewhat bigger; they will breed most about the ears, neck, and tail, and over all the body. They come of poverty, and the Horse will be always rubbing, and scratching, and will eat his meat; and not prospere withal, and with rubbing, he will break all his mane and tail. The cure, according to Martin, is thus; Anoint the place with Sope and Quicksilver, well mingled together, and to a pound of Sope, purk half an ounce of Quicksilver.

**Markham.**

Here be Horses that will be Louise, and it cometh of poverty, cold and ill keeping, and it is oftenest amongst young Horses, and most men take little heed unto it, and yet they will die thereon. The cure is, to wash them three mornings together in Stau-aker and warm water.

**How to save Horses from the stinging of flies in Summer.**

A Noit the Horses coat with Oyle, and Bay-beries mingled together, or tie to the headd of his collar, a sponge dip in strong Vinegar, or sprinkle the stable with water wherein Herb-grace hath been laid in steep, or perfume the stable with Ivie, or with Calamint, or with Gith burned in a pan of coles.

**Of bones being broken out of joynt.**

Few or none of our Farriers do intermeddle with any such griefs, but do refer it over to the Bonefetter, whose practised hand, I must needs confesse, to be needful in such busines. Notwithstanding, for that it belongth to the Farriers art, and also for that the old writers do make some mention thereof, I thought good not to passe it over altogether with silence. Albeit, they speak only of fractures in the legs beneath the knee. For they make little mention or none of bones above the knee, taking them to be incurable, unleffe it be a rib, or such like. If a bone then be broken in the leg, it is easie to perceive, by feeling the roughness and inequality of the place griev'd, one part being higher then another. The cure whereof, according to Abijtan and Hierocles, is in this fort:

First put the bone again into his right place: that done, wrap it about with unwash't wool, binding it fast to the leg with a small llenen roller, foaked before in Oyl and Vinegar mingled together. And let that roller be laid on as even as is possible, and upon that again lay more wool dip't in Oyl and Vinegar, and then splent it with three splents; binding them fast at both ends with a thong, and let the Horses leg be kept straight, and right out, the space of forty days, and let not the bones be loosen'd above three times in twenty days, unleffe it thinketh and do require to be new drest, and bound again. But fail not every day once, to pour on the fore place, through the splents, Oyl and Vinegar mingled together. And at the forty dayes end, if you perceive that the broken place be dower'd together again with some hard knob or gristle; then loosen the bones, so the Horse may go fair and softly, using from that time forth to anoint the place with some softe greaze or Ointment.

**Blundevile.**

If a Horses knee or shouder be clean out of joynt, and no bone broken, Martin faith the readieft way is, to bind all the four legs together, in such fort as hath been taught before in the Chapter of Incoirding, and then to hoifie the Horses somewhat from the ground, with his heels upward; so shall the weight and poise of his body, cause the joynt to shoo in again into the right place: for by this means he pleasured not long since a friend and neighbour of his, who going with his Cart from S. Alburn, towards his own house, his Thiller fell and put his shouder clean out of joynt, so as he was neither able to rife, nor being holpen up, could stand on his legs: to which mischance Martin being called, made no more ado, but taking his friends Cart-rope, bound the Horses legs all four together, and with a lever being laid upon the Cart wheel, they putting their shoulders to the other end, hoifie up the Horfe clean from the ground, the poife of whose body made the bone to return into his
Of the Horse.

his right place, with such a loud knack or crack, as it might be heard a great way off, and the Horse immediately laid the use of his leg, so as he drew in the Cart, and went also safe home without complaining thereof ever after.

Certain receipts of Plasters, very good for broken bones, taken out of the old Authors, writing of Horse-ouch crafts.

T Aked of Spuma argenti, of Vinegar, of each one pound, of Saller Oyl half a pound, of Ammoniacum, and Turpentine, of each three ounces, of Wax, of Robin, of each two ounces, of Gumum, of Pitch, of Vetoigniente, of each half a pound. Boy the Vinegar, Oyl and Spuma argenti together, until it wax thick, then put thereunto the Pitch, which being molten, take the pot from the fire, and put in the Butumen, without stirring it at all; and that being also molten, then put in all the rest, and let the pot again to the fire, and let them boy all together until they be all united in one: that done, strain it, and make it in a plaster form, and this is called Hieroles Plaster.

Another receipt for broken bones.

T Aked of liquid Pitch one pound, of Wax two ounces, of the purest and finest part of Frankincense, of each ounce, of Ammoniacum four ounces, of dry Rose, and of Gallacum, of each one ounce, of Vinegar two pints. Boy first the Vinegar and Pitch together, then put in the Ammoniacum, dissolve first in Vinegar, and after that, all the rest of the aforefaid drugs, and after they have boyed together, and be united in one. Strain it, and make it plasterwise; and this is called Emplesium plaster, that is to say, the Yellow plaster.

An Ointment for broken bones.

T Aked of old Saller Oyl a quart, and put thereunto of Hogs grease, of Spuma nitri, of each one pound, and let them boy together until it begin to bubble above, and let this ointment be very warm when you use it.

Hitherto of all the diseases belonging to a Horse. Now therefore my promise was made unto you to speak of those things wherein the cure of all diseases do conftit, that is to say, in letting of blood, in taking up of veins, in purging, and in giving the fire; yea, and also order it let bindeth me to treat of the said things presently, and first of letting blood.

In how many veins a Horse may be let blood, and to what end.

As touching the order, time of the year, Moon, and day, and other circumstances belonging to letting of blood, we have sufficiently spoken already in the keepers Office, in the 22 Chapter. I rereit therefore here to shew you what veins shoul be opened when the Horse is sick of any disease, according to Vegetius opinion. But first I will rehearse unto you once again, in how many veins a Horse may be let blood, and the rather for that I follow Vegetius. A Horse then may be let blood in the two Temple veins. Item, in the two eye veins, which are eafe to finde in the face of the Horse, somewhat beneath the eyes. Item, in the two palat veins of the mouth. In the two neck veins. Item, in the two palat veins which are in the breast. Item, in the two fore thigh veins. Item, in the four shalke veins before. Item, in the two toe veins before. Item, in the two side veins, which may be otherwyse called Shank veins. Item, in the tail vein. Item, in the two banch veins. Item, in the four hough veins. Item, in the four shalke veins behind. Item, in the two toe veins behind; so that by this account, a Horse may be let blood in 31 veins. All which veins are eafe enough to know, because that every one lyeth in a little gutter, which by feeling softly with your finger, you shall finde immediately.

And Vegetius faith, that if any Horse be pained with any grief in his head, as with ach, heavenes, frenzy, falling-evil, or such like, then it is good to let him blood in the two temple veins with a feiam. If his eyes be waterish, bloodshotten, or grieved with pin, web, or haw, then it is good to strike the eye vein with a feiam. If he have any heavenes or weariness of body, or be diathed in the throat with the strangullion, quinsz, or swelling of the arteries, either within or without, then it is good to let him blood in the mouth, in the palat veins with a Corner. If he be vexed with an Ague, or with one other disease universally hurtung the body, then let him blood in the neck veins. If his grief be in the lungs, liver, or in any other inward member, then let him blood in the brest veins, which we called before the palat veins. If he be grieved in the shoulder, then let him blood in the fore-thigh veins above the knee with a lancet, and that very warily, because that place is full of finewes, and if he be grieved in his joints, then let him blood in the shalke veins, and that warily, because that place is also full of finewes.

And if he be foiled on his fore-feet, by foundering or otherwyse, then let him blood in the toe veins, making way first with your drawer, or Corner in the hoof to come to the vein. If he be diathed in the kidnes, reins, back, or belly, then let him blood in the flank veins, and in the tail. If he hath any grief in his hips, or houghs, then let him blood in the hip or hough veins. And if
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his hinder-legs, joints, or feet be griev'd, then let him bloud in the shakel veins, and toe veins, as is aforesaid.

The order of taking up Veins, and wherefore it is good.

Blandwine.

The order observed by Martin, is in this fort: First, if the Horfe be very curf, and threfh'd, then call him upon a dunghill, or fome straw, then having found the vein that you would take up, marke well that part of the skin which covereth the vein, and pull that fomewhat afide from the vein with your left thumb, to the intent you may flit it with a Razor, without touching the vein: And cut no deeper then only through the skin, and that longift wife, as the vein goeth, and not above an inch long. That done, take away your Thumb, and the skin will return again into his place, right over the vein, as it was before: Then with a Coronet uncover the vein and make it up, and being bare, thrufh the Coronet underneath it, and raife it up, fo as you may put a Shoomakers threed underneath, somewhat higher then the Coronet, to knit the vein when time is. And if your Coronet had a hole in the small end to put in the threed, it fhould be the eafieft done. Then the Coronet flanding fo flit, flit the vein longift wise that it may bleed, and having bled fomewhat from above, then knit it up with a fure knot, fomewhat above the flit,uffering it to bleed only from beneath, and having bled sufficiently, then knit up the vein also beneath the flit with a fure knot, and till the hole of the vein with Salt, and then heat up the wound of the skin with Turpentine and Hogs greafe molten together, and laid on with a little Flax. The taking up of veins is very neceffary, and doth eafe many griefs in the legs: for the taking up of the fore-thigh veins eafe Farcins, and swellings of the legs; the taking up of the shakel veins before, eafe the Quarter-bone and swelling of the joints, feabs, and cratches. The taking up of the hinder veins, helpeith the Farcin, Swellings, and both the Spavens; the taking up of the shakel veins behind, helpeith swelling of the joints, the pains, and kibed heels, and fuch like difeafes.

Of Purging with Purgation or Glyfter.

Purgations is defined by the Phyficians, to be the emptying or voiding of superfluouf humors, annoying the body with their evil quality. For fuch humors bring evil juice and nutriment, called of the Phyficians Cacochymia, which when it will not be corrected or holpen with good diet, alteration, nor by the benefit of nature and kindly heat, then it muft needs be taken away by Purging, Vomit, or Glyfter. But forasmuch as Horfes are not wont to be purged by Vomit, as men be, I will speak here only of Glysters and Purgations. And first becaufe a Horfe is griev'd with many difeafes in his guts, and that nothing can purge the guts fo well as a Glyfter, and efppecialy the thick guts, I wish that our Farriers would learn to know the diversities of Glysters, to what end they ferue, and with what drugs or fimples they fhould be made, for as the difeafe requireth, fo muft the Glyfter be made; fome to allay griefs and fcarpifes of humors, fome to bide, fome to loofen, fome to purge evil humors, fome to cleanfe Ulcers: but our Farriers ufe Glysters, only to loofen the belly, and for no other purpole; yea, few or none do that unleef he be Martin, and fuch as he hath taught, who is not ignorant that a Glyfter is the beginning of purging. For a Glyfter, by cleaning the guts, refrefheth the vital parts, and prepareth the way before. And therefore whenever a Horfe is furfeited and full of evil humors, needing to be purged, and specially being pain'd in the guts, I would with you to begin firft with a Glyfter. left by purging him by medi- cine upon the sudden, you flir up a multitude of evil humors, which finding no palage downward, because the guts be fopit with winde and dregeges, do strike upwards, and fo perhaps put the Horfe in great danger.

But now you shall understand, that Glysters be made of four things, that is to fay, of Decoctions, or Drugs, of Oyls, or fuch like unchift matters, as Butter and foft greafe, and fourthly of divers kinds of Salt to provoke the virtue expellive. A Decoction is as much to fay as the broth of certaine hearts or fimples boyled together in water till the third part be confume. And sometimse in deed of fuch Decoction, it fhall be needfull perhaps to ufe fome fat broth, as the broth of Beef, or of Sheeps heads, or Milk, or Whay, or fome other fuch like liquor, and that perhaps mingled with Honey or Sugar, according as the difeafe fhall require, the Glyfter to be either Lentive, that is to fay, eating pain; or Glutinative, that is, joyning together; or elfe Abferfive, that is to fay, cleaning or wiping away filthy matter, or which Decoction of broth being drained, you fhall need to take three pints or a quart at the leaft. And then into this, you may put fuch drugs as fhall be needfull to the weight of three or four ounces, according as the fimples fhall be more or leffe viol- ent. Or Oyl at the leaft halfe a pint, and of Salt two or three drams, and then to be mingled luke-warm with a horn or pipe made of purpole, when the Horfe is not altogether full paunch'd, but rather empty, be it either in fore-morning, or after-morning. And as touching the time of keeping Glysters in the body, you fhall understand, that to Glysters abferfive half an hour or leffe may suffice: to Glysters Lentivse, a longer time if it may be: and to Glysters Glutivse, the longest time of all is most needful.
Purgations for Men may be made in divers sorts and forms; but Horfes are wont to be purged only with pilis, or else with purging powders put into Ale, Wine, or some other liquor. But the simples whereof such pilis or powders be made, would be chosen with judgment and aptly applied, so as you may purge away the hurtful humors, and not the good. Learn first therefore to know with what humor or humors the Horse is griefed, be it Choler, Phlegm, or Melancholy, and in what part of the body such humors do abound; then what simples are best to purge such humors, and with what property, quality, and temperaments they be induced. For some be violent and next cousins to poyson, as Scammony, or Colocynthis. Some again are gentle, and rather mean than medicines, as Manna, Cassia, Whay, Prunes, and fuch like. And some again be neither too violent, nor too gentle, but in a mean, as Rub rhubarb, Garriek, Sene, Aloes. The old men did use much to purge Horfes with the pulp of Colocynthis, and sometime with the roots of Wilde Cowcumber; and sometime with the broth of a foated Whelp mingled with Nitrum, and divers other things, whereof I am sure I have made mention before in the curing of Horfes diseafes.

Notwithstanding I would not wish you to be rash in purging a Horse after the old mens example. For as ther simples many times be very violent, so the quantities thereof by them prescribed are very much, and dangerous for any Horfe to take in these days, in the which neither man nor beast, as it seemeth, is of fuch force or strength as they were in times past. And therefore wherely you would purge him with such like kindes of Purgations as Martin writeth, whereof you have example before in divers places; and whensoever you lift for knowledge faking to deal with other simples to prove them firt upon fuch Jades as may well be spared. For whosoever mizeth to purge a Horfe well, that is, to fhow him good and no hurt, had need to consider many things: as the nature of the Horfes diseafe, and the Horfes strength: also the nature, strength and quantity of the medicine that he minifieth: the Region, or COUNTRY, the time of the difafe, the time of the year and day. For as the diseafes and evil humors causing fuch diseafes are divers, fo do they require to be purged with divers medicines, diversly compounded, wherein confifteth a point of Art to be learned at the Phytifians hands, and not at mine.

Again, weak, delicate, and tender Horfes may not be purged in fuch forte: as thofe that be of a strong lurdy nature. And therefore in fuch cafes the quality and quantity of the simples is not a little to be confidered: neither is the hotnefs or coldnefs of the Region to be neglected, nor the time of the difafe. For some require to be purged in the very beginning: fome not until the matter be thorougly digefed: and though the difafe proceed perhaps of cold and cold humors, yet a man may not minifher fuch hot things in Summer, as he would do in Winter, nor in the contrary cafe, fuch cold things in Winter as he would in Summer. And therefore the time and reafon of the year is alfo to be obfervet: yea the day and time of the day. For the more temperate the day is, the better; not in an extreme hot day, for making the Horfe to faint; nor yet when the winde bloweth in the cold North, for that will fop and hinder the working of the medicine, but rather in a temperate moift day, when the winde is in the South, if it may be; for that will further and help the working of the medicine, and make the body loofe and soluble.

Again for a Horfe, whether you purge him with pilis or drink, it is best for him (as Martin faith) to take them in the morning, after that he hath fafted from meat and drink all the night before. And having received his medicine, let him be walked up and down, one hour at the leaft, and then let him up, and fuffered to fland on the bit two or three hours without any meat, but in the mean time fee that he be well littered, and warm covered: and three hours after, offer him a little of a warm maff made with Wheat-meal, or with Bran, or elle with ground mault. Give him little meal, or none until he be purged: all which things have been shewed you before in divers places, and therefore I think it not good to be tedious unto you with often recital thereof.

Of Cauterization, or giving the fire, as well actual as potential.

Forasmuch as the Fire is judged of all the old Writers to be the chiefest remedy, and as it were the laft refuge in all diseafes almost whereunto a Horfe is subjed, I thought good therefore to talk of it in this place; and the rather, for that few or none of our Farriors, unless it be Martin, or fuch as have been taught, do know how to give the fire, or to what end it ferveth. But first you fhall understand, that according to the learned Chirurgions, yea, also according to my old Authors, there be two kindes of Cautery, the one actual, and the other potential. The Cautery actual is that which is done only by fiering of the grievedy place with a hot Iron. The potential Cautery is done by applying unto the grievede place fome medicine corrosive, putrefactive, or cautel. But we will speak firft of the actual Cautery, fhowing you whereunto it is good, then of what metal and fashion your instrument should be made, and finally how and when to ufe them.

Actual faith, that an actual Cautery moderately used, is a noble remedy to flop corruption of members, to refolute the compexion of the fame, and alfo to flanch bloud. Howbeit you must beware (faith he) that you touch not the fines, cords, or ligaments, let the member be weakened, or that the Cramp enueth. Vegetius also writing of Horfe-leach-craft, praifeth the actual Cautery very much, speaking in this forte: The actual Cautery faith he, bindeth togeth
Cauteries Potential, as Johannes Vigo faith, are medicines Corroffive, Putrificative and Calulick.

This word Corroffive, is derived of the Latin word Cordo, which is as much to say, as to gnaw and fret; and of such Corroffives, some be simple and some compound.

The simple, as Vigo faith, be such as these be, Roch Alum, as well burnt as not burnt, Spunge of the Sea somewhat burnt, Lime, red Coral, powder of Mercury. Compound Corroffives be thebe, Unguentum Apofolorum, Unguentum Egyptianum, Unguentum Ceracum. Medicines Putrificative, called of the learned fort, Sepice, according to Avisen, be those that have strength to corrupt the composition of the member, and to induce any farke like dead flesh, causing great pain; yea and Fevers, and therefore ought not to be minihibited but to strong bodies and in strong diseases, as in Carbuncles, Canker, Ulcers, and such like; and they be thebe, Aftenicke, Sublimate, Refalger, and order medicines compound therewith. Silioiu also addeth thereunto Sandaraca, Chryfcola, and Acuum, but he doth not agree with Avisen in the description of the putrificative medicines: For he faith, that they have little pain or none, neither be they so hot and drie as those that are called Efobaratica; that is to say, Crucive: which be hot in the fourth degree, and do breed a cruel and fear, and caufe great pain, as unfeck't Lime, and the burned dregs of Wine: wherefore it seemeth that Avisen description belongeth rather to the crucive then to the Putrificative medicines.

Notwithstanding, I must needs say that our Chirurgions and also Farriers, do finde both Aftenicke and Refalger, to be so sharp, hot and burning things, as when they minihter the lame to any part of the
Of the Horse.

The receipt of a Cautick used by Chiron, to dry up the superfusious moisture, and to bind parts loosened, and to strengthen parts weakened.

Take of Bitumen Judaeicum two pound, of Bitumen Apollinis two pound, of the purest part of Frankincense fix ounces, of Deersweat two pound, of Peperatum two ounces, of Galbarum two ounces, of the drops of Storax two ounces, of common Wax two pound, of Rosin Gabriel one pound, of Vitium Italium three ounces, of Aperium two ounces, of the juice of Hytop two ounces, of the drops of Armoniack two ounces, of Pitch one pound.

Another Cautick used by Pelagonius, to dry up Swellings, Bladders, Wind-galls and Splenès in the legs and joynets.

Take Virgin Wax one pound, of Rosin two pound and a half, of Galbarum three ounces, of Aperium Judaeicum two pound, of Mirrhe secondary two pound, of Bitumen one pound, of Armoniack fix ounces, of Cofus fix ounces. Boy all these things together in an earthen pot, laying the Aperium, Armoniack and Coftum, which being first ground like fine flour, mall be added unto the other things, and after that they have been boiled and cooled, and then boiled all together again, and well stirred, so as they may be incorporated together, and made all one substance. These kinds of Emplasters or Ointments ought in my judgement to be so called, as I said before, rather binding charges then Cautikk medicines, because there be no such extreme Corrosive or burning simples in these, as are before recited. Nowthwithstanding I refer my judgment to those that be better learned, and so end for being over tedious. For if I would, I could take very good occasion here to speak of divers other medicines, whereas some are called Anodyne, easing pain and grief. Musin calleth them Linoges, which are made of Linseed, Camomile, soft grease and such like things, as are hot in the first degree; some again are called Narcotics, that is to say, allaying or bringing to sleep, as those that are made of Opium, Mandragora, Poppy, and such like cold and groffe things. And some are called Seroctics, that is, Breeding flesh, as Barly flource and Frankincence. And many other kinds of Emplasters, Ointments, waters and falves, which would occupy a book of no small volume, to be written hereafter by some other perhaps, if not by myself, and in the mean time, let this that I may have already written suffice.

Of the Anticors.

A N Anticor cometh of superfluity of evil blood or spirit in the arteries, and also of inflammation Musum. In the liver, which is ingendered by means of too choyle keeping, and overmuch reat, which choaketh the vital powers, and occasions unnatural swellings in the breet, which if they ascend upward and come into the neck, they are instantly death. The cure whereof is in this fort; Let him bleed first as he may bleed abundantly, then with a sharp knife in divers places cut the swelling: when done, let a cupping-glasse thereon, and cup it till the glasse filled with foul water. fall away it fell; then give the Horse to drink three mornings together a pint of Malmsey well stirred with Cinnamon, Licoras, and a little Bezar stone, and during his sickness, let his drink be warmed, and mingled with either Bran or Male.
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Of the Cords.

The Cord is a disease that maketh the Horse stumble, and many times fall, and they appear in a Horse's fore-legs: this is the cure thereof; Take a sharp knife, and cut a slit even at the top of his nose, just with the point of the gristle, open the slit being made, and you shall perceive a white string, take it up with a Boars tooth, or some crooked bodkin, and cut it in sunder, then stitch up the slit and anoint it with Butter, and the Horse doublets shall be recovered.

Of the Millets.

The Millets is a grief that appeareth in the Fetlocks behind, and caueth the hair to shed, three or four inches long and a quarter of an inch in breadth, like as it were bare and ill to cure. But thus is the cure; First wash it well with wrong lie, and rub it till it bleed, then bine unto it Hony, unfeck't Lime, and Deers fewer, boyled and mingled together, this do for the space of a week, and it shall be whole.

Of the Strew.

A Serew is a foul forance, it is like a Splent, but it is a little longer, and is most commonly on the outside of the fore-leg, as the Splent is on the inside. The cure is thus; Take two spoonfuls of strong Wine Vinegar, and one spoonful of good Sallet Oyl, mingle them together, and every morning before one hour in rubbing the forance with it altogether downward till it be gone, which will not be long in going.

The medicines arising out of Horses.

Pliny.

The Grecians have written nothing at all concerning Wilde Horses, because in their Country there was none of them usually bred or gotten: yet notwithstanding the fame we ought to think that all medicines or any other things, which do proceed from them, are more strong in operation, and have in them greater force and power than any common Horses have, as it falleth out in all sorts of other beasts.

The blood of a Horse (as Pliny affirmeth) doth gnaw into dead flesh with a putrefactive force; the same virtue hath the blood of Mares, which have been covered by Horses: Also the blood of a Horse (but especially of one which is a breeder) doth very much make and help against impotences, and small bunches which do arise in the flesh. Moreover it is said that the blood of a young Ass is very good against the Jaundies, and the over-flowing of the gall, as also the same force and effect is in the blood of a young Horse. The Horse-leaches do use the blood of Horses for divers diseases which are incident unto them, both by anointing or rubbing the outward parts, as also in their bodies.

Furthermore if one do cut the veins of the palate of a Horse's mouth, and let it run down into his belly, it will presently destroy and confuse the maw or belly-worms, which are within him. When a Horse is sick of the Pestilence, they draw blood out of the veins in his spurring place, and mingling the same upon a stone with Salt, make him to lick it up. The blood of a Horse is also mingled with other medicines, and being anointed upon the arms and shoulders of men or beasts, which are broken or out of joynt, doth very much help them. But a Horse which is weary or tyred, you must cure after this manner; First, draw some blood out of his matrix or womb, and mingle it with Oyl and Wine, and then put it on the fire till it be lake-warm, and then rub the Horse all over against the hairs.

If the sinews of Horses do wax stiffe or shrink in together, it is very necessary that the sick parts should be anointed with the hot blood which doth proceed from him, for Horses also which are fed in the field use their flesh and dung, against the biting and stinging of Serpents.

We also finde that the flesh of Horses being well boiled is very medicinable for divers diseases. Moreover it is very usuall and common with the women of Occitania to take the fat or grease of Horses to anoint their heads to make the hair of their heads multiply and increase; and certain Latine Physicians do mingle the marrow of a Horse with other Ointments for a remedy against the Cramp.

The marrow of a Horse is also very good to loosen the sinews which are knit and fadned together, but first let it be boyled in Wine, and afterwards made cold, and then anointed warmly either by the fire or Sun. If a Horse do labor in that kind of impotune which they vulgarly call the Worm, either any where as well as in the nose, they do open the skin with a fearing iron, and do sprinkle Verdigrise within the Horfes mouth being brent, and being added thereofunto sometimes the feed of Henbane.
Of the Horse.

The teeth of a male Horse not gelded, or by any labour made feeble, being put under the head, or over the head of him that is troubled, or darteth in his dream, both with hand and reftit all unquietness which in the time of his rest might happen unto him. Play also doth affent that flower doth heal the Sores of a Horse's teeth and gums, and the cleats and thines of a Horse's feet.

The teeth also of a Horse is very profitable for the curing of the Chilibances which are rotten and full of corruption when they are swollen full ripe. Marcellin faith, that the tooth of a Horse being beaten and crushed into very small powder, and being sprinkled upon a Man's genital doth much profit and very effectually help him: but the teeth which were first ingented in a Horse, have this virtue in them, that if they should touch the teeth of Man or Woman, who are mollied and grieved with the tooth-ach; they shall presently find a final end of their pain, if in the like manner a child do kife the nose or frowt of a Horse, he shall never feel pain in his teeth, neither at any time shall the childe be bit by the Horse.

The teeth which do first of all fall from Horses, being bound or fastned upon children in their infancy, do very easily procure the breeding of the teeth, but with more speed and more effectually if they have never touched the ground, wherefore the Poet doth very well apply these Verfes, saying:

Collo jugur molli dentes et quoties equi, Qui prima fuerit pullo coferente vultus.

It is also said, that if the hair of a Horse be fastned unto the Horse of a mans enemy it will be a means that neither little flies or small goats shall flie by his dwelling place or abode. The tongue of a Horse being never accustomed unto wine, is a most present and expedient medicine to slay or cure the milt of a Man or Woman (as Cæcilius Boni reporteth unto us, that he learned it of the Barbarians.) But Marcellin faith, that the Horse tongue ought to be dryd and beaten into small powder, and put into any drink, except wine only, and forthwith it will shew the commodity which rifereth thereupon, by eating either Man or Woman, of the pain of the Spleen or Milk: divers also do think that a Horse's tongue used after this manner, is a good means or preservative against the biting of Serpents or any other venomous creatures.

But for the curing of any fores or griefs in the inward parts, the genital of a Horse is most of all commended: for as Pliny fuppofeth, this genital of a Horse is very medicinal for the loofing of the belly, as also the bloud, marrow, or liver of a Goat, but these things do rather dry up and close the belly (as before we have taught) concerning the Goat.

In the heart of Horses there is found a bone, most like unto a Dog's tooth, it is said that this doth drive away all grief or sorrow from a man's heart, and that a tooth being pulled from the cheeks or jaw bones of a dead Horse doth shew the full and right number of the sorrowes of the party so grieved. The duit of a Horse hoof anointed with Oyl and Water, doth drive away impoiltumes and little bunches which rife in the flieh, in what part of the body forever they be: and the duit of the hoof of an Affe anointed with Oyl, Water and hot urine, doth utterly expell all Wens and kernels which do rife in the neck, arme-holes, or any other part of the body, of either man or woman.

The genital of a gelded Horse dryd in an Oven, beaten to powder, and given twice or thrice in a little hot broth to drink unto the party so grieved, is by Pliny accounted an excellent and approved remedy in the Sores of a woman. The foam of a Horse, or the duit of a Horse hoof dryd, is very good to drive away flame-Salliness, being anointed with a certain titulation. The scrapings of the Horse's hoofs being put in wine and poured into the Horse's nostrils, do greatly provoke his urine.

The ashes also of a Horse hoof, being mingled with wine and water, doth greatly ease and help the difeafe called the Colick or Stone: as also by a perfume which may be made by the hoofs of Horses being dryed, a childe which is still born is cast out.

The milk of Mares is of such an excellent virtue, that it doth quicke expell the poison of the Scabare, and all other poison whatsoever: drink also mingled with Mares milk, doth make the body ftoke and laxable. It is also counted an excellent remedy against the falling ficknes, to drink the stones of a Boar out of a Mares milk or water. If there be any filth or matter lying in the matrice of a woman, let her take Mares milk boiled and thoroughly strained, and prefently the filth and excrements will void clean away. If so be that a Woman be barren and cannot conceive, let her then take Mares milk (not knowing what it is) and let her prefently accompany with a man, and she will conceive. The milk of a MARE being drunk doth affwage the labor of the matrice, and doth causeth a still childe to be cast forth. If the feed of Henbane be beaten small and mingled with Mares milk, and bound with a Harts skin, so that it may not touch the ground, and fastened or bound to a woman, it will hinder her conception.

The thinneft or laftest part of the milk of a Mare, doth very easily, gently, and without any danger purge the belly. Mares milk being dailily anointed with a little Hony doth without any pain or punishment take away the wounds of the eyes being new made. Cheefe made of Mares milk doth repreffe and take away all wringings or eches in the belly, whatsoeuer. If you anoint a comb with the foam of a Horse, wherewith a young man or youth doth use to comb his head, it is of fuch force as it will caufe the hair of his head neither to encreafe, or any what to appear. The foam of a Horse
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Horset is also very much commended for them which have either pain or difficulty of hearing in their ears, or else the duit of Horse dung being new made and dryed, and mingled with Oyl of Roses. The grief or foresens of a man's mouth or throat, being washed or anointed with the foam of a Horse which hath been fed with Oates or Barly, doth presently expell the pain of the foresens, if so be that it be two or three times washed over with the juycy of young or green Sea-crabs beaten small together; but if you cannot get the Sea-crabs which are green, sprinkle upon the grief the small powder which doth come from dryed Crabs which are baked in an Oven made of Bratle, and afterward wash the mouth where the pain is, and you shall finde prentent remedy. The foam of a Horse being three or four times taken in drink, doth quite expell and drive away the Cough. But Marcellus doth affirm that whosoever is troubled with the Cough, or consumption of the lungs, and doth drink the foam of a Horse by it self alone without any drink, shall finde prentent help and remedy: but as Sextus faith, the Horse will presently die after it. The same also being mingled with hot water, and given to one who is troubled with the same diseas, being in manner palt all cure, doth presently procure health; but the death of the Horse doth instantly enuie. The sweat of a Horse being mingled with Wine, and so drunk, doth cause a woman which is very big and in great labor, to calfe or till the child.

The sweat of any Beall, (but as Albertus faith only of a Horse) doth breed wind in a man or womans face, being put thereupon, and besides that, doth bring the Smince or Snequity, as also a filthy thinking sweat. If Swords, Knives, or the points of Spears when they are red fire hot, be anointed with the sweat of a Horse, they will be so venemous and full of poision, that if a man or woman be flitten or pricked therewith, they will never cease from bleeding as long as life doth laft. If a Horse be wounded with an Arrow, and have the sweat of another Horse, and breed which hath been, being mingled in mans urine, given him to drink, and afterwards some of the same being mingled with Horfe grease put into the wound, it will in short time procure him eafe and help. There are some which will affure us, that if a man be troubled with the belly worms, or have a Serpent crept into his belly, if he take but the sweat of a Horse being mingled with his urine, and drink it, it will presently caufe the Worms or the Serpent to issue forth.

The dung of a Horse or Affe which is fed with garlette, being dryed and afterward dipped in wine, and so drunk, is a very good remedy against the bitings and blows of Scorpions. The same medicines they do also ufe, being mingled with the genital of a Hare in Vinegar, both against the Scorpion, and against the Shrew-mouse. The force is so great in the poiyon of a mad Dog or Bitch, that if his pargeted Urine doth much hurt, especially unto them that have a fore boil upon them; the chiefest remedy therefore against the same is the dung of a Horse mingled with Vinegar, and being warmed put into the scab or fore. The dung as well of Aisses as of Horses, either raw, or cold, or burnned, is excellent good against the breaking forth or issues of the bloud.

The dung of Horses or Aisses being new made or warm, and so clapped and put to a green wound, doth very eafe and speedily flanch the bleeding. If the vein of a Horse be cut, and the bloud do issue out in too much abundance, apply the dung of the same Horse unto the place where the vein is cut, and the bleeding will presently ceafe, wherefore the Poer doth very well express it in these Verles following;

Vere fium manni cum tefis aritur ovf,  
Et reprimis fluidos mirificamine cuftus.

The same doth also very well drive away the corruption in mens body which doth cause the bloud to thinke if it be well and fully applied unto the corrupt place. The same also being mingled with Oyl of Roses, and new made, and so applied unto the ears, doth not only drive away the pain, but also doth very much help for hearing: There is another remedy also for the hearing, which is this, to take the dung of a Horse which is new made, and to make it hot in a furnace, and then to pour it on the middle of the head against the Eade, and afterward to tie the aforefaid dung in a linen or woollen cloth unto the top of the head in the night time.

The dung of a young Affe when he is first foiled, given in Wine to the quantity or magnitude of a Beann, is a present remedy for either man or woman who is troubled with the Jaundice or the overfowing of the gall, and the same property hath the dung of a young Horese or Cole when he is new foiled. But the dung of an old Horese, being boiled in fair water, and afterward strained and so given to the party to drink, who is troubled with Water in his belly or stomach, doth presently make vent for the same.

There is also an excellent remedy against the Colick and Stone, which is this, to take a handful of the dung of a Horse which hath been fed with Oates and Barly, and not with garlette, and mingle very well it with half a pinte of Wine, all which I do give will amount unto the weight of eighteen ounces, and then boil them all together untill half of them be boyled or conformed away, and then drink the same by little and little until it be all drunk up, but it will be much better for the party that is troubled to drink it up all together if he be able.

There is moreover a very good and easie way by Horfe dung to cure the Ague or Quarterly Fever, which is thus, to burn the forefaid dung, and to mingle the very dutt it self thereof in old wine, and then beat it unto small powder, and so give it unto the party who is troubled therewith, to drink or suck without any water in it, and this will very speedily procure eafe and help. If that a woman
woman supposed her child which is in her womb to be dead, let her drink the milk of a Horse in some sweet water, not to the smell, but to the tale, and she will presently cast the childe.

The namee virtue are in the perfume which is made of a Horse's hoof, as also in the dry dung of a Horse. There is some which do use this means against the falling sickness, or the sickness called Saint John's eveil, that is to mingle the water or urine which a Horse doth make with the water which cometh from the Smiths trough, and so to give it the party in a potion. There is a very good help for Cattell which do avoid blood through their Noftrils or secret parts, which is this, to make a palle of Wheat flower, and beat it and mingle it together with Butter and Eggs in the urine of a Horse which hath lately drunk, and afterward to give that palle or pouletis baked even to ashes to the beast so grieved.

To provoke urine when a mans yard is flrop, there is nothing so excellent as the dung or filth which proeedeth from the urine which a Horse hath made, being mingled with wine, and then strained, and afterwards poured into the Noftrils of the party so vexed.

There are certain Tsetters or Ring-wormes in the knees of Horses, and a little above the hoofs in the bending of these parts, there are indurate and hardned thick skins, which being beaten into small powder and mingled with Vinegar, and so drunk, are an exceeding good preservative against the Falling sickness: the name is also a very good remedy for them which are bitten with any wide Beast whatsoever. By the Tetter or Ring-worm which groweth in a Horses knees or above the hoofs, beaten and mingled with Oyle, and so poured in the ears, the teeth of either man or woman which were weak and feble, will be made very strong and falt. The aforefaid Tetter, without any mingling with Oyl, doth also heal and cure the head-ache and Falling-sickness, in either man or woman. The same also being drunk out of Clarret Wine or Mufcadel for forty dayes together, dothe quite expell and drive away the Colick and Stone if that any man do get and put up the phoe of a Horse being bruack from his hoof as he travelleth in his pace (which doth many times happen) it will be an excellent remedy for him against the filling in the stomache called the Hicket.

Of the Hyana.

We are now to discouer of a Beast whereof it is doubtfull whether the names or the kinds thereof be more in number, and therefore to begin with the names, it seemeth to me in general, that it is the same Beast which is spoken of in Holy Scripture, and called Zeb-reeb, and Arabbus, Zophon. 3. Principe urbis Hierosylyme velut Leones sujicientes, judices ejus similis sunt lupis Vesciniae qui alia non relinquunt ad illicum: Their Princes are roaring Lions and their Judges are like to night-wolves which leave not the bones till the morning, as it is vulgarly translated. In like forse Jer. 5. calleth them Zeb-Abaroth, Wolves of the wilderneas, and the Prophet Habakkuk, Cap. 1. useth the word Zeeb-reeb, Wolves of the evening. By which it is made easie to consider and discouer what kinde of Beasts this Hyana may be deemed; for the Hyana, as I shall shew afterward, is a Greek word. And first of all I utterly exclude all their opinions, which translate this word Arabian Wolves, for the Hebrew notes cannot admit such a verion or exposition: But seeing we read in Opisthocom and Taineus, that there are kinds of Wolves which are called Hamagges, more hungry then the residue, living in Mountains, very swift of foot, and in the Winter time, coming to the gates of Cities, and devouring both fheep and bones of every living creature they can lay hold on, especially Dogs and men, and in the morning go away again from their prey, I take them to be the same Beasts which the Grecians call Hyana, which is also the name of a Fift much like in nature hereunto. It is also called Glanor, and by the Phrygians, and Bythnians, Genus, and from one of these came the Ilyrian or Scythian word Sans, and it feemeth that the Grecians have given it a name from Swine, because of the gristles growing on the back, for an Hyana can have no better derision then from Eum or Hym. Julius Caesar in his place where he recordeth that there were deceased Bibliys hab Gandians, ten Hyas or in the days of Gordians: And the reason of this name is not improbably derived from Belba a City of Egypt. Phinianus a learned man calleth the Greek, because it hunteth the Sepulchres of the dead. Albertus in his de Hyana, calleth it Ame. The Arabians call it Kete, and Zeb, or Zeba and Asara. I take it also to be the same Beast which is called Lata, and Ana, and Zibe, because that which is reported of thee, is true in the Hyana; they frequent graves, having sharp teeth and long nails, being very fierce, living together in herds and flocks, and loving their own kinde most tenderly, but most pernicious and hateful to all other, being very crafty to fet upon a fit prey, defending it selfe from the rage of stronger Beasts by their teeth and nails, or else by flight or running away. Wherefore we having thus expresed the name, we will handle the kinds, which I finde to be three, the first Hyana, the second Papio or Dabob, the third Groans, and Lachomous whereunto by conjecture we may add a fourth, called Muntchera.
The Figure of the first *Hyæna*.

His first and vulgar kinde of *Hyæna*, is bred in *Africa* and *Arabia*, being in quantity of body like a *Wolfe*, but much rougher haired, for it hath bristles like a *Horse* mane all along his back, and in the middle of his *back* it is a little crooked or dented, the colour yellowish, but blesckled on the sides with blew *spots*, which make him look more terrible, as if it had so many eyes. The eyes change their colour at the pleasure of the beast, a thousand times a day, for which cause many ignorant writers have affirmed the same of the whole body, yet can he not see one quarter so perfectly in the day as in the night; and therefore he is called *Lupus vesperinus*, a *Wolfe* of the night. The skilful *Lapidarius of Germany* affirm that this beast hath a *cone* in his eyes (or rather in his head) called *Hyæna* or *Hyænus*; but the Ancients say, that the apple or pulpe of the eye is turned into such a *cone*, and that it is indued with this admirable quality, that if a man lay it under his tongue, he shall be able to foretell and prophesie of things to come; the truth hereof I leave to the reporters. Their back-*bone* stretcheth it felf out to the head, fo as the neck cannot be bend except the whole body be turned about, and therefore whensoever he hath occasion to wray his neck, he must supply that quality by removing of his whole body.

This Beast hath a very great heart, as all other Beasts have which are hurtful, by reason of their fear. The genital member is like a *Dogs* or *Wolfs*; and I marvail upon what ocasion the writers have been so poifeld with opinion that they change *sexes*, and are sometime *male* and another *female*, that is to say, male one year, and female another, according to these *Verfes*:

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Si tamen est aliquid mina novitatis in ipsis
Alterare vitae, & que non sit fiamina tere
Paffa mens ed, male ed, mens miserrima Hyænam.
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Both kindes have under their tails a double note or *passage*, in the male there is a *scifice* like the secrets of a female, and in the female a *bunch* like the *bones* of the male, but neither one nor other inward, but only outward; and except this hath given cause of this opinion, I cannot learn the ground thereof: only *Orus* writeth, that there is a *Figit* of this name which turneth *sex*, and per-adventure some men hearing so much of the *Figit*, might mistake it more easily for the *Four-footed Beast*, and apply it thereunto.

Their *procreation*. Thefe engender not only among themselves, but also with *Dogs*, *Lions*, *Tygers*, and *Wolves*, for the *Ethiopian Lion* being covered with an *Hyæna*, beareth the *Crested*. The *Therion* of whom we shall speak more afterward, are generated betwixt this Beast and a *Wolfe*; and indeed it is not without reason that *God himself* in holy Scripture calleth it by the name of a *Vesperine Wolf*, seeing it resembles a *Wolf* in the quantity, colour, in voracity and glutonning in of flesh, in infubility to overcome *Dogs* and *Men*, even as a *Wolfe* doth *fily* *Sheep*. Their teeth are in both Beasts like *fawes*, their genitals alike, and both of them being hungry, range and prey in the night *seasone*.

This
The female is far more subtil then the male, and therefore more seldom taken, for they are afraid of their own company. It was confidently affirmed that among eleven Hyænas, there was found but one female; it hath been believed in ancient time that there is in this beast a Magick or enchanting power, for they write, that about what creature so ever he goeth round three times, it shall stand and one still and not be able to move out of the place: and if Dogs do but come within the compass of their shade and touch it, they presently lose their voice: and that this doth most wholly in the full moon; for although the swiftness or other opportunity of the Dogs helpeth them to flye away from her, yet if she but call her shadow upon them, she easly obtayneth her prey. She can also counterfeit a mans voice, vomit, cough and whistle, by which means in the night time she cometh to Houses or folds where Dogs are lodged, and so making as though the vomited, or else whistling, draweth the Dogs out of doors to her, and devoureth them. Likewise her nature is, if she finde a Man or a Dog on sleep, she considereth whether or he have the greater body, if she, then she falleth on him, and either with her weight, or some secret work of nature, by stretching her body upon him killeth him, or maketh him senseless; whereby without resisting the eateth off his hands: but if she finde her body to be shorter and leffer then his, she taketh her heels and flyeth away.

If a Man meet with this Beast, he must not set upon it on the right hand, but on the left, for it hath been often seen, that in haste it did run by the Hunter on the right hand, he presently fell off from his Horie senseless; and therefore they that secure themselves from this beast must be careful to receive him on the left side, that so he may with more facility be taken, especially (faith Pliny) if the cords wherein he is to be enframed be fastened with seven knots. Abianus reporteth of them, that one of thefe coming to a Man asleep in a Sheep-cot, by laying her left hand or fore-foot to his mouth, made or called him into a dead sleep, and afterward digged about him such a hole like a grave, as she covered all his body over with earth, except his throat and head, whereupon the fat until the suffocated and stifled him; yet Pliny attributeth this to her right foot. The like is attributed to a Sea-calf, and the fifth Hyæna, and therefore the old Magicians by reason of this examining property, did not a little glory in these beasts, as if they had been taught by them to exercise Diabolical and prodigious incantation, whereby they deprived men of life, motion, and reason. They are great enemies to men, and for this cause Saltinus reporteth of them, that by secret accomplishing themselves to Houses or yards, where Carpenters or such Mechanicks work, they learn them to call their names, and so will come being an hungry and call one of them with a difficult and articulate voice, whereby he causeth the man many times to forsake his work and go to see the person calling him; but the subtile Hyæna goeth further off, and so by calling allureth him from help of company, and afterward when she feeth time devoureth him, and for this cause shee her proper Epithet is Eum. Texier, and soye-counterfeiter.

There is also habit breadth between a Pardell and this Beast, for if after death their skins be mingled together, the hair falleth off from the Pardell skin, but not from the Hyæna; and therefore when the Egyptians decribe a superiour man overcome by an inferiour, they picture these two skins; and so greatly are they afraid of Hyænas, that they run from all beasts, creatures and plates, whereas any part of their skin is fastened. And Abianus faith, that the Bin bird which liveth upon Serpents, is killed by the gall of an Hyæna.

He that will go safely through the mountains or places of these beasts abode, Refis and Abybris say, that he must carry in his hand a root of Colloquintida. It is also believed that if a man compleasse his ground about with the skin of a Crocodile, an Hyæna, or a Sea-calf, and hang it up in the gates or gaps thereof, the fruits enclosed shall not be molested with hail or lightning. And for this cause Pallasius reporteth of the Seamen, who were wont to cover the tops of their sails with the skins of this Beast, or of the Sea. Reis. and Hemes faith, that a man clothed with this skin may passe without fear or danger through the muddiest of his enemies: for which occasion the Egyptians do picture the skin of an Hyæna to signify feasable audacity. Neither have the Magicians any reason to ascribe this to any prodigious enchantment, seeing that a Fig-tree alio is never oppreessed with hail nor lightning.

And the true cause thereof is affirmed by the Philosophers to be the bitterness of it; for the influence of the heavens hath no destructive operation upon better, but upon sweet things, and there is nothing sweet in a Fig tree, but only the fruit. Allo Columella writeth, that if a man put three bushels of feed grain into the skin of this Beast, and afterward sow the same, without all controversy it will arife with much encreas. Gensam worn in an Hyænas skin, seven days instead of an Amulet, is very foeveraign against the biting of mad dogs. And likewise if a man hold the tongue of an Hyæna in his hand, there is no Dog that dareth to seize upon him. The skin of the forehead, or the bloud of this Beast, refilith all kind of Witchcraft and Incantation. Likewise Pliny writeth, that the hairs layed to Woman's lips, maketh them amorous. And so great is the vanity of the Magicians, that they are not ashamed to affirm, that by the tooth of the upper jaw of this Beast on the right side bound unto a man arme or any part thereof, he shall never be molested with Dart or Arrow.
Likewise they say, that by the genital of this beast, and the Article of the back-bone which is called Atlantis, with the skin cleaving unto it preferred in a House, keepeth the family in continual concord, and above all other, if a man carry about him the smallest and extreme gut of his intrails, he shall not only be delivered from the Tyrany of the higher powers, but also foreknow the successe and event of his petitions and futes in Law.

If his left foot and nails be bound up together in a Linnen bag, and so fastened into the right arme of a Man, he shall never forget whatsoever he hath heard or knoweth. And if be cut off the right foot with the left hand and wear the same, who soever seeth him shall fall in love with him, besides the Beast. Also the marrow of the right foot is profitable for a Woman that loveth not her Husband, if it be put into her nostrils. And with the powder of the left claw, they which are anointed therewith, being first of all decocted in the blood of a Weald, do fall into the hatred of all men. And if the nails of any beast be found in his maw after he is slain, it signifies the death of some of his hunters. And to conclude, such is the folly of the Magitians, that they believe the transmigration of souls, not only out of one man into another, but also of man into beasts. And therefore they affirm, that their men Symis and religious votaries departing life send their souls into Lions, and the religious women into Hyannes.

The excrements or bones coming out of the excrements when it is killed, are thought to have virtue in them against Magical incantations. And Demagirius writeth, that in Cappadocia and Mycia, by the eating of the herb Theriisaroba, all wilde beasts fall into a deadly sleep, and cannot be recovered but by the aspersions of the urine of this beast. And thus much for the first kinde, now followeth the second.

The Second kinde of $H T E N A$, called Papio or Dabub.
Of the Crocuta.

The region, proportion, and other qualities, of the third kind of Hyenas, except the coats of Hair, which are in all the Hyenas, of the same kind of Hair, as the rest of their Body.

The third kind of Hyena is called Crocuta, not the Galon aforefaid, but another different from that, which is said to be an Ethiopiaan four-footed Beast, because it is engendred betwixt a Lyonef and an Hyena. His teeth are all of one bone, being very sharp on both sides of his mouth, and included in the flesh like as in a cafe, that they may not be dulled: with their teeth they break any thing. It is said alfo by Sulpitius, that it is never wined, and that their nature seemeth to be tempered betwixt a Dog and a Wolf, yet is it more fierce then either of both, more admirable in strength, and especially of the teeth and belly, having power to break and digest any bone: it imitates all the voyce of a man to devour them, as is said before in the Hyena.

The Beasts and Wilds of the Regions about the Levant.

The Beasts and Wilds of the Regions about the Levant.

Of the Mantichora.

This beast or rather Monster (as it is fain written) is bred among the Indians, having a treble row of teeth beneath and above, whose greatnes, roughnes, and teeth are like a Lyon, his face and ears like unto a man, his eyes gray, and colour red, his tail like the tail of a Scorpion, of the earth, armed with a thine, calling forth sharp pointed quills: his voyce like the voyce of a small Trumpet or Pipe, being in course as foffes as a Hare: his wildenes such as can never be tamed, and his appetite is especially to the fith of man. His body like the body of a Lyon, being very apt both to leap and to run, so as no distance or pace doth hinder him: and I take it to be the fame Beast which Philo.

Advocatus callcth Maniida: and Manius, with her tails the woundeth her Hunters, whether they come before her or behind her, and presently when the quills are cast forth new ones grow up in their room, wherewithal the overcome all the Hunters: and although India be full of divers ravening Beasts, yet none of them are filled with a title of Anthropophagi, that is to fay, Men-eaters: except only this Mantichora. When the Indians take a Whelp of this Beast, they all to bruife the buttocks and
and tail thereof, that so it may never be fit to bring itarp quills, afterwards it is tamed without peril. This also is the same Beart which is called *Lycencmna* about the bigness of a wilde As, being in legs and Hoofs like a Hart, having his mouth reaching on both sides to his ears, and the head and face of a female like unto a Badgers. It is called also *Martius*, which in the *Pecifon* tongue signifieth a devourer of men; and thus we conclude the story of the *Hyæna* for her description, and her several kinds: Now followeth the medicines arising out of her several parts.

### The Medicines of the Hyæna.

The Oyl in which a Fox is baked either alive or dead, doth either altogether cure and make whole those which are troubled with the Gout, if so be that the disease or sicknesse be green or new, or at the leaft not of too long continuance; yet it may happen to return again, yet it will be much more milde and gentle then before it had been. But the Oyl which proceedeth from Foxes doth nothing more drive away the forenamed disease, then that which like-wise is got or prepared out of the *Hyæna* for that hath an excellent and eminent quality of dissolving and dispersing. The flesh of the *Alanas* is both hot and cold, and being baked with Oyl, doth very much help either men or women which have their feet Gowy, or have any pain in their joynts, which may happen or come by the occasion of cold: for it is of a slender and dissolutive sub stance.  

The vanity of the *Magi*, or Wise-men, which is witty in nothing but in circumstance of words, doth say, the best time to take *Hyæna's*, is, when the Moon paseth over the signe called *Gemini*, and that for the most part the hairs be kept and preserv'd. The *Magi* do also affirm, that the skin of an *Hyæna* being spread upon a fore which was bitten by a mad *Dog*, doth presently and without any pain cure the same. The fame also being bound to that part of the head, which doth ache, will immediately drive away the pain and grief thereof.

The same doth very effectually and speedily help them which are troubled with the Gout, or swelling in the joynts. The flour of Barley being mingled with the bloud of an *Hyæna*, and fried or baked over the fire, and so taken, doth very much alligwe the wringings and wrinchings either in the guts or belly of a man or woman. If the bloud of an *Hyæna* being hot be anointed on them which are infected with the Leprofe, it will without delay very effectually cure them.

The *Hyæna's* flesh being eaten, doth much avail against the bigness of ravenous *Dogs*; but some are of opinion, that the liver being only eaten is of more force and power to cure or heal them. The nerves or linews of an *Hyæna*, being beaten to small powder, and dryed and mingled with *Frankincense*, together, and so drunk, doth restore fertility and plenty of seed in that woman which before was barren.

There is also for the bigness of a ravenous Dog another excellent remedy, which is this, first to anoint the place to be bitten with the fat or grease of a Sea-calfe, or else to give it in drink: and then to make the operation more effectual, mingle the marrow of an *Hyæna*, and Oyl that cometh from the Matlick tree and Was together, and being so applied and anointed upon the fore, it will presently cure the same. The fame marrow of the *Hyæna* is very good and effectual against the pain and grief in the finews, as also for the loofenes and weaknes of the reins.

The marrow which proceedeth from the Cline-bone of an *Hyæna*, being mixed with his Gall and old Oyl together, and so boiled until they come unto a soft temperature, and mollifying medicine, being anointed upon the finews, doth expel and force away all pain of grief thereof whatsoever. The same marrow being bound unto the back of either man or woman, who are troubled with vain phantasties or dreams in their sleep, doth very speedily and very effectually help them. The fat or grease of an *Hyæna* being burnt, doth drive away all venomous Serpents from the place where it is used.

The same being mingled with leaven, and so being wrought into a plaister, is a very good cure or remedy for the falling of the hair, or the disease called the Foxes evil. The left part of the brain of an *Hyæna* being either anointed upon the nostrils of either men or beasts, is of such vertue, that it will cure diseases upon them which are in a manner mortal. For the slendriness and barrennes of women, the eye of an *Hyæna* being mixed with *Lycoras*, and the herb called *Dill*, and so taken in drink, is of such force and power, that in three days it will make them fit for conception.

The teeth of an *Hyæna* either touched, or bound in order unto the teeth of any man or woman who are troubled with the tooth-ache, will presently ease and vaxation thereof. One of the great teeth of an *Hyæna*, being bound with a string unto any that are troubled in the night times with shadows and phantasties, and which are fray'd out of their sleep with fearful visions, doth very speedily and effectually procure them ease and rest. The tooth of an *Hyæna* (called *Alcaba*) being bound upon the right arm of any one which is either oblivious or forgetful, and hanging down from the arm unto the middle finger or wrif, doth renew and refresh their decayed memory.

The pate of an *Hyæna* being dried and beaten to powder, and then mingled with Egyptian *Allum*, and so made hot and mixed altogether, being three times turned in any ones mouth, which hath either sore or ulcer init, will in small time procure them remedy and help of their vexation and trouble. The flesh which greweth upon the hinder part of the neck, being burned, and then eaten of taken in druk, doth very speedily help and cure the grief and aches of the loins.
The History of Four-footed Beasts.

The shoulders likewise being used in the aforesaid manner, doth profit much for the healing of any who are vexed with any anguish or pain in their shoulders or sides. The lungs being dried and taken in drink, do ease any, either man or woman which is troubled either with Colick or Stone. But being dried into powder, and mingled with Oyl, and so anointed upon the belly, it killeth the Worms, and expelleth all aches away from the belly. The Heart being used in the aforesaid manner and taken in drink, doth ease and help all aches, pains or griefs in the body whatsoever. The white flesh being taken from the breast of an Hyaena, and seven hairs, and the genital of a Hart, being bound all together in the skin or hide of a Buck or a Doe, and afterwards hanged about the neck of a woman which is in travel, will greatly hinder her for bringing forth her child.

If there shall be any flesh or bones of men found in the body of a dead Hyaena, being dried and beaten to powder, and then mixed with a certain perfume, they will be very excellent to help the Govt, or drive away the Convulsion of the sinews. The kail or calw wherein the bowels are contained, being used in the aforesaid manner, and also mixed with Oyl, will be a present remedy against the burning and inflammations of fores, botches, and Ulcers.

The chine bone of an Hyaena being bruised and beaten into small powder, and so dried, and then mingled with the tongue and the right foot of a Sea-calf, the gall of an Ox being added thereunto, and all of them boiled or baked together, and anointed upon the hide or skin of an Hyaena, and so lapped about the legs or joynets of them which are troubled with the Govt, will in short time ease the pain, and rid them altogether of the grief thereof.

The chine bone being also beaten to powder, and given in Wine to drink, is very profitable and necessary for those which are in tore travel or pain of child-birth. The first or eighth rib of the fame Beel, being beaten and mingled with a certain perfume, is very good and medicinable for fores and botches which do break through the flesh.

Their flesh also being eaten, doth quickly cure and heal the bitings or tearings of a ravenous Dog; but their liver being so used, is more effectual and speedy for the curing thereof. The liver of the aforesaid Beel is also very curable for Agues or quartern Feavers being beaten to powder, and drunk in Wine, before the augmentation or second assault thereof. The same also is an excellent and speedy remedy for the wrangings and aches of the belly, as also for that grievous and painful disease called the Colick and Stone. For the same diseas, the gall of a Sea-scorpion, and of a fish called Halops, and of a Sea-crab, and of an Hyaena, being beaten to powder, and mixed together, and so drunk in Wine, is a very good and effectual cure and help. The gall of an Hyaena, by it self, alone being rub'd or anointed upon the head of either man or woman whose hairs are fallen off, doth presently procure the hair to renew and grow again; it will also bring hair upon the eye-lids, being rubbed thereupon.

The gall of an Hyaena being mingled with Hony, and anointed upon the eyes; doth sharpen and clear the eye-fight, and expel and drive away all blemishes and small skins which cover the sight of the eyes; as also the pain in the eyes called the Pin and the Web. But Apollonia Pitonace doth say, that the gall of a Dog being used in the aforesaid manner, is better to cure the sight of the eyes than the gall of an Hyaena. But Pliny whom I think beft to follow, and worthyeft to be believed, doth (ay) it is of this substance but the gall of an Hyaena is the best for the purpose; and also for the expelling of certain white spots in the eye, which do hinder the sight thereof.

The gall of a Bear and of a Hyaena, being dried and beaten to powder, and so mixed with the best Hony which is possible to be had, and then stirred up and down a long time together, doth help them unto their eye-fight which are stark blinde, if that it be daily anointed and spread upon the eyes for a reasonable space together: The gall of a Hyaena being baked in a cruet of Athei- nian Hony, and mingled with the crooked herb Crescis, and so anointed upon the brows or fore-head of them which are purblind, doth speedily help them; it doth also ease them which are troubled with the water or rheume which falleth in the eyes. Democritus doth affirme, that if the brow of either man or woman be anointed with the gall of an Hyaena only, it will drive away all darknings, and blemishes in the eyes, and expel the water or rheume thereof, and also affwag the pain or grief which may come or happen in them whatsoever it be.

The marrow which proceedeth from the chine-bone of an Hyaena, being mixed with his own gall, and with old Oyl, and then baked or boiled in a cruet until it come into a temperate and mollifying medicine, and then being laid or anointed upon the fines or nerves, who is in those parts troubl'd, will throughly heal and cure any default or pain which may happen therto. The gall of a male Hyaena being pounded or beaten, and bound about the left thigh of any woman that is barren, doth help for conception. The gall of the same Beel being drunk in Wine, to the value of a dram, with the decoction or liquor which cometh from Spike-lavender, called Oyl of Spike, is a very good remedy and help against the Typhany or house-pest of the belly. The gall also being beaten and mixed with the flower called Est-flees, is very good and profitable for them which are troubled with the Govt. The milt of an Hyaena is very effectual to cure and heal any pain or grief in the mil of either man or woman. The lungs being dried and beaten to powder, and mingled with oyl, and anointed upon the loins of any one who is grieved or troubled in those places, will speedily cure the aches or griefs thereof.

The bladder of an Hyaena being drunk in Wine, is a very good and effectual remedy against the incontinency of man or womans urine, or the running of the reins. But if there be any urine in the bladder of the Hyaena found when he is taken, let it be poured forth into some clean vesse, and mixed with
with Oyl which proceedeth from the pulpe or corn of India, and so drunk up, and it will much ease and help them who are troubled in minde, and are full of care and grief. The secreet parts of a female Hyaza beaten and mixed with the rinde or skin of a Pomegrante, and taken in drinke, is very profitable to cure the inconveniences or pain of a woman's secreet parts.

The genital of a male Hyaza dryed and beaten to powder, being mingled with a certain perfume, both cure and help those which are troubled with the Cramp, and Convulsion of the fineurs. The feet of an Hyaza being taken, both heal and cure those which are sand-blinde, and such as have botches and ulcers breaking through the skin and flesh; and also such as are troubled with inflammations or breedings of wind in their bodies, only by touching and rubbing them over.

The durt or dung which is found in the interior parts of an Hyaza, being burned, and dryed into powder, and so taken in drink, is very medicinable and turuable, for those which are grievd with painful excoriations and wringings of the belly, and also for those which are troubled with the Bluody-flux. And the same being mingled with Goose-grease, and anointed over all the body of either man or woman, will ease them of any pain or grief which they have upon their body whatever. The dung or filth of an Hyaza also, being mingled with certain other medicines, is very excellent to cure and heal the bites and slincings of Crocodiles, and other venemous Serpents. The dung it self is also very good to purge and heal rotten wounds and fores which are full of matter, and filthy by corruption.

Of the IBEX.

This Beast Deut. the 14, is called Ago, and is there rehearsed among the clean Beasts, which although the Septuagints translate Tragelaphus, yet we have thrwed already in that story, that it cannot stand with the meaning of the holy Ghoft, because that Beas is found now where but near the River Paphis, or in Arabia, (as Fifth and Dioecus write;) and besides the Cheles tranlation hath Jerda; the Persians, Catelan; the Arabians, Obul; all which by Abraham Ezra, and Rabbi Selmon, and many other of the learned Jews, are interpreted to be the Beas, which of the German is called Steinbock, and the female of the Hyl firearm is called Thoythen, and Thiegefs; which words seemeth to be derived from the Latin word ibex, and the Cyfaphine French, which speak Italian, dwelling about Mililain, retain the German word for the male, but the female by a proper word they call Vejina, and so also do the Hyl firearm. The Tranfaphine French, Bouc efante; the Illyrians, Kozaraziec, and some Latin Authors call him Capricornut, The Graciant, Illalut, and Aggerors: Although I have never read Capricornus to signifie a Beas, but only a flar, excepting some Poetical Grammarians, who affirm this Beas to be a monfter of the Sea; and that Pan when he fled out of Egypt, with other Gods from Tyburn the Giant, their great Enemy, call himfelf into the water, and was transformed into this Beas. But Jupiter admiring his wit, placed him among the Stars near to Leo, according to this verse:

Humidas Aggerors, nec plus Leo tollitur urna.

Although there be some that affirm, this Capricorn to be placed among the Stars by Jupiter, because he was nursed with him. And that Pan hath his hinder parts like a fishe, and his foore-parts like a Goat, according to thefe verses:

Tun gelidum valida de pellio frigis anchelant,
Corpora semiferae, magna capricornus in orb.

Wherefore by the signes Cancer and Capricornus, the Ancients were wone to understand the defending and ascenting of the foul: that is to say, by the Cancer or Crab which goeth backward, the soules descant, by Capricornus, (because the Goat clibmeth) the soules ascet: and therefore they place it in the Zoodiac, where the Sun after the short days begins to acent, for no other caufe then for that which I have rehearsed. The Epithets that are given unto this Capricorn, do also belong unto the Ibees, such as are thefe, moift, cold, swift, horn-bearing, watery, snowye, of this Beast. wool-beaster, rough, brittle, cared, horrible, fierce, tropick, frrowing, flowing, threatenning, black, and such like.

To return therefore unto the Ibees, although I do not dislike the opinion of them, which take it to be a wilde Goate, yet I have reserved it into this place, because of many eminent differences, as may appear by the flory. Firft there are bred in the Alpes, and are of an admirable celerity, although their heads be loaded with fuch horns, as no other Beasts of their nature beare. For I do read in Ephasis, that their horns are fitten palms long, or five fpees and one palm, and sometimes feaven fpees, and with the horn confecrated at Delb, being two cubits and a fpan long, and fix and twentie pounds in weight. This Beas (faith Poblius) in his neck and haires is like a Buck, bearing a foare under his chin of a fpan long, as thick as a Colets tail, and in other parts of his body resembeth a Harp.

It feemeth that his Hebrew name Paal, is derived of climbing, and Sidus faith that Ibees are the places of most Aves, that is like Birds, because like Fowles of the air, they inhabit the tops of cliffs, Rocks, and

and
and Mountains, far from the view and sight of men. Their horns reach to their buttocks or hips, so that if at any time hedoth chance to fall, he cowseth his whole body betwixt his horns, to break the strong force and violence of his own weight, and also he is able to receive upon his horns the strokes of great stones which are shot or cast at him; they are knotty and sharp, and as they encrease in age, so do their horns in strength and other qualities, until they be twenty years old.

Thefe Beasts inhabit and keep their abode in the tops of those Mountains, where the ice never thaweth or dissolveth; for it loveth cold by nature, otherwife it would be blinde; for cold is agreeable to the eye sight and beauty. It is a noble Beaff, and very fat. In the small head, and lean legs, it refembleth a Hart; the eyes are very fair and bright; the colour yellowish; his hoof cloven and sharp like wilde Goats. It far excelleth a wilde Goat in leaping; for no man will believe how far off, or what long space it will leap, except he saw it. For there is no place fo steep or cragged, that if it afford him but fo much space as his foot may hand on, but he will pafs over it with a very few jumps or leaps. The Hunters drive them to the smooth and high Rocks, and there they by enclo- sing them, take them in ropes or toils, if they cannot come near them with shot or swords. When the Beaff seeeth his hunter which defendeth to him by some Rock, he observeth very diligently, and watcheth if he can fee any distance or space betwixt him and the Rock; yea, but so much as his eye- sight can pierce through: and if he can, then he leapeth up and getseth betwixt the Hunter and the Rock, and so casteth him down head-long; and if he can escape no distance at all, then doth he keep his standing until he be killed in that place.

The hunting of this Beaff were very peflant, but that it is encumbered with much labour and many perils, and therefore in these days they kill them with guns. The Inhabitants of Valon (near the River Sidamo) take them in their infancy when they are young and tame them, and until they be old, they are contented to go and come with the tame Goats to pulture, but in their older and riper age they return to their former wilde nature.

a triflote affirmeth, that they couple or engender together (not by leaping up each other) but standing upright, upon their hinder legs: whereunto I cannot content, becaufe the joynts and nerves...
erves of their hinder-legs will not be stretched to such a copulation; and it may be that he or his
relator had seen them playing together as Goats do, flanding upright, and so took that gesture
in their palate for carnal copulation. The female hath left horns then the male, but a greater body;
and her horns are very like to a wide Goats.

When this Beast feeleth insensible tokens of her death, and perceiveth that her end by some wound
or course of nature approaceth, and is at hand; it is reported by the Hunters, that the attendent
the top of some Mountain or high Rock, and there fathem one of her horns in the same deep
place, going round continually and never flanding still, until the have worn that horn asunder,
whereby he layeth her fell, and so at length at the infiant or point of death, breaking her horn,
falleth down and periseth. And because they die among the Rocks, it falleth out feldom that their
bodies are found, but times when the Snow falleth from the Mountains in great and huge ma-
fi even with a living Ibex, and other wide Beasts, and so oppreaffing them driveth them down
to the foot of the Hills or Mountains, as it doth trees and small houfes, which are built upon the fides
of them.

In Greece they make bows of the horns of these Beasts. And concerning their taking it is not to
be forgotten how the Hunter which periceth her from one rock to another, is forced many times for
the fagard of his own life, to forfake his flanding, and to obferve the Beaff when it maketh force
at him, and to rid himfelf from danger of death by leaping upon his back, and taking falt hold on his
horns, whereby he efcapeth. In the house of Pompey, where the memorable Forrest of Cordibus
was painted, there were among other Beafes two hundred Ibexes, which Pompey gave unto the people at
the day of his triumph, for to make ipoil thereof at their own pleafure.

The Medicines of the Ibex.

Some do commend the blood of the Ibex to be a very good remedy against the fume of the blad-
der, being used in this manner: Firft, they divide it in parts, and put one part of the blood, and
about fome fix parts of Wine Apis, and Hony mixed together, and do boil them both together
lufe-warm, and afterwards they referveth in a clean veffel, and the third day in the morning they
give it unto the party to drink who is grieved, and then they put them into a Bath about noon time,
and in the evening, and this order is to be observed for three days together, for it come to pafs,
that in that space the Stone will be dilolved and turned into fand or gravel, and fo by that means
will have vent together with the urine.

There is also by the dung of the aforefaid Beaff, an excellent remedy againft the Sciatica or Hip-
gout, by which that moft excellent Phyffitian Avfionius himfelf was healed, and many other lying de-
perate of remedy, which is this; to gather the dung of this Beaff in the feventeenth day of the
Moon, neither is it any grea matter whether you gather it in some part of the old Moon, for it will
have the fame operation: you fhall therefore take as much of this dung as you can hold in your
hand or fift at one time: fo that the quantity of the dung be unlike, and you fhall put it in a morter
and beat it to powder, and caft twenty grains of Pepper into the fame time, being very diligently
pounded or bruifed, and then you fhall add e nine ounces of the beft Hony unto the aforefaid mixture,
and four pounds of the beft Wine, and mix the potion in the manner of a compound Wine, and the
dung or dirt being dried and beaten fift; you fhall mingle all the reft, and put them together in a
vesel made of glafs, that when you have any need, you may have the medicine ready prepared, to
comfort him or her which is fo afflicted.

Of the ICHNEUMON.

Marcellus and Sallust, do make queftion of this Beaff (Icneumon) to be a kinde of Otter, or
the Otter a kinde of this Icneumon, which I find to be otherwife called Enydrus or Emydrus,
because it liveth in water; and the reafon of this name I take to be fetched ab injugifienta, because
like a Dog or hunting Hound, it diligently fearcheth out the feats of wide Beafes, especially the
Crocodile and the Afp, whose Egg is deftroyeth. And for the eminency unto Serpents, it is called
Oplio-
mousus. Icndrus is of opinion, that the name of this Beaff in the Greek is given unto it, because by the
favour thereof, the venom and wholefomes of meates is defcribed, Whereof Dracontius writeth in
this manner:

Predict Sallius vnumiufcung us: vmen t.

The Icneumon forretheth the power, and presence of all po{on. And it is called Sallius in Latine, be-
cause like a Hog, it hath briffles in head of hair: Albertus alfo doth call it Neonum, miftaking it
for Icneumon.

There be fome that call it an India Mouse, because there is some proportion or fimilitude in the
outward form between this Beaff and a Mouse. But it is certain, that it is bred in no other Nation
but only in Egypt, about the River Nilus; and of fome it is called Mur Piuans, Pharaonth Moule. For
I berod was a common name to all the Egyptian Kings.

H h

Hermolani, Gilius.
There be some that call it Thyamon, and Anfibycamon, and also Damula, mistaking it for that Weasel which is an enemy to Serpents, called by the Italians, Donula: yet I know no learned man but taketh these two names, to signify two different Beasts. The quantity of it or stature is sometimes as great as a small Cat or Ferret, and the hairs of it like the hairs of a Hog; the eyes small and narrow, which signify a malignant and crafty disposition; the tail of it very long like a Serpents, the end turning up a little, having no hairs but scales, not much unlike the tail of a Moule. Eledanus affirmeth, that both sexes bear young, having seed in themselves, whereby they conceive. For those that are overcome in combates one with another, are branded with a warlike mark of Villanage, or subjection to their Conquerours; and on the contrary side they which are conquered and overcome in fight, do not only make vassals of them whom they overcome, but in token thereof for further punishment, fill them with their seed by carnal copulation, so putting off from themselves to them, the colours and torments of bearing young.

This first picture of the Ichneumon was taken by Bellonius except the back be too much elevated.

The second picture taken out of Oppianus Poems, as it was found in an old Manuscript.

When it is angry the hairs stand upright, and appear of a double colour, being white and yellowish by lines or rows in equal distance, entermingleed, and also very hard, and sharp, like the hair of a Wolf, the body is something longer than a Cats, and better set or compacted; the back black, and sharp at the nose like a Ferrets, and without beard; the ears short and round; the legs black, having five claws upon his hinder-feet, whereof the laft or hindmost of the inner side of the foot is very short; his tail thick towards the rump: the tongue, teeth and ftones are like a Cat's, and this it hath peculiar, namely a large passage, compassed about with hair, on the outside of his excrement hole like the genital of a woman, which it never openeth but in extremity of heat; the place of his excrements remaining shut, only being more hollow then at other times. And it may be that the Authors aforesaid, had no other reason to affirm the mutation of feeble or common transmigration of genital power, beside the observation of this natural passage in male, and female. They bring forth as many as Cats and Dogs, and also eat them when they are young; they live both in land and water; and take the benefit of both elements; but especially in the River Nibus, amongst the Reeds, growing on the banks thereof, according to the faying of Nemetian;
Of the Ichneumon.

--- Et placidis Ichneumonis quartae ripis, Inter amandissimae figiers.

For it will dive in the water like an Otter, and seem to be utterly drowned, holding in the breath longer then any other four-footed Beasts, as appeareth by his long keeping under water, and also by living in the belly of the Crocodile, until he deliver forth himself, by eating through his bowels, as shall be thewed afterwards. It is a valiant and imble creature, not fearing a great Dog, but fetteth upon him and biting him mortally, but especially a Cat; for it killeth or strangleth her with three bites of her teeth, and because her bow or snout is very narrow or small, it cannot bite any thing, except it be left then a mafs fift. The proportion of the body is much like a Bidders, and the nose hangeth over the mouth, like as it were always angry; the nature of it, is finding the Crocodile afeep, fuddly to run down into his throat and belly, and there to eat up that meat which the Crocodile hath devoured, and not returning out again the way it went in, doth make a paffeage for it felf through the Beasts belly.

And because it is a great enemy and devourer of Serpents, the common people of that Countrie do tame them, and keep them familiarly in their houses like Cats, for they eat Mice, and likewife be- wray all venemous Beasts: for which caufe as is faid before, they call it Pharaonis Mouse, by way of excellency. At Alexandria, they sell their young ones in the Market, and nourifh them for profit; it is a little Beaf, and marvellously flidious of purity and cleanlines.

Bellonis affirmeth that he faw one of them at Alexandria, amongf the ruins of an old Cafle, which suddenly took a Hen and eat it up, for it lovethe all manner of fowls, especially Hens and Chickens, being very wary and cafty about his prey, oftentimes standing upright upon his hinder-legs, looking about for a fit bottom, and when it eypeth his prey near him, it flieth fo clofe to the ground, as is very admirable, until it be within the reach, and then leapeth upon it with incredible celerity, flying to the throat, and like a Lion killeth all by ftrangling. It eateth diffe-
rently every living thing, as Snails, Lizards, Camelions, all kinds of Serpents, Frogs, Mice, and Afs. For Strato, faith, when he findeth an Afp by the water fide, it catcheth hold on the tail, and doth draweth the Beaf into the water, and receiveth help from the flocks to devour his enemy; and whereas we have faid already, that the Ichneumon entereth into the belly of the Cro-
codile, Ammianus Marcellinus, Strabo, Piny, and Oppianus, maketh thereof this discours following. When the Crocodile hath filled his belly, and over-gluttoned himself with meat, he cometh to the land to fleep.

Now there is in Egypt, a certain Bird called Crocillus, whose natures is to wait upon the Cro-
codile, and with her breath and claws, gently and with a kinde of delight, to pull out the remnants of the meat flicking in the Crocodiles teeth; wherewithal the Crocodile being pleased, openeth her mouth wide, to be thus cleaned by this Bird, and so falling faf afeep gaping, watched all the while by the vigilant eye of the Ichneumon, perceiving him to be deeply plunged in a fefilefs security, goeth prefently and walloweth in land and dirt, and with a fingular confidence entereth into the gate of death, that is, the Crocodiles mouth, and suddenly pierceth like an Arrow through the Monifors wide throat down into his belly.

The Crocodile feeing his unlooked for evil, awaketh out of fleep, and in a rage or madness, void of counfel, runneth to and fro, far and wide, plunging himfelf into the bottom of the river, where finding no cafe, returneth to land again, and there breatheth out his untolerable poyson, beating himself with all his power, striving to be delivered from this unfeizable fuffering. But the Ichneumon careth not for this all, fitting clofe upon the liver of the Crocodile, and feeding full sweetly upon his intrails, until at laft being satisfied, eateth out her owne paffeage through the belly of her hoaf. The felf fame thing is related by Pinfarch: but I wonder for what caufe the Beaf fhould rowl her felf in land and dirt, to enter into the Crocodiles belly; for fright of all, if after her rolling in dirt, the dry her felf in the Sun, yet will not that hard cruf be any fufficient armour of proof to defend her fmall body from the violence of the Crocodiles teeth, and besides, it encreafeth the quantity of her body, making her more unfit to glide down through the Crocodiles narrow throat: and therefore, the Authors cannot be but deceived in afcribing this quality to her, when she is to enter into the Crocodile, but rather I believe, the ufheth this defence againft the Afp, as Artiflate faith, and therefore the Author afcribing her fo covered with mud, might eafily be miftaken in her purpofe. For it is true indeed that when the fheeth the Afp upon the land, the calleth her fellows, who arm themselves as before faid before the combate, by which means they are safely preferved from the bitings of their enemies; or if it be true that they wallow themselves in the mud, they do not dry themselves in the Sun, but while their bodies are moist, glide down more eafily into the Crocodiles belly.

Concerning their fighting with Afs, and the arming of themselves as aforesaid, the Egyptians make this Hieroglyphick of the Ichneumon, to alimine a weak man, that wanteth and cra-

veth help of others; Piny also faith that when the Afp fighteth with this Beaf, the Ichneumon turneth to her, her tail, which the Afp taking for defiance, prefently maketh force at it, whereby the is overtaken and destroyed by the Ichneumon, but in my opinion this combate is better ex-

pressed by Oppianus.

H a 2 For
For faith he, the Ichneumon covereth her body in the sand, as it were in a grave, leaving nothing uncovered but her long Serpentine tail, and her eyes, and so expecteth her enemy. When the Aip eipophy her threatening rage, presently turning about her tail, provoketh the Ichneumon to combat, and with an open mouth and lofty head doth enter the lift, to her own perdurion. For the Ichneumon being nothing afraid of this great bravado, receiveth the encounter, and taking the head of the Aip in his mouth, biteth that off, to prevent the casting out of her poylon: afterwards tearing her whole body in pieces, although gathered together wound in a circle; for the successe of these two combattants, lyeth in the first blow. If the Aip first bite the Ichneumon, then doth her poylon destroy her adversary; and so on the contrary, if the Ichneumon first bite the Aip, then is the Ichneumon conqueror; and for this cause she covereth her body as aforesaid.

Furthermore, this Beast is not only enemy to the Crocodile and Aip, but also to their Egs, which the hunsteth out by the fagacity of her nofe, and doth destroyeth them; yet doth the not eat them: whereby the merciful providence of God doth notably appear, for the safeguarde of mankind, in those Countries where these nostome Beasts are bred, hath provided such an enemy to destroy them, both Egs and Birds, as is friendly and tameable by the hand and wit of man.

For which cause the blinde Pagans, consecrated this Beast to Latona, and Lucina, and the Heraclopiltes did think that they possessed al religion; the Egyptians themselves did worship them, because as their Country is all other plagued with Serpents, so they are much eased by the help of this little Beast. And when they die, they do not only lament them, but also bury them religiously. And thus much for the description of the Ichneumon. Now followeth their medicinal vertues.

The Medicines of the Ichneumon.

The skin of the Ichneumon, being dried and beaten into small powder, afterwards mingled with Wine Vinegar, and anointed upon those which are grieved with the venemous or poisonous bites of the same Beast; doth very effectually and speedily cure them of the same. The precious stone called by the name of Eis, which is very hard, as Herus faith, being burned, and afterward beaten or pounded into powder, is an excellent remedy against the venemous biting of the Ichneumon. It is also said, that all Beasts (but especially the Crocodile) do for the most part hate and detest the society of this Beast. There is moreover a very rank and venemous poylon, which proceedeth from the genital or groin of this Beast.

The hairs of the Ichneumon being taken in a certain perfume, doe very much help and cure those which are troubled or grieved with the Maw-worms. The dung of a Cat, or the dung of this Beast, is very medicinable to be put in any salve, or potion, for the strengthening and confirming of the body. The urine or tallow of an Ichneumon, being mixed with the milk of a black Cow, and given unto those which are troubled with that grievous disease, called the Colick and Stone, for the space of three days together in any kinde of drink, will easily and speedily cure them of their pain. The fones of an Ichneumon, being either beaten in powder, or taken raw, either in Wine or any other drink, is very medicinable, and curable for the ealing of all such as are troubled or grieved with any acht, pain, or disease in their belly: And thus much shall suffice concerning the cures, and medicines of the Ichneumon.

Of the LA MIA.

The signification of the word La mia, hath many significations, being taken sometime for a Beast of Lyibia, sometymes for a fish, and sometymes for a Spectre or apparition of women called Phairies. And from hence some have ignorantly affirmed, that either there were no such Beasts at all, or else that it was a compounded monster of a Beast and a Fish, whose opinions I will briefly set down. Aristophanes affirmeth, that he heard one say, that he saw a great wide Beast having several parts resembling outwardly an Ox, and inwardly a Mule, and a beautiful Woman, which he called afterwards Empusa. When Apollonius and his companions travelled in a bright Moon-shine-night, they saw a certain apparition of Phairies, in Latine called Lamia, and in Greek, Emusa, changing themselves from one shape into another, being also sometimes visible, and presently vanishing out of sight again: as soon as he perceived it, he knew what it was, and did rate it with very contumelious and despifeful words, exhorting his fellows to do the like, for that is the best remedie against the invasion of Phairies. And when his companions did likewise ratt at them, presently the vision departed away.

The Poetical Lamia.

The poets say, that Lamia was a beautiful woman, the daughter of Beulai and Lyibia, which Jupiter loved, bringing out of Lyibia into Italy, where he begot upon her many sons, but Juno jealous of her husband, took them as soon as they were born, punishing Lamia also with a reftlesse estate, that she should never be able to sleep, but live night and day in continual mourning, for which occasion she also stealth away and killeth the children of others, whereupon came the fable of changing of children: Jupiter having pity upon her, gave her exemptile eyes that might be taken in and out at her own pleafure, and Likewise power to be transformed into what shape she would; And from hence also came the faigned name of Acho, and Alpho, where-
Of the Lamia.

Tertullianus, Ec. i. quas Pampithiis
Institutio. Num. 1, 2, 3, &c.

Of these Angelus Politianus relateth this old wives story; in his preface upon Aristides first book of
Analytica, that his Grand-mother told him when he was a child, there were certain Lamiae in the
Wildernefs, which like Bug-bears would eat up crying boys, and that there was a little Well near to
Fesulanum, being very bright, yet in continual shade, never seeing Sun, where these Phairy women
have their habitation, which are to be seen of them which come thither for water.

Plutarch also affirmeth, that they have exemptile eyes as aforesaid, and that as often as they go
from home, they put in their eyes, wandring abroad by habitations, streets, and crofs ways, entering
into the assemblies of men, and prying so perfectly into every thing, that nothing can escape them,
be it never so well covered: you will think (faith he) that they have the eyes of Kites, for there is no
small mote but they espy it, nor any hole so secret but they finde it out, and when they come home
again, at the very entrance of their house they pull out their eyes, and cast them aside, so being
blinde at home, but seeing abroad. If you ask me (faith he) what they do at home, they sitting
and making of wool, and then turning his speech to the Florentines, speaketh in this manner: Vidi-
fiusque oitro Lamiis ibat, lei Fùrentinis, quas se & suis neciunt, alios & aliena specerunt. Negati? atqui tamen
sunt in ubiquum frequenter: verum perscrutata incendunt, homines credunt. Lamia sunt: that is to say, O ye Flo-
rentines, did you ever see such Phairies, which were bufe in prying into the affairs of other men, but
yet ignorant of their own? Do you deny it? yet do there commonly walk up and down the City,
Phairies in the shapes of men.

There were two women called Macha, and Lami, which were both foolish and mad, and from the
strange behaviours of them, came the first opinion of the Phairies: there was also an ancient Lybian
woman called Lamia, and the opinion was, that if these Phairies had not whatsoever they demanded,
prefently they would take away live children, according to these verses of Horace.

\[ \text{Vidi siueque oitro Lamiis ibat, \text{Florentinis, quas se \& suis neciunt, alios \& aliena specerunt.} } \]
\[ \text{Negati? atqui tamen sunt in ubiquum frequenter: verum perscrutata incendunt, homines credunt. Lamia sunt: that is to say, O ye Florentines, did you ever see such Phairies, which were bufe in prying into the affairs of other men, but yet ignorant of their own? Do you deny it? yet do there commonly walk up and down the City, Phairies in the shapes of men.} \]
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It is reported of Memphis the Lycean, that he fell in love with a strange woman, who at that time seemed both beautiful, tender, and rich, but in truth there was no such thing, and all was but a fantastical illusion; she was fized to incant herself into his familiarity, after this manner: as he went upon a day a lone from Corinth to Cenchrea, he met with a certain phantasm or spirit like a beautiful woman, who took him by the hand, and told him that she was a Phoenician woman, and of long time had loved him dearly, having fought many occasions to manifest the same, but could never find opportunity until that day, wherefore she entreated him to take knowledge of her house, which was in the Suburbs of Corinth, therewithal pointing unto it with her finger, and so desired his presence: The young man seeing himself thus woosed by a beautiful woman, was easily overcome by her allurements, and did oftentimes frequent her company.

There was a certain wife man, and a Philosopher, who espied the same, and spake unto Memphis in this manner: O Zorba, or a Zorba, expirte multihibus, opin thalpetis, eti so opo? that is to say, O fair Memphis, beloved of beautiful women, art thou a Serpent and doth nourish a Serpent? by which words he gave them his first admonition, or inking of a mischief; but not prevailing, Memphis purposed to marry with this Sperit, her house to the outward seem being richly furnished with all manner of household goods; then said the wife man again unto Memphis, this gold, silver, and ornaments of house, are like to Tantalus Apples, who are said by Homer to make a fair show, but to contain in them no substance at all: even so whatsoever you conceive of this riches, there is no matter or substance in the things which you see, for they are only inchant images and shadows, which that you may believe, this your next Bride is one of the Empusa called Lamia or Moromete, wonderful defirous of copulation with men, and loving their flesh above measure, but those whom they do entice, with their venereal arts, afterward they devour without love or pity, feeding upon their flesh: at which words, the wife man caused the gold and silver plate and houhold luffle, Cooks and Servants, to vanish all away; Then did the Spirit like unto one that wept, entreat the wife man that he would not torment her, nor yet cause her to confels what manner of person she was; but he on the other side being inexorable, compelled her to declare the whole truth, which was, that she was a Phairy, and that she purposed to use the company of Memphis, and feed him fat with all manner of pleasures, to the intent that afterward she might eat up and devour his body; for all their kind love was but only to feed upon beautiful young men.

These and such like stories and opinions there are of Phairies, which in my judgement arise from the prestigious apparitions of Devils, whose delight is to deceive and beguile the minds of men with error, contrary to the truth of holy Scripture, which doth no where make mention of such incanting creatures; and therefore if any such be, we will hold them the works of the Devil, and not of God, or rather I believe, that as Poets call Harlots by the name of Chrypsides, which devoureth and swalloweth whole Ships and Navies, alluding to the infaubtable gulph of the Sea, so the Lamia are but Poetical allegories of beautiful Harlots, who after they have had their lust by men, do many times devour and make them away, as we read of Domedis daughters; and for this cause also Harlots are called Lepes, She-wolves, and Lepores, Hares.

To leave therefore these fables, and come to the true description of the Lamia, we have in hand, In the fourth and thirty chapter of Echo, we do finde this heath called Lilibb in the Hebrew, and translated by the Ancients Lamias; which is there threatened to possess Babylon. Likewise in the fourth chapter of the Lamentations, there it is said in our English translation, that the Dragons lay forth their breasts, in Hebrew they are called Sasmim, which by the confession of the belt Interpreters, cannot signify Dragons, but rather Sea-calves, being a general word for strange wild Beasts. Howbeit the matter being well examined, it shall appear that it must needs be this Lamia, because of her great breasts, which are not ccbestible, either to the Dragon or Sea-calves; so then we will take it for granted, by the testimony of holy Scripture, that there is such a Beast as this. Chryphiasmus Dian also writeth that there are such Beasts in some part of Asia, having a womans face, and very beautifull, also very large and comely shapes on their breasts, such as cannot be counterfeited by the art of any Painter, having a very excellent colour in their fore-parts without wings, and no other voice but hissing like Dragons: they are the swiftest of foot of all earthly Beasts, so as none can escape them by running; for by their celerity they compass their prey of Beasts, and by their fraud they overthrow men. For when as they see a man, they lay open their breasts, and by the beauty thereof, entice them to come near to conference, and so having them within their compasses, they devour and kill them unto the same things subscribe Caucus and Circeuus; adding also, that there is a certain crooked place in Libya, near the Sea-shore, full of sand like to a sandy Sea, and all the neighbour places thertounto are Deserts.

If it fortune at any time, that through shipwreck men come there on fire, these Beasts watch upon them, devouing them all, which either endeavour to travel on the Land, or else to return back again to Sea, adding also that when they see a man they stand by one, and firt not till he come unto them, looking down upon their breasts, or to the ground; whereupon some have thought, they seeing them at the firft sight, have such a desire to come near them, that they are drawn into their compass, by a certain natural Magiical Witch-craft: but I cannot approve their opinions, either in this or in that, wherein they describe him with Horses feet, and hinder-parts of a Serpent; but yet I grant that he doth not only kill by biting; but also by poysoning, feeding upon
Of the Lion.

B eing now come to the discourse of the Lion (justly styled by all writers the King of Beasts) I cannot chuse but remember that pretty fable of Esfe, concerning the society and honour due unto this beast: For (faith he) the Lyon, Affe, and the Fox entered league and friendship together, and foraged abroad to seek convenient booties, at last having found one and taken the same, the Lion commanded the Affe to make division thereof, the filly Affe regarding nothing but society and friendship, and not honor and dignity, parted the same into three equal shares; one for the Lion, an other for the Fox, and the third for himself: Whereat the Lion dinding, because he had made him equal unto the residue, preently fell upon him and tore him in pieces; then bidding the Fox to make the division, the crafty Fox divided the prey into two parts, assigning unto the Lion almost the whole booty, and referring to himself a very small portion, which being allowed by the Lion, he asked him, who taught him to make such a partition, Marry (quoth the Fox) the calamity of the Affe, whom you lately tore in pieces.

In like manner, I will be loath to be so simple, in shewing out the discourse of the Lion, as to make it equal with the treatise of the Beasts lately handled, but rather according to the dignity thereof, to exprefle the whole nature, in a large and copious tractate. For such is the rage of illiterate or elie envious men, that they would cenfure me with as great severity, if I should here-in, like an Affe, forget my self (as I were in their power) as the Lion did his colleague for one foolifh partition.

And therefore as when Lyfemonchus, the son of Agabocler, being ealt by Alexander to a Lyon to be destroyed, because he had given poison to Callisthenes the Philosopher, that was for the ending of his misery, who was included by the said Alexander in a cave to be famished to death; upon some fitie displeasure the said Lyfemonchus, being fo cast unto the Lyon, did not like a cowardly perfon offer himself to his teeth, but when the Lyon came gaping to him to devour him, having wrapped his arm about his liken garment, held him faft by the tongue, until he flopped his breath, and flew him; for which caufe, he was ever afterwards the more loved and honored of Alexander, having at the time of his death, the command of all his treasure.

In like fort, I will not be afraid to handle this Lyon, and to look into him both dead and alive, for the expressing of so much of his nature, as I can probably gather out of any good writer.

First of all therefore to begin with his several names, almost all the Nations of Europe do follow the Greeks in the nomination of this Beast, for they call him Lion; the Latins, Le; the Italians, Leone; the French and English, Lion; the Germans and Italians, Lox; the reason of the Greek name Leora, is taken para to leum, from the excellence of his sight; or from Lao signifying to see, and Athis significeth blinde; for indeed there is no creature of the quantity of a Lion, that hath such an admirable eye-light. The Lionelle, called in Greek, Leona, which word the Latins follow, from whence also they derive Lea for a Lionelle, according to this Verse of Lucretius:

Irrita Lea jaciebat corpora fallari.

The Hebreus have for this Beast male and female, and their young ones, divers names: and first of all for the male Lyon, in Deut. 33, they have Aria, and Ari, where the Chaldees tranflate it Arumon, the Arabians, Aqad; the Persians, Gerad; and plurally in Hebrew, Assur, Arain, Arua, as in the ftire of Zeph. Aratba, Sefhann, roaring Lions; and from hence comes Aria, signifying valiant and strong, to be the name of a Prince; and I.fai. 59. Ezek. 43. it is taken for the Altar of Burnt-offerings, because the fire that came down from heaven, did continually lie upon that Altar, as a Lion in his den; or else because the fashion of the temple was like the proportion of the Lion; the Assyrians call a Lionelle, Aria, the Hebreus also call the male Lyon, Labi, and the female Leah, and they disfiguing Ari, and Labi, making Ari to signify a little Lion, and Labi a great one; and in Num. 23. in this verse, containing one of Gods promises to the people of Israel for victory against their enemies; Behold my people shall arise like Labi, and be lifted up the Aria: there the Chaldeen tranlation rendeth Labi, letto, the Arabians, Jebu, the Persians, Siler; and Mossefs faith that Labi is an old Lyon. In Job 38. Lebaim signifies Lion, and in Psal. 57. Labe signifies Lionelles. In the Prophet Nahum the 2. Lea is by the Hebreus translated a Lion, and the same word Lea, the 30. is by the Chaldees translated a Lions whelp: and in the forefaid place of the
The several kinds of Lions, born in different countries, are described as follows:

1. The Lion of Persia, or the Persian Lion, because it is the most feared and is considered the king of beasts. It is described as having a long, thick mane and a powerful, menacing appearance.
2. The African Lion, or the Lion of Africa, is known for its strength and ferocity. It is described as having a powerful build and a fearsome appearance.
3. The Lion of Europe, or the European Lion, is considered the most aggressive and is known for its ferocity. It is described as having a powerful build and a fearsome appearance.
4. The Lion of Asia, or the Asian Lion, is known for its size and strength. It is described as having a powerful build and a fearsome appearance.

These lions are known for their strength, ferocity, and fearlessness, and are considered the kings of the beasts.

The History of Four-footed Beasts.

Prima Leo, psferena Draco, media ipfa Chimera.

There be also many Fishes in the great Sea, about the Ille Tarpona, having the heads of Lions, Panthers, Rams, and other Beasts. The Tygers of Praia are also engendered of Lions, and are twice so big as they. There are also Lions in India, (called Forence) about the bigness of Egyptian Wolves. Carnaophorales have their binder parts like Lions. The Monekbraa hath the body of a Lion, the Lyon crocata the neck, tail, and beast like a Lion, and there is an allogorical thing called Demoonium Leximun, a Lion Devil, which by Bellamensis, is interpreted to be an allegory, signifying the mingling together reasonable understanding with malicious hurtful actions.

It is reported also by Eelianus, that in the Island of Chnos, a Sheep of the flock of Nicippus, contrary to the nature of those beasts, in stead of a Lamb, brought forth a Lion, which monstrous prodigy was seen and considered of many; whereof divers gave their opinions what it did portend, namely, that Nicippus of a private man should effect superiority and become a Tyrant: which shortly after came to passe, for he ruled all by force and violence, not with fraud or mercy: for Frauf (faith Cicer) quasi Vulpecule, in Leoania esse videtur; that is, Fraud is the property of a Fox, and violence of a Lion.

It is reported that Meles the first King of Sardis, did beget of his Concubine a Lion, and the Soothsayers told him that on what side ever of the City he should lead that Lion, it should remain impregnable, and never be taken by any man; whereupon Meles led him about every tower and rampier of the City, which he thought was weakest, except only one tower, flanding towards the River Tmolus, because he thought that fide was invincible, and could never by any force be entr'd, fealed or ruinated. Afterwards in the reign of Grefus, the City was taken in that place by Darius.

There are no Lions bred in Europe, except in part of Thrace, for the Nemean, or Colchian Lion is but a fable; yet in Aristotles time, there were more famous and valiant Lions in that part of Europe, lying betwixt the Rivers Aetenaus and Nesius, then in all Africa and Asia. For when Xerxes led his Army through Ponsia over the River Cydnos, the Lions came and devoured his Camels in the night time: But beyond Nesius towards the East, or Adderius towards the West, there was never man saw a Lion in Europe; but in the region betwixt them which was once called the Country of the Aderius, there were such flore, that they wandered into Olympus, Macedonias, and Thessalia; but yet of purpose Princes in Castles and Towers for their pleasures fake, do nourish and keep Lions in Europe, where sometimes also they breed, as hath been seen both in England and Florence. Telephomeus also hath no Lions, and therefore when Homer make mention of Diason hunting in the mountains of Ermenos and Teygern, he speaketh not of Lions, but of Harts and Bears.

All the Countries in the East and South, lying under the heat of the Sun, do plentifully breed Lyons, and except in hot Countries they breed feldom, and therefore the Lions of Elys, Tenebra, Angal, Hippo, and Tintus, are accounted the most noble and audacious Lions of Africa, because they are hot Countries. But the Lions of colder Countries have not half so much strength, stomach,
The History of Four-footed Beasts.

The colour of Lions.

Vartomannus.

The colour of Stars.

Carduanus.

The several parts.

Plutarch.

A Lion hath a most valiant and strong head, and for this occasion, when the Nymphes were terrified by the Lions and fled into Curysyn, the Promontory wherein they dwelt was called Co-leon, that is, the Lions-head, where afterwards was built a goodly City. It fortunated as Themisfoles went thither to manage the affairs of the Gracies, Epitrites the Perisys, preident of Phrygia, intended his destruction, and therefore committed the business unto one Ifi, with charge that he should behead Themisfoles, who came thither to execute that murder; but it happened as Themisfoles slept at the noon day, he heard a voice crying out unto him, O Themisfoles effige leonum cepit se in leonem incursus; that is to say, O Themisfoles get thee out of the Lions head, lest thou fall into the Lions teeth: whereupon he arose and saved his life.

The face of a Lion is not round as some have imagined, and therefore compared it unto the Sun, because in the compass thereof, the hairs stand out eminent like Sunbeams, but rather it is square figured like as his forehead, which Aristates faith, you may chuse whether you will call it a forehead, or Epipodium frontis, that is, the superficies of a forehead; for like a cloud it seemeth to hang over his eyes and nose, and therefore the Germans call a man that looketh with such a countenance, Niben of Nabilar, to be cloudy, and it betokeneth either anger or sorrow; also it is called Septimus affellum, because the Septimans were always wont to look as though they were ready to fight.

The eyes of a Lion are red, fiery, and hollow, not very round nor long, looking for the most part awry; whereof the Poets style the Liones Tauris locans. The pupils or apples of the eye shine exceedingly, insomuch as beholding of them, a man would think he looked upon fire.

His upper eye-lid is exceeding great, his Nose thick, and his upper chap doth not hang over the neck, but meet it just: his mouth very great, gaping wide, his lips thin, so that the upper parts fall in the neck, which is a token of his fortitude: his teeth like a Wolves and a Dogs, like faws, lofing or changing only his canine teeth, the tongue like a Cat or Leopards, as sharp as a file, wearing through
through the skin of a man by licking; his neck very flexible, because it is conformed but of one bone without joints, like as in a Wolfe and an Hyæna; the flesh is so hard as if it were all a sinew: There are no knuckles or turning joints in it called Spondylis, and therefore he cannot look backward.

The greatness and roughness of his Neck, betokeneth a magnificent and liberal minde; Nature hath given a short Neck unto the Lion, as unto Bears and Tygers, because they have no need to put it down to the earth to feed like an Ox, but to lift it up to catch their prey. His shoulders and breasts are very strong, as also the forepart of his body, but the members of the hinder part do degenerate. For as Pliny faith, Leones via jumma in pectore, the chiefest force of a Lion is in his breast.

The part above his throat-hole is loose and soft, and his Metaphrenon or part of his back against his heart (so called) between his shoulder-blades, is very broad. The back bone and ribs are very strong, his ventricle narrow, and not much larger than his maw. He is most subject to wounds in his flank, because that part is weakest, in all other parts of his body he can endure many blows.

About his loynes and hip-bone he hath but little flesh. The lionesse hath two udders in the midst of her belly, not because the bringeth forth but two at a time, for sometimes the bringeth more, but because she aboundeth in milk, and her meat (which the getteh feldom) and is for the more part flesh, turneth all into milk. The tail of a Lion is very long, which they shake oftentimes, and by beating their sides therewith, they provoke themselves to fight. The Greeens call it Aceris: and Aceratn maketh this excellent emblem thereof upon wrath.

Alcaeus veteres caudam discre Leonis,
Qua simulacra iras concitat ile graver.
Luna quam fortis bilu crudaedit, & abro
Felle dolor, furiae excitat indomitas.

The neither part of his tail is full of hairs and gristles; and some are of opinion, that there is therein a little sting wherewithal the Lion pricketh it self, but of this more afterwards.

The bones of Lions have no narrow in them, or else it is so small that it seemeth nothing: therefore they are more strong, solid, and greater than any other beast of their natur, and the males have ever more harder bones then the female, for by striking them together you may beget fire, as by the percussion of Flints; and the like may be said of other beasts that live upon flesh, yet are some of the bones hollow. The legs of a Lion are very strong and full of Nerves, and in head of an ankle-bone it hath a crooked thing in his pattern, such as children use to make for sport, and so also hath the Lynx.

His forefeet have five distinct toes or claws on each foot, and the hinder feet but four. Mislaws Plin." are crooked, and exceeding hard, and this seemeth a little miracle in nature, that Leopards, Tygers, Cardani, Panthers, and Lions do hide their claws within their skin when they go or run, that so they might not be dulled, and never pull them forth except when they are to take or devour their prey: also when they are hunted, with their tails they cover their footstepps with earth, that so they may not be bewrayed.

The Epithets of this beast are many, whereby the authors have expressed their several natures, such are these, the curst kind of Lions, full of flomach, tharp, bold, greedy, blunter, froth-enter, Caflian, Cleomen, the Lord and King of the beasts and woods, fierce, wild, furry, yellow, strong, fretting, teeth-grasning, Nemian, thundering, raging, Getulian, rough, lowering, or wry-faced, impa-ient, quick, untamed, free, and mad, according to this saying of the Poet;

Febris Prometheus insini Leonis
Vim flamacho oppugnus nostris.

For as the Eagle is fainfed upon the heart of Prometheus; so also is the Lion the ruler of the heart of man, according to the Aristotelus. And from hence it cometh that a man is failed to bear a stomach when he is angry, and that he should be more subject to anger when he is hungry, then when he is full of meat.

These also are the Epithets of Lions, wrathful, maned, Lybian, deadly, flouth, great, Misstian, Main- tisanian, Farthian, Throgian, Molochean, Carthaginian, preying, ravening, ribbourn, sucking, wrinkle, cruel, bloody, terrible, swelling, vaft, violent, Marmaecian.

The voice of these also are the Epithets of the Lionesses, African, bold, flon-hearted, vengible, caves-lodging, fierce, yellow, Getulian, Hyrcanian, ungentele, Lybian, cruel, frowning, and terrible. By all which the nature of this Beast, and several properties thereof, are comprehendedly expressed in one word.

The voice of the Lion is called Rugitus, that is, roaring, or bellowing; according to this Verse of the Poet;

Tigris indeinque vastus, rugiunt; Leonis.

And
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And therefore cometh Regium Leo, the roaring of the Lion. It is called also Genitus, and Fennius, as Virgil, Fennit leo es cruento. And again;

Hinc exaudiri gemitus, irae; leonum
Vincla receuantur, et fora jub natæ rudendent.

And when the young Lions have gotten a prey, in token thereof they roar like the bleating of a Calf, thereby calling their elders to participate with them. The places of their abode are in the mountains, according to this saying; Leo ecocumina montium amas.

Their sight and their smelling are most excellent, for they sleep with their eyes open, and because of the brightness of their eyes, they cannot endure the light of fire: for fire and fire cannot agree: also their smelling (for which cause they are called Odoarti) is very eminent, for if the Lionesses have committed adultery with the Leopard, the male discovereth it by the sense of his Nose, and for this cause also they are tamed in Tartaria, and are used for hunting Boars, Bears, Hares, Roe-bucks, wilde Asles, as also for wilde and outlawd Oxen, and they were wont to be carried to hunting, two Lions in a Cart together, and either of them had a little Dog following them.

There is no beast more vehement then a fhe or female Lion, for which cause Semiramis the Babylonian tyrannies, elecemed not the slaughter of a male Lion or a Libbard; but having gotten a Lionelle, above all other she rejoyned therein. A Lion when he eateth is most fierce, and also when he is hungry, but when he is satisfied and filled he layeth aside that savage quality, and theweth himself of a more meek and gentle nature, so that it is leffe danger to meet with him filled then hungry, for he never devoureth any till famine constraineth him.

I have heard a story of an Englishman in Barbary which turned Moor, and lived in the Kings Court, in a day it was said in his presence that there was a Lion within a little space of the Court, and the place was named where it lodged. The Englishman being more then half drunk, offered to go and kill the Lion hand to hand, and therewithal armed himself with a Musket, Sword and Dagger, and other complements, and he had also about him a long Knife; so forth went this regenerate English Moor, more like a mad man then an advised Champion to kill this Lion, and when he came to it, he found it a sleep, so that with no peril he might have killed her with his Musket before the saw him: but he like a fool-hardy fellow, thought it as little honour to kill a Lion sleeping, as a flout Champion doth to strike his enemy behind the back. Therefore with his Musket top he fomite the Lion to awake it, whereat the beast suddenly mounted up, and without any thankes or warning, he struck his forefeet on this Squires brest, and with the force of her body overthrow the Champion, and so flod upon him, keeping him down, holding her grim face and bloody teeth over his face and eyes; a sight no doubt that made him with himself a thousand miles from her, because to all likelihood they should be the grinders of his flesh and bones, and his first executioner to send his cursed soul to the Devil for denying Jesus Christ his Saviour. Yet it fell out otherwise, for the Lion having been lately filled with some liberal prey did not presently fall to eat him, but flod upon him for her own safegarde, and meant so to stand till she was an hungry; during which time, the poor wretch had liberty to gather his wits together, and at the last, seeing he could have no benefit by his Musket, Sword, or Dagger, and perceiving nothing before him but unavoidable death, thought for the faving of his credit, that he might not die in foolish infamy, to do some exploit upon the Lion whatsoever did betide him; and thereupon seeing the Lion did betide him, standing over his upper parts, his hands being at some liberty, drew out his long Barbarian knife, and thrust the same twice or thrice into the Lions flank: which the Lion endured, never hurting the man, but supposing the wounds came some other way, and would not forfake her booty to look about for the means whereby she was harmed. At last finding her self sick, her bowels being cut aunder within her (for in all hot bodies wounds work presently) she thedeparted away from the man above some two yards distance, and there lay down and dyed. The wretch being thus delivered from the jaws of death, you must think made no small brags thereof in the Court, notwithstanding, he was more behold to the good nature of the Lion, which doth not kill to eat except he be hungry, then to his own wit, strength, or valour.

The Male Lion doth not feed with the female, but either of them apart by themselves. They eat raw flesh, for which cause the Grecians call them Omphister, Omobrosi, and Omophagi: the young ones themselves cannot long be fed with milke, because they are hot and dry; being at liberty they never want meat, and yet they eat nothing but that which they take in hunting, and they hunt not but once a day at the morn, and eat every second day: whatsoever they leave of their meat, they return not to it again to eat it afterwards, wherefore some affigned the cause to be in the meat, because they can endure nothing which is unwholesome, hot, or flinking; but in my opinion they do it through the pride of their nature, renfeting in all things a Prince-like majesty, and therefore licent to have one dith twice presented to their own table. But tame Lions being constrained through hunger, will eat dead bodies, and also cakes made of meal and honey, as may appear by that tame Lion which came to Afuliaenis, and was fed to have the soul in it of Amosis King of Egypt, which story is related by Philostratus in this manner.

There was (faith he) a certain man which in a land led up and down a tame Lion like a Dog, whithersoever he would, and the Lion was not only gentle to his leader, but to all other persons that
Of the Lion.

That met him; by which means the man got much gains, and therefore visited many Regions and Cities, not sparing to enter into the temples at the time of sacrificing, because he had never shed blood but was clear from slaughter, neither licked up the blood of the Beasts, nor once touched the flesh cut in pieces for the holy Altar, but did eat upon Cakes made with meal and honey; also bread, Gourds, and sod flesh, and now and then at customary times did drink wine. As Apollinus sat in a Temple, he came unto him in more humble manner, laying down at his feet, and looking up into his face, then ever he did to any, as if he had some special supplication unto him, and the people thought he did it for hope of some reward, at the command and for the gain of his Master: At last Apollinus looked upon the Lion, and told the people that the Lion did entreat him to signify unto them what he was, and wheresoever he was pooffeled; namely that he had in him the foul of a man, that is to say, of Amafit King of Egypt, who reigned in the Province of Sai. At which words the Lion sighed deeply, and mourned forth a lamentable roaring,Graphing his teeth together, and crying with abundance of tears; whereat Apollinus stroked the Beaf, and made much of him, telling the people that his opinion was, forasmuch as the foul of a King had entered into such a kingy Beaf, he judged it altogether unfit that the Beaf should go about and beg his living, and therefore they should do well to lend him to Leontopolis, there to be nourished in the Temple. The Egyptians agreed thereunto, and made sacrifice to Amafit, adorning the Beaf with Chains, Bracelets, and branches,fo sending him to the inner Egypt, the Priests finging before him all the way, their idolatrous Hymns and Anthems; but of the transfiguration of men into Lions, we shall say more afterward, only this I verfe in this place to shew the food of tame and en-<ref>Elephant</ref> cased Lions.

The substance of such transfigurations, I hold to be either Poetical, or Diabolical. The food therefore of Lions is most commonly of meek and gentle Beasts, for they will not eat Wolves or Bears, or such Beasts as live upon ravening, because they beget in them melancholy: they eat their meat very greedily, and devour many things whole without chewing, but then they eat afterwards two or three days together, never eating until the former be digested; but when they fall, that day they drink, and the next day they eat, for they seldom eat and drink both in one day: and if any fish in his stomach which he cannot digest, because it is overcharged, then doth he thrust down his nails into his throat, and by straining his mouth pulleth it out again; the felie same thing he doth when he is hunted upon a full belly: And also it must not be forgotten that although he come not twice to one carcase, yet having eaten his belly full, at his departure by a wilful breathing upon the residue, he so corrupteth it, that never after any beast will taste thereof: for so great is the poison of his breath, that it putrifeth the flesh, and also in his own body after it is suddenly ripped up, the intrails stink abominably. The reasons whereof I take to be their great voracity which cannot but corrupt in their stomach, and also the seldom emptying of their belly, for they utter their excrements not above once in three days, and then also it is exceeding dry like a Dogs, stinking abominably, and sending forth much winde: and because their urine smelleth strongly, which also they render like a Dog holding up one of their legs: They never make water, but first of all they smell to the tree, I mean the male Lion. They fall upon some creatures for defire of meat, and especially when they are old, and not able to hunt they go to Towns and Villages, to the stables of Oxen, and folds of sheepep, and sometimes to men and devour them, wherefore they never eat herbs but when they are sick.

Polybius affirmeth that he saw them besiege and compass about many Cities of <ref>Africa</ref>, and therefore the people took and hanged them up upon crowses and gallows by the high way to the terror of others. Wherefore as they excel in strength and courage,so also they do in cruelty. The cruelty of devouring both men and beasts, setting up troops of Horfemen, depopulating the Rocks and herds of Lions. Cattel, bringing home alive to their young ones, killing five or six at one time, and whatsoever they lay hold on, they carry it away in their mouth, although it be as big as a Camel; for they love Camels flesh exceedingly.

And therefore the Lions that set upon the Camels of <ref>Xerxes</ref>, neither medled with the Men, Oxen, nor vitals, but only the Camels: so that it seemeth no meat is so acceptable unto them.

They hate above measure the wilde Asse, and hunt and kill them, according to the saying of the Wiseman, <ref>Lion</ref> venatic agent; the wilde Asse is the game of Lions, Ecclus. 13. They also hate the <ref>Dog</ref>, and will not come near their meat, because both of them live upon flesh; of whom <ref>Elephant</ref> writeth;

They eat also Apes, but more for Physick then for nourishment. They set upon Oxen, using their own strength very prudently, for when they come to a stall or herd, they terrifie all, that they may take one. They eat also young Elephants, as we have shewed before in the story of Elephants: and so terrible is the roaring of the Lion, that he terrifieth all other Beasts, but being at his prey, it is said he maketh a circle with his tail, either in the snow, or in the dust, and that all Beasts included within the compass of that circle, when they come into it presently know it, and dare not for their live passe over it (believe this who that lift.)
It is also in, that when the Beasts do hear his voice, all of them do keep their standing and dare not stir a foot; which affertion wanteth not good reason, for by terour and dread they stand amazed. And the writer of the Gloss upon the Prophet Amos, upon these words of the Prophet, *Nonquid rugiæ Leo in salut, nefi baberit prædam?* Will the Lion roar except he have a prey? *Le*, (faith he) *cum famem petitum, svidet prædam dat rugiæ, quæ audio* fire *stant fixo gradu stupenda;* that is to say, the Lion when he is hungry and feeth his prey roareth, and then all the wilde Beasts stand still amazed.

They drink but little, and also seldom, as we have said already, and therefore *Cyrum* praising good Solliers in *Xerophan uelthe* these words, *Vos famem habetis pro essoio, & hydropofan de raon von Leonum fortere;* that is to say, hunger is your shambles, and you are more patient of thirft then Lions, although you drink water. Nevertheless this great valancy of Lions, yet have they their terours, enemies, and calamities, not only by Men, but also by Beasts, over whom they claim a soveraigny. We have shewed already in the story of Dogs, that the great Dogs in *India* and *Hircania* do kill Lions, and forfake other Beasts to combat with them. There is a Tygre also called *Lazæni,* which in many places is twice as big as a Lion, that killeth them, and depieth the huge quantity of Elephants. *Martius* also writeth, that he saw a tame Tygre devour a wilde Lion. A Serpent, a Snake doth easily kill a Lion, whereof *Ambrosius* writeth very elegantly; *Eximia Leonis pulchritudo per comantes terricis tros executur, cum suisto a serpente os vellere tentat altiliter, itaque Coluber cervum fugit iel Leonem interficit.* The splendent beauty of a Lion in his long curled mane is quickly abated and alloyed when the Serpent doth but lift up his head to his breach; for such is the ordinance of God, that the Snake which runneth from a fearful Hunt, should without all fear kill a courageous Lion; and the writer of *S. Mamos* *alla,* *Alta O men utram, &c.* How much more will he fear a great Dragon, against whom he hath not power to lift up his tail? And *Arifilæ* writeth that the Lion is afraid of the Swine, and *Kæstum* affirneth as much of the Mouse.

The Cock also are both seen and heard for his voice and comb, is a terror to the Lion and Buffalo, and the Lion runneth from him when he feeth him, especially from a white Cock; and the reason hereof is, because they are both partakers of the Sun qualities in a high degree, and therefore the greater body feareth the lesser, because there is a more eminent and predominant funny property in the Cock, then in the Lion.

*Lucianus* describeth this terour notably, affirming that in the morning when the Cock croweth the Beasts become themselves to flight, because there are certain seeds in the body of Coocks, which when they are pent and appear to the eyes of Lions, they vex their pyples and apples, and make them against nature become gentle and quiet; the Verres are thefe;

Quintetiam gallum nūle excludantibus aliis
Auream clarâ confructam voce vocare,
Quem necuenent rapidi contra confurse Leones
Ing, tuti; its continuo meminecre fugiæ.

Nimium quia sunt gallorum in corpore quedam
Sermina, quæ quum sūt ocula immittis Leonum
Pupillias interfudent, serem, dolorem
Decembur, ut necerant contra duræ feroces.

We have spoken already of the *Leonoponus* how the rendreth a urine which poisoneth the Lion; the noise of wesbeles and chariots do also terrifie them, according to the saying of *Seneca, Leonit provia sunt ad hujusmodis firiimis petens.* The high stomach of a Lion is afraid of a little strange noife. *Ambologin* hath an excellent Epigram of one of *Cybels* Priests, who travelling in the mountains by reason of frost, cold, and snow, was driven into a Lions den, and at night when the Lion returned, he feared him away by the found of a Bell. The like also shall be afterwards declared of Wolves in their story.

They are also afraid of fire, *Arístes;* faces, quae quamvis fænit horret; For as they are inwardly filled with natural fire (for which cause by the *Egyptians* they were dedicated to *Vulcan*) so are they the more afraid of all outward fire, and so licipios is he of his welfare, that if he tread upon the rinde or bank of Oke or the leaves of Olvy, he trembleth and randeth amazed. And *Demoretius* affirneth that there is a certain herb growing no where but in Armenia and Cappadocia, which being laid to a Lion, maketh him to fall presently upon his back and lie upright without flaming, and gaping with the whole breadth of his mouth, the reason whereof (Pliny faith) is because it cannot be bruised.

There is no Beast more defirous of copulation then a Liones, and for this cause the males oftentimes fall for, for sometimes eight, ten, or twelve males follow one Lioness, like so many Dogs one Half Bitch; for indeed their natural constitution is hot, that at all times of the year both sexes desire copulation, although *Arifilæ* fecemeth to be against it, because they bring forth only in the spring.

The Liones (as we have shewed already) commiffceth adultery by lying with the Libbard, for which thing the is punished by her male if the wath be not her self before she come at him; but when she is ready to be delivered, the flyeth to the lodgings of the Libbards, and there among them bideheth her young ones, (which for the most part are males) for if the male Lion finde them, he knoweth them and destroyeth them, as a battard and adulterous ifieu, and when the goeth to give them fhe taketh as though the went to hunting.
Of the Lion.

By the copulation of a Lioness and an Hyena is the Ethiopian Cheetah brought forth. The Aryan Parias, Dogs, called Lesangmess, were also generated betwixt Dogs and Lions. In all her life long the heareth but once, and that but one at a time, as if she seemed to set down in that fable, where he expresseth that contention between the Lioness and the Fox, about the generosity of their young ones: the Fox objecteth to the Lioness, that the bringeth forth but one whelp at a time, but lie on the contrary begetteth many cubs, wherein he taketh great delight; unto whom the Lioness maketh this answer: Paterque quidem aquea sed Leones; that is to say, the bringeth forth indeed but one, yet that one is a Lion; for one Lion is better then a thousand Foxes, and true generosity confifteth not in popularity, or multitude, but in the gift of the mind joyed with honorable defect. The Lionesses of Syria bear five times in their life; at the first five, afterwards but one, and lastly they remain barren. Hieronymus speaking of other Lions, fay, they never bear but one, and that only once, whereas he giveth this reason, that when the whelp beginneth to thr in his Dams belly, the length of his claws pierce through her matrix, and so growing greater and greater, by often turning leaveth nothing whole; so that when the time of littering commeth the cafgeth forth her whelp and her womb both together, after which time she can never bear more: but I hold this for a fable, because Homer, Pliny, Oppianus, Solinus, Philostratus, and Aelianus affirm otherwise contrary, and besides experience fieweth the contrary.

When Apollonius travelled from Babylon by the way they saw a Lioness that was killed by hunters: the Beait was of a wonderful bignes, such a one as was never seen: about her was a great cry of the Hunters, and of other neighbours which had flocked thither to fee the monster, and wondering so much at her quantity, as that by opening of her belly, they found within her eight whelps, whereon Apollonius wondring a little, told his companions that they traveling now into Indus should be a year and eight months in their journey: for the one Lion signified by his skill Philostrat an one year, and the eight young ones eight months. The truth is that a Lion beareth never above thrice, that is to say, fix at the first, and at the moft afterwards two at a time, and lastly but one, because that one groweth greater, and fuller of stomach, then the other before him; wherefore nature having in that accomplished her perfection, giveth over to bring forth any more. Within two months after the Lioness hath conceived the whelps are perfected in her womb, and at fix moneths are brought forth blinde, weak, and (some are of opinion) without life, which do so remain three dayes together, until by the roaring of the male their father, and by breathing in their face they be quickned, which also he goeth about to eafterdash by reason; but they are not worth the relating. Ifidius on the other side declareth that for three dayes and three nights after their littering, they do nothing but sleep, and at last are awaked by the roaring of their father: so that it should seeme without controversy, they are senfles for a certain space after their whelping: At two months old they begin to run and walk: They say also that the fortitude, wrath, and boldnes of Lions, is conspicuous by their heat, the young one containeth much humidity contrived unto him by the temperance of his kind, which afterwards by the driesnes and caldity of his evacuation groweth vifcous and flimie like bird-lime, and through the help of the animal Spiritis prevaileth especially about his brain, whereby the nerves are fo topp'd, and the spirits excluded, that all his power is not able to move him, until his parents partly by breathing into his face, and partly by bellowing, drive away from his brain that vifcous humor; these are the words of Physiologus, whereby he goeth about to eafterdash his opinion; but herein I leave every man to his own judgment, in the mean reaon admiring the wonderful wisdom of God, which hath so ordered the several natures of his creatures, that whereas the little Partridge can run so soon as it is out of the fleg; and the ducking the first day swim in the water with his dam, yet the harmful Lions, Bears, Tygres, and their whelps are not able to fee, fland or go, for many moneths; whereby they are expos'd to destruction when they are young, which live upon destruction when they are old: so that in infancy, God cloatheth the weaker with more honor.

There is no creature that loveth her young ones better then the Lioness, for both shepherds, and hunters, frequenting the mountains, do oftentimes see how truly she fightheth in their defence, receiving the wounds of many Darts, and the troakes of many thones, the one opening her bleeding body, and the other pelting the bloud out of the wounds, flaming with incivile grief yielding till death, yes death it felwe were nothing unto her, fo that her young ones might never be taken out of her Den; for which cause Homer comparath Ajax to a Lioness, fighting in the defence of the carcasse of Paratuc. It is also reported, that the male will lead abroad the young ones, but it is not likely, that the Lion which refuseth to accompany her female in hunting, will so much asbe his noble spirit, as to undergoe the Lionesses duty in leading abroad the young ones. In Fangius a mountain of Thracia, there was a Lioness which had whelps in her den, which the den was observ'd by a Bear, the which Bear on a day finding the den unfortified, both by the absence of the Lion and the Lionesses, entred into the same and flew the Lions whelps, afterward went away, and fearing a revenge, for her better security against the Lions rage, climed upon a tree, and there fast as in a sure castle of defence: at length the Lion and the Lionesses returned both home, and finding their little ones dead in their own bloud, according to natural affection fell both exceeding sorrowful, to see them so slaughter'd whom they both loved; but smelling out by the foot the murderer, followed with rage up and down until they came to the tree whereinto the Bear was ascended, and seeing her, looked both of them gaily upon her, oftentimes assaying to get into
the tree, but all in vain, for nature which adorned them with singular strength and nimbleness yet had not endued them with power of climbing, so that the tree hindring them from revenge, gave unto them further occasion of mourning, and unto the Bear to rejoice at her own cruelty, and deride their sorrow.

Then the male forsook the female, leaving her to watch the tree, and he like a mournful father for the loss of his children, wandered up and down the mountain making great moan and sorrow, till at the last he saw a Carpenter hewing wood, who being the Lion coming towards him let fall his Axe for fear, but the Lion came very lovingly towards him, sawning gently upon his breast with his forefeet, and licking his face with his tongue; which gentleness of the Lion the man perceiving, he was much astounded, and being more and more embraced, and fawned on by the Lion, he followed him, leaving his Axe behind him which he had let fall; which the Lion perceiving went back, and made signs with his foot to the Carpenter that he should take it up; but the Lion perceiving that the man did not understand his signs, he brought it himself in his mouth and delivered it unto him, and led him into his cave, where the young whelps lay all embrewed in their own blood, and then led him where the Lioness did watch the Bear, the therefore seeing them both coming, as one that knew her husbands purpose, did signify unto the man that he should confider of the miserable slaughter of her young whelps, and showing him by signs, that he should look up into the tree where the Bear was, which when the man saw, he conjectured that the Bear had done some grievous injury unto them; he therefore took his Ax and hewed down the tree by the roots, which being cut, the Bear tumbled down headlong, which the two furious Beasts seeing, they roar her all to pieces: And afterwards the Lion conducted the man unto the place and work where he first met him, and left there him, without doing the least violence or harm unto him.

Neither do the old Lions love their young ones in vain and without thanks or recompence, for in their old age they require it again, then do the young ones both defend them from the annoyances of enemies, and also maintain and feed them by their own labor; for they take them forth to hunting, and when as their decipt and withered estate is not able to follow the game, the younger pursueth and taketh it for them: having obtained it, roareth mightly like the voice of some warning piece, to signify unto his elder that he should come on to dinner, and if he delayed, he goeth to seek him where he left him, or else carr eth the prey unto him: at the sight whereof, in gratulation of natural kindnese, and also for joy of good success, the old one first licketh and kiseth the younger, and afterward enjoy the booty in common betwixt them.

Admirable is the disposition of Lions, both in their courage, society and love, for they love their nourisshers and other men with whom they are conversant: they are neither fraudulent nor sulficious, they never look awry or squint, and by their good will they would never be looked upon.

Their clemency in that fierce and angry nature is also worthy commendation, and to be wondere at in such Beasts, for if one prostrate himself unto them as it were in petition for his life, they often spare, except in extremity of famine; and likewise they seldom deftroy women or children: and if they see women, children, and men together, they take the men which are strongest, and refuse the other as weaklings and unworthy their honor; and if they fortune to be harmed by a Dart or Bone by any man, according to the quality of the hurt, they frame their revenge; for if it wound not, they only terrify the hunter, but if it pinch them further, and draw blood, they increase their punishment.

There is an excellent story of a Souldier in Arabia, who among other his colleagues, rode abroad on gendings to see some wild Beasts: now gendings are so fearful by nature, that where they conceive any fear, no wit or force of man is able by spur and rod to make him to come near the thing it feareth, but those which are not gendied are more bold and courageous, and are not at all afraid of Lions, but will fight and combat with them. As they road they saw three Lions together, one of the Souldiers seeing one of them stray and run away from his fellows, cast a Dart at him, which fell on the ground near the Lion's head, whereas the Beast fled a little and paused, and afterward went forward to his fellows. At last the Souldier road betwixt him and his fellows which were gone before, and run at his head with a spear, but missed it, and fell from his Horse to the earth, then the Lion came unto him and took his head in his mouth, which was armed with a Helmet, and prefing it a little did wound him, taking of him no more revenge, then might require the wrong received, but not the wrong intended; for generally they hurt no more then they are harmed.

There is an obscure Author that attributeth such mercy and clemency to a Beast which he called Meloes, for he persecuteth with violence and open mouth flout men, and all whom he is able to refit, but yet is afraid of the crying of children. It is probable that he mistaketh it for the Lion, for besides him, I have not read of any Beast that spareth young children. Solinus affirmeth that many Captives having been set at liberty, have met with Lions as they returned home, weak, ragged, sick, and disarmed, fairly without receiving any harm or violence.

And in Libya the people believe that they understand the petitions and entreaties of them that speak to them for their lives; for there was a certain Captive woman coming home again into Gerhia her native Countrey through many woods, was let upon by many Lions, against whom she used no other weapon but only threatening and fair words, falling down on her knees unto them,
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them, beceathing them to spare her life, telling them that she was a stranger, a captive, a wanderer, a weak, a lean and loft woman, and therefore not worthy to be devoured by such courageous and generous Beasts as they: at which words they spared her, which thing she confedted after her falte return: the name of this woman was called Ἴπα. Although about this matter there were bendency opinions of men, some making question whether it be true, that the Lion will spare a prostrate suppliant, making confession unto him that he is overcome; yet the Romans did fo generally believe it, that they caused to be inscribed so much upon the gates of the great Roman Palace in these two Verfes;

Ἐρατος χειμος, προς δεινις ἱππα λεονις;

In fatis præstato, hoc negat effer ferum.

It is reported also, that if a man and another Beast be offered at one time to a Lion to take his chiose whether of both he will devour, he spareth the Man and killeth the other Beast. These Lions are not only thus naturally affected, but are enforced thereunto by chance and accidental harmes; as may appear by these examples following: Mentor the Syracusan, as he travelled in Syria met with a Lion, that at his first flight fell prostrate unto him, rolling himself upon the earth like some distrefled creature, whereas the man was much amazed, and not understanding the meaning of this Beast, he indeavoured to run away; the beast still overtook him, and met him in the face, licking his footsteps like a flatterer, thwed him his heel, wherein he did perceive a certain dwelling, whereas he took a good heart, going unto the Lion, took him by the leg, and seeing a splint sticking therein, he pulled it forth, so delivering the Beast from pain; for the memory of this fact, the picture of the man and the Lion were both pictured together in Syracusus, until Finier time, as he reporteth. The like story is reported of Elys the Seamian, who coming into Africa by ship, and there going a shore, had not walked very far on the Land, but he met with a Gaping Lion, at which being greatly amazed, he climbed up into a tree, forasmuch as there was no hope of any other flight, and prayed unto Bacchus (who in that Country is esteemed as chief of the Gods) to defend him, as he thought, from the jaws of death; but the Lion seeing him to climb into the tree flood still, layed himself down at the root thereof, directing him in a manner, by his heave roaring, to take pity upon him, gaping with his mouth and shewing him a bone sticking in his teeth, which through greediness he swallowed, which did to pain him that he could eat nothing; at the last the man perceiving his mind (moved by a miracle) laid aside all fear, and came down to the dumb-speaking distrefled Lion, and eafeed him of that misery: which being perform'd, he not only shewed himself thankful for the present time, but like the best natured honest man, never forlooke shore, but once a day came to shew himself to the man his helper, during the time that they abode in those quarters; and therefore Elys did afterward dedicate a Temple unto Bacchus in remembrance thereof. And this seemeth to me most wonderful, that Lions should know the vertue of mens curing hands above other creatures, and also come unto them against nature and kinde, but so much is the force of evil and pain, that it altereth all courtes of savage minds and creatures.

When Antrocles a servant ran away from a Senator of Rome, because he had committed some offence (but what his offence was I know not) and came into Africa, leaving the Cities and places inhabited to come into a defert region: Afterwards when Antrocles had obtained a Matter being Confuill of that Province of Africa, he was compelled by daily stripes to run away; that his fides might be free from the blows of his Matter, and went into the solitary places of the fields, and the fides of the wilderness: and if he should happen to stand in need of meat, he did purpose to end his life by some means or other; and there he was so chortched with the heat of the Sun, that at last finding out a cave, he did cover himself from the heat of it therein; and this cave was a Lions den. But after that the Lion had returned from hunting, (being very much pained by reason of a thorn which was fastened in the bottom of his foot) he uttered forth such great lamentation & pitiful roarings, by reason of his wound, as that it should seem, he did want some body to make his moun unto for remedy; at last coming to his cave, and finding a young man hid therein, he gently looked upon him, and began as it were to flatter him, and offered him his foot, and did as well as he could pray him to pull out the piece of splint which was there fastened. But the man at the first was very fore afraid of him, and made no other reckoning but of death: but after that he saw such a huge savage beast so meek and gentle, began to think with himself, that surely there was some fore on the bottom of the Beast, because he lifted up his foot fo unto him, and then taking courage unto him, lifted up the Lions foot, and found in the bottom of a great piece of splint, which he plucked forth, and so by that means eafeed the Lion of his pain; and prefed forth the matter which was in the wound, and did very curiously without any great fear throughly dryt, and wipe away the bloud: the Lyon being eafeed of his pain, laid himself down to refl, putting his foot into the hands of Antrocles.

With the which cure the Lion being very well pleased, because he handled him fo courteously and friendly, not only gave him for a recompence his life, but also went daily abroad to forrage and brought home the fattert of his prey. Antrocles whom all this while (even for the space of three years) he kept familiarly, without any note of cruelty or evil nature in his den, and there the Man and the Beast lived mutually at one common, the man roasting his meat in the hot Sun, and

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The Lion eating his part raw, according to kind. When he had thus lived by the space of three years, and grew weary of such habitation, life, and society, he betought himself of some means to depart; and therefore when the Lion was gone abroad to hunting, the man took his journey away from that hospitality, and after he had travelled three days (wandering up and down) he was apprehended by the legiornary Souldiers, to whom he told his long life and habitation with the Lion, and how he ran away from his Mafter a Senator of Rome; which when they understood, they also sent him once again to Rome to the Senator.

And being received by his master, he was guilty of so great and foul faults, that he was condemned to death, and the manner of his death was, to be torn in pieces of Wild beasts. Now there were at Rome in those days many great, fearful, cruel, and ravening beasts, and among them many Lions: it fortuned also, that shortly after the taking of the man, the aforefaid Lybfon Lion with whom he lived long, seeking abroad for his companion and man-friend, was taken and brought to Rome, and there put among the residue, who was the most fierce, grim, fearful, and savage, above all other in the company, and the eyes of men were more fastened upon him then all other beside. When Antroche was brought forth to his execution, and caft in among these savage beasts, this Lion at the first sight looking steadfastly upon him, stood still a little, and then came toward him softly, and gently, spitting to him like a Dog, and wagging his tail: the poor examineate and forlorn man, not looking for any thing but present death, trembled and was scarce able to stand upright in the presence of such a beast: not once thinking upon the Lion that had nourished him so long, but the Beast Aceptii benefcioi memelii mindful of former friendship, licked gently his hands and legs, and so went round about him touching his body, and so the man began to know him, and both of them to congratulate each other in that their imprisoned occurrence, and to figure to all the beholders their former acquaintance and conversation, the man by iroking and killing the Lion, and the Lion by falling down prostrate at the mans feet.

In the mean time a Pardall came with open mouth to devour the man, but the Lion role up against her, and defended his old friend, and the being inhaft, the Lion tore her in pieces, to the great admiration of the beholders, as it could not otherwise chufe. Then Cafiur which had caufed those spectacles, fent for the man, and asked him the caufe of that fo rare and prodigious an event, who incontinently told him the ftrife before expreffed. The rumor whereof was quickly fped abroad among the people, and tables of writing were made of the whole matter, and finally all men agreed that it was right that both the man and the Lion should be pardoned and restored to liberty: and afterward (faith Afpion) all the people and beholders of that comedy were feters to the Senat for the accomplishment thereof, and to the man was pardoned, and the Lion was given unto him for a reward or fuffrage, who led him up and down the streets in a team or flip; Antroche receiving money, and the Lion adorned with flowers and garlands, and all men that faw or met them faid, His eft Leo benefcioi, bic eft mendo Liou: Here goeth the Lion which was thy Mans foff, and here is the man which was this Lion Pofciau.

Sence alfo in his book De benefcioi, out of Gallius writeth fo much of another Lion: and indeed there is no man or other Beast more fixed and constant in their love and friendship, or more ready to revenge the breach of amity and kindness, then is a Lion; as appeareth by this ftrife of Inimicis, who writeth of a certain young man, that he nourished together many years a Dog, a Bear and a Lion, who lived in perfect peace and concord without breach, flaring, or appearance of anger. On a day as the Bear and Dog played together and biting one another gently, it happened that the Dog fatten his teeth (in sport) deeper then the Bear cold digget, and therefore prefently he fell upon him, and with his claws tear out the soft part of his belly, whereof he prefently dyed: the Lion fitting by, and feeing this cruelty, and breach of love, amity, and concord among them that had fo long lived together, fell to be inflamed to revenge that perfidie, and like a true king of Beasts, measured the fame measure to the Bear as he had done to the Dog, and served him with the same fauce, tearing him infancy in pieces.

There is alfo in the life of S. Jerome, a ftrife of a Lion that was cured by him, as you have read before the Lion was by Elfis, and that the Beaf in gratitude of that good turn, did ever afterward follow the Aife which brought him home his carriage and provifion through the woods; till at laft the Lion being alfeep, the Aife was stolen away, for sorrow whereof, the Lion put himself in the Aifes stead, to bear burthens as he did; within fhort time after he found out the Aife in the thieves fable, and brought home again; but I am of Eresfum minde concerning this ftrife, that the Author thereof took upon him to write wonders and not trufh.

The Kings of Egypt and Syria did keep tame Lions, to accompany them into their wars, which were led about their own bodies for their guard and cultoby, againft all peril and invasion.

It is alfo very pertinent to this place, to express the emenency of these Beasts towards the Martyrs and fervants of Jesus Christ, both men and women, that so we may obferve the performance and accomplishment of that Prophefie, Pali. 91. They fould walke upon the Afe, and the Cockatrice, and feely tread upon the Lion and the Dragon: This we are not to attribute to the nature of Lions, but rather to the over-running hand of our and their Creator, who in remembrance of his own promise, and advancement of his own glory, foppeth the mouth of Lions, and restrained all violence both of living creatures and elements; yet I will not impose any necelitv of believing these ftrifes upon the Reader, for I my felf report them not for trufh, but because they are written.
Of the Lion.

When S. Anthony went about to make a grave for the interring of the carcases of Paul the first Ana- lyst, conit, and wanted a shovel or spade to turn up the earth, there came two Lions, and with their claws opened the earth so wide and deep, that they performed therein the office of a good grave-maker. The Prophet Daniel was cast unto the Lions, to whom (according to the Babylonian story) was given for their diet every day, two condemned men, and two sheep, and yet by power of the Almighty whom he served, the Angel of the Lord came down andaptop the Lions mouths, so that in extremity of hunger, they never so much as made force at him, but sat quietly at his feet like so many little Dogs; by which means he escaped all peril and torments of death. Eluberus being cast to the Lions at the command of Adrian the Emperor, and Prisca a Noble Virgin, at the command of Claudius Caesar, both of them in their several times, tamed the untamed Beasts and escaped death.

Martyrs being in the Wilderness or Mountains, it fortuned a Lioness had a dens nest unto its cell, wherein she had long nourished blinde whelps, to whom the holy man (as it is reported) gave the use of their eye and light; the Lioness required the same with such gratification as lay in her power, for the brought him very many sheep-skins to clothe and cover him. Prosperus, and Facilius, Thracia, Vitus, Modestus, and Crescens, all Martyrs, being cast unto Lions received no harm by them all, but the beasts lay down at their feet, and became tame, gentle, and meek, not like themselves, but rather like Doves. When a Bear and a Lion fell upon Tres the Virgin, a Martyr, a Lioness came and fought eagerly in her defence against them both. When Martina, the daughter of a Cesar, could not be terrified or drawn from the Christian faith by any imprisonment, chains, or stripes, nor allured by any fair words to sacrifice to Apollo, there was a Lion brought forth to her, at the commandment of Alexander the Emperor, to destroy her; who, as soon as she saw her, he lay down at her feet wagging his tail, and fawning in a loving and fearful manner, as if he had been more in love with her presence, than dehors to lift up one of his hairs against her. The like may be said of Daria, a Virgin, in the days of Numerian the Emperor, who was defended by a Lioness; but I spare to blot much paper with the recital of those things (which if they be true) yet the Authors purpose in their allegation is most profane, unlawful and wicked, because he thereby goeth about to establish miracles in Saints, which are none gone ceas'd in the Church of God.

Some Martyrs also have been devoured by Lions, as Ignatius Bishop of Antioch, Saturus and Perpetua, he under Trajan the Emperor, and they under Valerian and Gallienus. In holy Scripture there is mention made of many men killed by Lions. First of all it is memorable of a Prophet, 1 King, 13. that was sent by the Almighty unto Jeroboam, to cry out against the Altar at Bethel, and him that erected that Altar; with charge, that he should neither eat nor drink in that place:

Afterward an old Prophet which dwelt in that place hearing thereof, came unto the Prophet, and told him that God had commanded him to go after him, and fetch him back again to his house to eat and drink; wherewith being deceived, he came back with him contrary to the commandment of the Lord given to himself; whereupon as they sat at meat, the Prophet that beguiled him, had a charge from God to prophesy against him, and so he did: afterward as he went homeward a Lion met him and killed him, and sold by the corps, and his Ashes not eating of them till the old Prophet came and took him away to bury him.

In the twentieth chapter of the same Book of Kings, there is another story of a Prophet, which as he went by the way he met with a man, and bade him in the name of the Lord to wound and smite him; but he would not, preferring yet before the service of the Lord; Well (said the Prophet unto him) seeing thou refuseth to obey the voice of the Lord, Behold we saw not what thou art departed, a Lion shall meet thee and destroy thee: and so it came to pass, for being out of the presence of the Prophet, a Lion met him and tore him in pieces.

The Idoltalous people that were placed at Jerchem by the King of Bethel, were destroyed by Lions; and unto these examples of God his judgements, I will add other out of humane stories. Papges, a King of Ambracia, meeting a Lioness leading her whelps, was suddenly set upon by her and torn in pieces, upon whom Ovid made these verses:

Fate tibi occurrat patrio popularis in urvo; Song; Papgesae causa leona necis.

Hyas the brother of Hyades, was also slain by a Lioness. The people called Ambraciota in Africk, do most religiously worship a Lion; because a notable Tyrant which did oppress them was slain by such an one. There is a Mountain near the River Idus (called Licinius) of a Shepheard so named, which in that Mountain did most superstitiously worship the Moon, and contented all other Gods, his sacrifices were performed in the night season; at length (faith the Author) the Gods being angry with him, sent unto him a couple of Lions who tore him in pieces, leaving no monument behind but the name of the Mountain for the accident of his cruel death. The Inhabitants of that Mountain wear in their ears a certain rich stone (called Citrine) which is very black, and bred no where else but in that place.

There is a known story of the two Babylonian lovers, Pyramus and Thisbe, who in the night time had covetted to meet at a Fountain near the sepulchre of Nymus, and Thisbe coming thither first,
The History of Four-footed Beasts.

as the fate by the Fountain, a Lion being thirsty, came thither to drink water, (after the slaughter of an Ox:) at sight whereof, Thibes ran away and let fall her mantle, which the Lioness tore it in pieces with her bloody teeth. Afterward came Pyramus, and seeing her mantle all bloody and torn asunder, suspecting that the that loved him, being before him at the appointed place had been killed by some wild beast, very inconsiderately drew forth his sword, and thrust the same through his own body, and being scarce dead, Thibes came again, and seeing her lover lie in that distress, as one love, one caufe, one affection had drawn them into one place, and there one fear had wrought one of their destructions, the also sacrificed her self upon the point of one and the same sword.

There was also in Scythia a cruel Tyrant (called Therosmus) who was wont to cast men to Lions to be devoured of them, and for that caufe did nourish privately many Lions: unto this cruelty did Ovid allude, saying:

Therosmonstes ut qui senfere Liones.

And again:

Non tibi Therosmon crudelis: vocabitur Ateus.

Unto this discourse of the blood-thirsty cruelty of Lions, you may add the puissant glory of them, who both in Sacred and profane stories are said to have destroyed Lions. When Sampson went down to Timnah, it is said, that a young Lion met him roaring to destroy him, but the Spirit of the Lord upon him, and he tore it in pieces like a Kid; wherein he was a Type of Jesus Christ, who in like forte being set upon by the roaring of the Devil and his members, did with facility (through his divine nature) utterly overthrow the malice of the Devil. Afterward Sampson went down to the Philistine woman whom he loved, and returning, found that Bees had entered into the Lions carcases, and there builded, whereupon he propounded this Riddle: A vosel exitus cibus, & ex forti eigressa eff dulced: Out of the devourer came meat, and out of the strong came faintnels.

Benisih the son of Jephaiada one of David Worthies, did in the Winter time in the snow kill a Lion in a ditch: David himselfe feeding his fathers flock, slew a Lion and a Bear which had robbed him of a Lamb.

It is reported of Perdiccas (one of the Captains of Alexander) a valiant man, that he went alone into the Den of a Lions, but not finding her therein, took away her wholes, and brought them forth to the admiration of all men; for the Lions both among the Barbarians and Graecians is accounted the strongest and most unfeizable beast. In the Northern parts of the World (faith Pan-

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wore continually that Lions sain which was given him by Hercules: and therefore he could not be wounded: But I take this to be but a fable: rather this was the truth: Alex was a valiant soldier, and so warily carried himself in many battails, that he never received wound, but at last he flew himself with his own sword, thrusting it through his neck; and for this cause it was fabled, that he never could be wounded, by a vertue (as was imagined) conferred on him from Hercules. Ovid hath a witty fction of one Phylus, who fell so deeply in love with a little boy, that at his pleasure he took many wilde Beasts, Birds, and Lions, and tamed them to the delight of his Amours: at length the infaile Boy required him to do the like by a Bull, which he had overcome, but Phylus denying that request, they Boy presently call himself down from a Rock, and was afterward turned into a Swan; by which the Poet declarth, the unmerciful regard which wretches and childish minds bear towards the greatest labours and deferts of the best men; and that in fuch fociety a man is no longer beloved, then he giveth; alfo the denial of one small request cannot be endured, although a thousand good turns have gone before it; wherefore fuch minds may well be transmuted into Swans, which forfake their owners and breeders, going and swimming far from their firft and proper habitation.

Having but mentioned fuch a fary, it is no exorbitant to add in one word other fictions of Metamorphosing, and transmuring men into Lions which we promised in the former discourse of Atlas and Apollo, when I discovered of the food of Lions.

And firft of all, it is not improper to remember the caution of Timoec the Pythagorean, who affirned, that the mutation of men into_beasts, is but a fiction brought in to the terror of wicked men, who seeing they cannot be restrained from vice, for the love of well doing, they may be deterred for the fear of punifhment, which is meant by fuch beffally transfigurations.

And this thing is thought to be most confonant to the opinion of Plato, for inconsideration of the habit, and not of the kinde; a good house-keeper, and charitable nourishing man, is said to be transmuted into a tree: He which liveth by catching and snatching, to ferve his own concupifcence, into a Knave; he which for love of military discipline and Martial affairs, into a Lion, he that was a Tyrant and a devourer of men, into a Dragon: and Empefcoals also faid, that if a man depart this natural life, and be transmuted into a brute beaft, it is most happieft for him if his foul go into a Lion: but if he looke his kinde and lenes, and be tranfmutted into a plant, then is it beft to be metamorphosed into a Laurel or Bay-tree. And for thefe caufes we read of Hipp changed into a Lion, and Atlas into a Lion, and the like I might lay of Heracles, of the Curetes, and others: and generally all the Eastern wise men believed the transmigration of fpirits from one into another, and inftancd fo much to their symmirs and dignities, making little or no difference betwixt the natures of men and brute beafts. Therefore they taught that all their Priests after death were turned into Lions, their religious Vellals or women into Hyrana, their Servants or Minifters in the Temples, about the service of their fpirit God into Crows and Ravens; the Fathers of families, into Eagles and Hawks; but thofe which ferved the Leonick Altars, naming Nemea farea, inftituted for the honour of Hercules, were transformed diverfly: but of all thofe we have already expressed our opinion; namely, to believe and think fo basely of mankinde, created after Gods image, as once to conceive or entertain one thought of fuch paffing of one from another, were moft lewd and Diabolical; but to conceive them as allegories, by which the minds of the wise may be inftucted in divine things, and God his judgements; it is Poetical, fo is it not againft any point of learning, or good Religion.

As that which hath been already expressed moft notably defcribith the nature of the Lion, which fo that succedeth hath the fame use for the manifelfation of the dignity and honour of Beauf.

First of all therefore, to begin with his understanding, and to fiew how heere he cometh to the nature of man. It is reported by Alliana, that in Lybia they retain great friendfhip with men, enjoying many things in common with them, and drinking at the fame Well or Pountain. And if at any time he be deceived in his hunting, and cannot get to satisfies hunger, then goeth he to the houses of men, and there if he finde the man at home, he will enter in and defroy, except by wit, policy, andrength, he be refilled; but if he finde no man, but only women, they by railing on him and rebukes, drive him away, which thing argueth his understanding of the Lybian tongue; The rum and manner of thofe fpeeches and words which the ueth among the Liones, and many Kight men, or at leaft beffed, being a Lion, the King of Beaufs, to come to my por tafhe to big meat at the hands of a woman? and like a fick man, disfurred with the weaknes of body, to fall into the hands of a woman, that by her mercy thou maft attain thofe things which are requeftible for thy own maintenane, and fuffelevation? you rather thou fhouldf keep in the Mountains, and live in them, by hunting the Hare and other Beaufs, provided in nature for the Liones food, and not after the fatisfition of little bague Dogs, come and live in beaufs to take meat at the hands of men and women.

By fuch like words the enchanceth the minde of the Lion, fo that like a reasonable perfon, overcome with strong arguments, notwithstanding his own want, hunger, and extremity, he calleth his eyes to the ground affhamed and affiicted, and departeth away without any enterprise: Neither ought any judicious or wise man think this thing to be incredible; for we fee that Horfes and Dogs which live among men, and bear their continual voyces, do differne alfo their tearms of threatening, chiding, and rating, and fo stand in aw of them; and therefore the Lions of Lybia, whereof
many are brought up like Dogs in houses, with whom the little children play, may well come to the knowledge and understanding of the Montana tongue.

It is also said they have understanding of the parts of men and women, and discern sexes, and are induced with a natural modesty, declining the sight of women's privy parts. And unto this may be added the notable story of a Lion in England, (declared by Grammarians) which by evident token was able to distinguish betwixt the King, Nobles, and vulgar sort of people.

As the ears of Horses are a note of their generosity, so is the tail of Lions, when it flarethimmovable, it sweareth that he is pleasant, gentle, meek, unmoved, and apt to endure any thing, which salleth out very seldom, for in the sight of men he is seldom found without rage. In his anger, he first of all beateth the earth with his tail, afterwards his own sides, and lastly leapeth upon his prey or adversary. Some creatures use to wag their tails, when they feele suddenly those which are of their acquaintance, as Dogs; but Lions and Bulls, do it for anger and wrath. The reason both of one and other, is thus rendred by Aproadesius. The back-bone of such Beasts is hollow, and containeth in it marrow, which reacheth to the tail, and therefore there is in the tail a kind of animal motion, and power. For which cause when the Beast seeth one of his acquaintance, he waggeth his tail by way of salutation for the same reason that men shake hands, for that part is the readieft and nimbleft member of his body; but Bulls and Lions are constrained to the wagging of their tails for the same reason that angry men are light fingered, and apt to strike: for when they cannot have sufficient power to revenge, they either speak if they be Men, or else bark if they be Dogs, or smite their sides with their tail if they be Lions; by that means uttering the fury of their rage to the cave of nature, which they cannot to the full desire of revenge.

But we have shewed before that the Lion striketh his sides with his tail, for the stirring up of himself against dangerous perils, for which cause Lucan compareth Cæsar, in his warlike expedition at Pharsalia, against his own Country, before his passage over Rubicon, (whilest he exhorted his followers) to a Lion beating himself with his own tail in these veres:

Inde mora soluit bello, tumidumque: per annum,
Sicque tails propere: sicque fialentibus avus
Et ffera; Lybici, visi Leo conitus bofe,
Subsidat dubius, tantum dum colligat iram;
Max imi le fave stimulavit verbere cauda,

There are many Epigrams, both Greek, and Latine, concerning the rage, force, friendship, and society of Lions with other Beasts, whereof these are most memorable: the first of a Hare, which through sport crept through the mouth of a tame Lion, whereof Martial writeth in this fort, teaching her to fly to the Lions teeth against the rage of Dogs in these veres:

Rithibus his Taurus non ripiure magisfis,
Per quos prada fugax ieg; reditq. lepuri.
Quando magis mirum, velocius exit ab bofe,
Nec nibil à tanta nobilitate refert.

There is another of the same Poets, about the society of a Ram and a Lion, wherein he wondereth, that so different natures should live together, both because the Lion forgettesth his prey in the Woods, and also the Ram, the eating of green grass, and through hunger, both of them constrained to taste of the same dithes; and yet this is no other, then that which was foretold in holy Scripture, the Lion and the Lamb should play together: the Epigram is this:

Maffici Leo fama jugi, pecoris; maritus
Lanigeri, mirum qua poliue fide,
Ipfe licet videm, cavaa Habitudinem in una;

For we have shewed before, that a Lion in his hunger will endure nothing, but fiercely falleth up

on every prey, according to these veres of Mariantus:

Quis dubitet, quia sit natura Leonis?
Quaeque, siue aliqua signa melcontentibus atque?
Hic novem semper fugas, multa bella ferarum
Apparit, & pereunt omnium spolia, atque rapinis.

Concerning the hunting and taking of Lions, the Indian Dogs and some other fierce Hunters do set upon Bulls, Bares, and Lions, as we have said before in the History of Dogs: but Dogs, which are begotten of Tygers, amongst the Indian, and chioe of Hyrcania, especially do this thing: as it is noted by Mariut, concerning the fortiitude and courage of a Dog, saying:

Et truculentus Helor certare Leonibus sudens.
Of the Lion.

In the Province of Gignis, which is subject to great Cham King of Taenaria, there are very many Lions which are very great and cruel: and in that Region the Dogs are accounted so bold and strong, as they will not fear to invade or eat upon those Lions; and it is often times cometh to pass, that two Dogs and a hunting Archer sitting on Horse-back do kill and destroy a Lion: for when the Dogs perceive the Lion to be near them, they set upon him with great barking, but especially when they know themselves backed with the help of a man, they do not cease to bite the Lion in his hinder parts and tail: and although the Lion doth oftentimes threaten them with his frowning and terrible countenance, turning himself this way and that way, that he might tear them in pieces, notwithstanding the Dogs looking warily unto themselves, are not easily hurt by him, especially when the hunting Horse-man following them, doth seek the belt means to flay his Dart in the Lion, when he is beaten of the Dogs, for they are wise enough to consider their own help. But the Lion then flyeth away, to fear left the barking and howling of the Dogs, may bring more company both of Men and Dogs unto him. And if he can he betaketh himself nighly unto some tree, that he may enjoy the fame for a place of defence for his back, then turning himself with a scornful grinning, he fighteth with all his force against the Dogs. But the Hunter coming nearer upon his Horfe, refeth not to throw Darts at the Lion until he kill him: neither doth the Lion feem to feel the force of the Darts until he be flank, the Dogs do unto him so great hurt and trouble.

If a Lion be seen in the time of hunting, being ashamed to turn his back, he doth a little turn away himself if oppressed with a multitude: but being removed from the sight of the Hunters, he doth hastily prepare for flight, thinking that his fame is cleared by concealing himself; and therefore knoweth that the Woods cannot give testimony of his fear.

He doth want in his flight the leaping which he useth in pursuing either Beasts He doth craftily difsemble and abolish his foot-steps to deceive the Hunters: Pollux affirmeth, that if a Hunter do fight against any wilde Beasts, as a Bore, he must not trifle with his legs wide abroad, but keep them together within the compass of a foot, that he may keep his ground steadfast and sure, even as the manner is in Wrestling: for there are some wilde Beasts, as Panthors and Lions, when they are hunted, and are hindered in their course by their Hunters, if they be any thing near them, do presently leap upon them. But the stroke which is given ought to be directed or levelled right against the breast, and the heart, for that being once stricken is incurable. Xenophon faith, in his Book concerning hunting, that Lions, Leopards, Bears, Pardals, Lynxes, and all other wilde Beasts of this fort which inhabit Defert places (without Greece) are taken about the Pangeean Mountain, and the Mountain called Cyrtus, about Macedony: some in Olympus, Myliss, and Pindus: some in Mytia above Syris, and in other Mountains which are fit for the breeding and nourishing Beasts of this kinde. But they are taken partly in the Mountains by poyon of Wolf-bane; for the sharpness of the Region (because that can admit no other kinde of hunting as by Nets and Dogs) but mingling this with that thing in which every wilde Beast delighteth; the Hunters do call it unto them near the Waters.

There are some also which do descend down in the night time, who are taken in regard that all the ways by which they should ascend unto the Mountains are flopped with Hunt-men, and weapons, neither being so excluded, are they taken without great peril unto the Hunt-men.

There are some also which make pitfalls or great ditches in the ground to catch Lions, in the midst whereof, they leave a profound lofty pillar, upon which in the night time they tie a Goat, and do heap the pitfalls round about with boughs, left that it might be seen, leaving no entrance into the fame. The Lions hearing the voce of the Goat in the night, do come unto the place and walk round about the hedge, but finding no place where they may enter, they leap over and are taken.

Oppianus doth describe three manner of ways of hunting Lions, which also Bellarminus doth, but he doth describe them my minde very unskillfully.

The first of them is rehearsed out of Xenophon; we will notwithstanding also add thereunto Oppianus: for he doth in very both of them. The second is made by fire. The third by whips or scoures.

The first manner of way is therefore as Gillius for the most part translating out of Oppianus; in this fort: Where the Hunters of Libya do observe the beaten path or way of the Lion going out of his Den unto the Water, they make a broad and round Ditch near unto it, in the midst whereof they raise up a great pillar, upon this they hang a fucking Lamb; and compasse the Ditch round about with a wall of stones heaped together, left that when the wilde Beest cometh near he perceive the deceit. The Lamb being fatneth upon the top of the pillar, doth incite the hunger-flaven heart of the Lion by his bleating, therefore coming near, and not being able to stay longer about the wall, he doth prefently leap over and is received into the unlooked for Ditch, in which being now included, he vexeth himself in all the parts of his body, lifting himself up rather at the Lamb, then to go forth, and being again overthrown, he maketh force again. These things Gillius affirmeth.

The other manner of hunting by fire, is the device of the people which inhabit about the River

The secon, Equorates, who hunt Lions after this manner: The Hunters some upon strong Horfes, and some upon gray Horfes, with glafen eyes, which are mott swift, and which dare only meet Lions, when other Horfes dare not abide the fight of Lions: other being on foot do fet the Nets. Three of them being placed in the shores remain to underprop the Nets, with flys and flakes: one in the middle, all the rest in both the bendings or turnings of the fame, so that he which is in the middle can
can hear both the other at the farther ends: some setting round about in warlike manner, holding pitchy fire-brands in their right hands, and bucklers in their left, for with those they make a very great noise and clamor, and with thwelling their fire brands, put the wide Beasts in an incredible fear: Therefore when all the Horfe-men being spred abroad invade the Beasts, and the Foot-men likewise do follow with a great noise: the Lions being terrified with the crying out of the Hunters, not daring to refit, give place: and all for fear of fire, as of the men, they run into the nets and are taken: like as fishes in the night time, by fire are compell'd and driven into the nets of the fifters.

The third manner of hunting is done with leffer labour: that is, four strong men armed with shields, and fortified all over with thongs of leath'rs, and having helmets upon their heads, that only their eyes, noses, and lips may appear, with the brandishing of their fire-brands, ruffle in upon the Lion, and the Lion, lying in his den: he not bearing this indignation, with a gaping and open wide mouth, the lightning or burning of his eyes being inflamed, breaketh forth into a great roaring, and with such celerity ruleth upon them, as if it were some form or tempest: they with a firm and constant courage abide that brute: and in the mean while that he coveth to catch any of them in his teeth or claws, another of them, provoking him behind, doth him in, and with a loud noise or clamour doth vex him: then the Lion in heat leaving the first which he had taken in his mouth, turneth his back upon the hinder: each of them in several parts do vex him; but he breathing forth warlike strength, runneth here and there, this man heleaveth, that he snatcheth up on high: at the length being broken with long labour, and weary'd, foaming in his mouth, he lyeth down straight upon the ground, and now being very quiet they bind him, and take him from the earth as if he were a Ram. I do also finde that Lions are intrenched in inares or traps, bound unto some pole or pike, nigh unto some narrow place, by which they were wont to pafs.

But 

Pliny, that in times past it was a very hard and difficult manner to catch Lions, and that the chiefest catching of them was in Ditches.

In the Mountain Zæronius in Africa, the strongest men do continually hunt Lions, the bell of which being taken, they fend them unto the King of Feffe: and the King ordereth his hunting in this manner: in a very spacious field there are little hutches built of that height as a man may stand upright in them: every one of these is shut with a little gate; and within flangeth an armed man, the Lion being raised, and forced to that place the dores being open, then the Lion seeing the dores open, runneth with great force, which being shut again, he is provoked to anger: Afterward they bring a Bull to combat with him, where beginneth a cruel fight, in which, if the Bull shall kill the Lion, the honour of that day is finisht; but if the Lion overcome him, all the armed men, which in number are almoft twelve, come forth to fight against the Lion; some of them having Boar-spears of fix cubits long: but if the armed men shall seem to overcome the Lion, the King commandeth the number to be diminished, and if on the contrary, the armed men be overcome, the King with his Nobles sitting in an high place to fee the hunting kill the Lion with CROFS-BOWS; but it cometh oftentimes to pafs, that every one of them is slain before the Lion.

The reward of those which combat with the Lion, is ten golden Crowns, together with a new garment: neither are any admitted unto this fight, except they are of a moli pregnant and valorous strength, and born in the Mountain Zæron, but those which do fight of all provoke and give on-fer to the Lions, are born in the Mountain Zæronius.

To conclude this discourse of the hunting of Lions. If it fortune that he be followed with men and Dogs, yet in the plain fields he never mendeth his pace, as some writers affirm, oftentimes turning about and looking upon his pursuers, as if they did dare their approchment, and to give defiance unto all their pretences: yet having gotten the thickets, he looketh to his safety with his belt celerity and speed, so wisely tempering his fear before his foes, that it may seem a boldness, and so politicly when he thinketh no eye doth him, no longer dissembleth with himself, but runneth away like a fearful Hart, or Hare, laying down his ears, and striking his tail betwixt his legs, like a Cur-dog, seldome times looking behind him, but most irefully upon those that come before him, especially if he receive from them any wound, whereunto Horace alluded, saying:

Quid ut noverrca me intueris,
Aut ut petitas ferro bellus?

In his course he spareth no Beasts that he meeteth, but felleth upon it like a mad Dog, (except Swine) for he is afraid of their bristles: and if a man do not attempt to wound him, he will snatch at him, and overthrow him, but do him little harm; according to these verses of OVID:

Corpora magnanimo satie est prostrasse Leoni;
Pagna sump famen, cum jacet bolis, habet.

He observeth most vigilantly the hand that woundeth him, and laboureth to take revenge for the evil turn, and so it remaineth in his minde, till opportunity send him his adversaries head: as may appear by this story following.
When *John King of Moors* (the Father of whom when he was a childe was brought in triumph) travelled through the Wildernefs with an Army of Souldiers, to repris certain rebels in one part of his Dominion, which had shaken off his government, and to settle them again in their first allegiance. There was a noble young Souldier in his Train, of the race of the Nobility, and not only very strong, but also well experienced in hunting, and by the way he with other of his fellowes met with a Lion, at whom he presently call a Dart, and gave him a fore wound, but not mortal; after the wound received, the Lion went away guilty of his hurt, and the young men did not profecute him, but went forward on their journey: After a whole year, the King returned homeward the same way, and his company that he carried with him, among whom was this young gallant that wounded the Lion: The Lion having recovered his hurt, and having his Den near the way and place of his harm, perceiving a return of the Army, went inumally among them, and found out the man whole hand had wounded him, and could not by any help of his officiates belayed from a revenge, but core the young souldier in pieces and departed away safe, for the residue seeing his rage, ran all away, thinking him to be some Devil in the likeness of a Lion.

After the taking of Lions, it followeth that we should intrest of their taming, and first of all, they which are tamed in their infancy while they are whelps, are most meek and gentle, full of sport and play, especially being filled with meat; so that without danger, a stranger may meet with them: but being hungry, they return again to their own nature, for as it is true (which Seneca laeth, *Leonibus manus magiilerreferit, cie ad tigrum funt quibus, this is to say; The Master of a Lion may put his hand in his mouth, and the Keeper of a Tyger may kiss him*, yet is it also to be feared, *Tigeb Lœnig, magnam feratitum innocent, aliquando submittitur, & cœm minime exsolutus*, *tigiz magist no texit.* Lions and Tygers do never leave off their wildefnes, although sometimes they yeeld, and seem to be submissive, yet upon a sudden when a man expecteth not, their malignant wrath breaceth forth, and they are exasperated.

Wherefore after they grow to be old, it is impossible to make them utterly tame; yet we read in divers stories of tame Lions, whether made fo from their luttering, or else constrained by the Art of fuch, fuch are thefe which follow: *Hanno* had a certain Lion, which in his expeditions of war carried his baggage, and for that cause the *Carthaginians* condemned him to banishment, for they said, *Male crebi libertas et cui in tantum estis et ferae,* it is not safe to truft fuch a man with the government of the Common-wealth, who by wit, policy, or ftrengt, was able to over come, and utterly to alter the wilde nature of a Lion: for they thought he would prove a Tyrant, that could bring the Lion to fuch meekness, as to wait on him at Table, to lick his face with his tongue, to smooth his hand on his back, and to live in his preffence like a little Dog.

The Indians tame Lions and Elephants, and let them to plough. *Onanarchus* the Tyrant of *Cattana* had Lions with whom he did ordinarily converse. In the Country of *Elymian* there was a Temple of *Adonis*, wherein were kept many tame Lions which were fo far from wildefnes, and ferceness, that they would imbark and fature the people that came in thereto to offer: Alfo if any one called them to give them meat, they would feme gently, and depart from them with quietnes. Likewise in the Kingdom of *Per*, in a plain called *Adebas*, there are certain Forrells wherein live tame and gentle Lions, which if a man meet, he may drive away with a small ftick or wand withont receiving any harm. And in another region of *Africk*, the Lions are fo tame, that they come dailiy into Cities, and go from one freet to another, and eating bones withoile cleft preffence neither women nor children run away. Likewise in many parts of *India*, they have Lions to tame, that they lead them up and down in leams, and accout them to the hunting of *Boars*, *Bulls*, and wilde *Affes*, like Dogs; for their nofes are as well fittet for that purpofe, as the fokt Hounds; as we have shewed before of the King of *Tartary.*

And the belt means of taming them is the rule of *Apolonius*, which he faid was the precept of *Phaeton*, which is, that they be neither handled too roughly, nor too mildly, for if they be beaten with stripes, they grow over fubborn; and if they be kept in continual fatteries, and ufed over kindly, they grow over proud: For they held opinion, that by an equal commiffion, of threatening and fair speaking, and gentle ufage, by which means they are more eafily brought to good defired conditions: and this wisdom the Ancients did not only ufe in the taming of Lions, but also in restraining of Tyrants, putting it as a bridle to their mouths, and a hock in their noftiles, to reftain them from fury and madnefs.

*Allartus* faith, that the belt way to tame Lions, is to bring up with them a little Dog, and oftimes to keep the fame Dog in their preffence, by which discipline the Lion is made more tractable to the will of his Keeper. It is faid of *Heligobulus*, that he nourifhed many tame Lions, and Tygers, and other fuch noifome beasts, calling himfelf their great mothere; and when he had made any of his friends drunk in the night time, he fhu them up together (who quickly fell asleep) through the heavines of their heads: who being fo asleep, he turned in amongst them some of his forefuid children, both Lions, Bears, Tygers, and fuch like; at whole preffence in the morning, his drunken friends grew fomewhat amazed, that oft times, some of them fell dead for fear: and to conclude, there is a R injury in a certain Epigram, of a Lion wandering abroad in the night time, for the avoiding of froft, and cold, came into a fold of *Goats*: at the fight wherein of the Goat-heards were much afraid, calling in question not only the lives of the flock, but also their own; because every one of them, thought himfelf bound to fight unto death in defence hereof: whereupon

*Ode taming of Lions.*

*Eliasen.*

*Leo Afer.*

*Elisian.*

The belt means to tame Lions.
according to the manner of men in extremity, they all made their prayers, desiring God to be delivered from the Lion, and according to their wishes it came to pass; for after the Lion had lodged in the warm fold of Goats a whole night, he departed in the morning, without doing any harm to man or beast; wherefore I take this Lion to be of the same kind, and as in all beasts there are differences both of natures, and inclinations, as we may see in Dogs, some of them being more apt after the manners of men, and to be ruled by them others; so also I see no reason, but that in the fierce, and royal nature of Lions, some of them should be more inclinable to obedience, subjection, and submission; whereunto being once won, they never afterwards utterly flake off their vassalage and yoke of them which overcome them.

From hence it came, that there were so many spectacles at Rome; as first of all Lucius Sulla, in the office of his addity, or oversight of the Temple, brought into the Roman circle or ring, one hundred great maned Lions loose, which always before that time, were turned in bound or muffled. And King Bocchus sent so many valiant Archers, and Dart-casters, to fight with them and destroy them. After him Pompey the greatest, in the same place brought in a combate, confounding of six hundred great Lions, and among them there were three hundred fifty maned Lions: Also he instituted hunting of Lions at Rome, wherein were slain five hundred. Cæsar when he was Dictator, presented in spectacle four hundred Lions. Quintus Scævola cauèd Lions to fight one with another.

But Marcus Antorius, in the civil War, after the battle of Pharsalia, did fight all of cause Lions to be yoked, and draw the Chariot of triumphs; where he himselfe fate, with one Cebes in a jeller: which thing was not done, without shew and observations of a prodigious and monstous action, and especially in those times, wherein it was interpreted, that as the noble spirits of those Lions were so much abased, and vassalaged, in stead of Horfes to draw a Chariot, they being in nature the King of Beasts, so it was feared that the ancient Nobility of Rome, the grave Senators, and gallant Gentlemen, Commanders of the whole Common-wealth, should in time to come, through civil wars, and pride of the people, be deprived of all honour, and brought down to the basest offices of the whole State. Antominus Pius nourished a hundred Lions. Domitian the Emperor, called for Aciusus Cabis the Consul, into Albania, about the time that the games were celebrated, for the prosperity of youth and young men, which were called Jovemates, to fight with a great Lion, and Aciusus coming wildy into the combate, did ealy kill him. In ancient time when Lions could not be tamed, they did discern them by their teeth, and nails, and so taking it as the flinging and playon from the Serpent, and the weapons wherein consisteth all their strength, they were without all peril, lent into the publick Assemblies, at the time of their general meetings, and great feasts. Martial hath an excellent Epigram, of the great Lion before exhibited in publick spectacle by Domitian, wondering that the Marsianus and Aciusus shepheards were so afraid of this Lion and made as great a noise, and murmure, about his presence, as if he had been a heard of Lions, and therefore he commendeth the Lybian Countrey for breeding such a beast, and withal expresseth the joy of the shepheards for his death, as are shown in these verses following:

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Auditor quantum Mæphla per avia murmur
Lamvuoque quitas fyva Leo furi;
Fælidas aevitius ad pleta magalia pafior
Cum rasscet tarnos, & fine mente pecus;
Tantus in Auentia fremmit modo terror arena;
Quis non esse gregem credere? unus erat;
Secundus tremere inti quoq; jura Levites;
Cui diadema darer marnore pila Namus.
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O quantum per colla decus, quem ferrar honorem
Aurea baneate cum fexi unda jube;
Grandia quam decusit laetum veninula pelus;
Quanta; de maga gandea morte sult?
Unde tuis Lybio felix gloria felix?
A Cybeles unguia venerat ille jugis?
Annegius Herculis gemenica mist ab ~bro
Hanc tibi vel fater, vel patre ipsa fera?
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We have shewed already that Lions although never so well tamed, become wilde again, and that through hunger, which breakeath through stone walls, according to the common proverb, and therefore maketh them to destroy whatsoever cometh in their way, according to these verses of Virgil:

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Impassus eum plena Leo per ovilia turbans,
(Snadat eum velena famae) mandiqt; trabitiq;
Molle pecus, mutuam metus, frtem ore cruento.
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Such a one was the Lion of Boresius Duke of Ferrara, who being in his cave would devour Bulls, Bears, and Boars, but with a Hare or little Whelp he would play, and do them no harm; at last leaving all his tamable nature, he destroyed a young wench, who oftentimes came unto him and stroke his mane, and allo to bring him meat and flowers, upon whom Struze made these two verses:
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Suffult insipratus cui quandam plurima debens
Petendijs jubis, & fora collo dabas.
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The like unto this allo, was the tame Lion that Martial spekeoth of, who returning to his first nature, destroyed two young children, and therefore he faith juftly, that his cruelty exceedeth the cruelty of war; the Epigram is this:

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Verbus
Having thus spoken of the taming and taking Lions, it also now followeth to entrest of the length of their life, and the diseases that are incident unto them, with their several cures: first therefore, it is held that they live very long, as threefour, or fourfour years: for it hath been seen, that when a Lion hath been taken alive, and in his taking received some wound whereby he became lame, or lost some of his teeth, yet did he live many years; and also it is found that some have been taken without teeth, which were all fallen out of their head through age, and **Elianus** faith, that a Lion and a Dolphin, do both confume away through multitude of years. The sicknefles wherewithal they are annoid, are not very many, but those that they have are continual: for the most part their intails or inward parts, are never found, but subject to corruption, as may appear by their fritile, and also by their biting, and scratching of their nails; for a man lightly touched by them at some times is as much poyfoned, as the biting of a mad Dog: also by reason of his extreme hot nature, every other day he suffereth one sicknefe or other, at which time he lyeth prostrate upon the earth, roaring not all the day long, but at certain hours, and in his wrath he is confumed through the heat inclofed in his own body. And in his belt effate he is afflicted with a quartane Aqué, even then when he feemeth to be in health, and except this difeafe did refrain his violence and malice by weaking of his body, he would be far more hurtful to mankind then he is: and this is to be understood, in the Summer time he falleth into this difeafe fometime at the fight of a man, and is cured by the bleed of Dogs, according to **Albertus** and Physiologus, when he feeleth himself sick, through abundance of meat, he falleth a vomiting, either by the strengthe of nature, or elle helpeth himfelf by eating a kind of grasfs, or green corn in the blade, or elle rapes; and if none of their prevail, then he faileth, and eateth no more till he finde eafe; or elle if he can meet with an Ape, he devoureth and eateth his flesh, and this is the principal remedie and medicine which he receiveth against all his difeafes, both in youth and age; and when he groweth old, being no more able to hunt Harts, Boars, and fuch beasts, he exerciseth his whole strengthe in the hunting and taking of Apes, whereupon he liveth totally; and for these caufes, there is a comparifon betwixt the Lion and the Dolphin, in **Elianus**. **Léonis, & Delphino multa sunt communia, uterq; imparant, ille terrerit, hic aquatibus deliri, fen- nelibus ambo tabescunt, & cum fum in agratia, illi terreris finea medetur, hic marina que; finea reme-dio ift; that is, the Lion and the Dolphin do agree in many things, both of them are Kings, this rul eth over the beasts of the Earth, and that over the beasts of the Sea; both of them confume through age, and long life; and as the Lion recovereth by eating an Ape of the Sea, fo is the Dol-phin cured by eating an Ape of the Sea; and thus much for the diseafes and cures of Lion.

Unto this natural discourse of Lions belongeth the use of their parts, both outward and inward, and also the pictures and ftructures erected for their fingular monuments. First therefore with the skins of Lions were the ancient **Mores** and **Barbarians**, inhabiting betwixt the Mountain Caucwus, and the River Copheus, and fo they appeared to **Apollonius**, and his companions; as also in the skins of Pantheres, with both which, they did not only clothe themselves in the day time, but also slept upon them in the night: and therefore **Hercules** is pictured wearing a Lions skyn: that the world might be admonifhed, what was the antient attire of their fore-fathers. **Virgil** describeth **Aventinus** covered with a Lions skin in this fort:

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**Quem sylva Leonis**

\*Pellis obit tum praefulgens unguibus anores.*

**And again:**

\*Ipse pedes tegmin torquenti immune Leonis, Terribilis impexum feta, cum dentibus albis, Indutus capitis,* &c.

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**And Aeneas** sleeping upon a Lions skin, saying

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\*Futiq; infernor pelle Leonis.*

**And elsewhere,**

\*Præcipuum; tor, & villof pelle Leonis*  
\*Accepit Aeneas.*

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**Adrasius** was commanded by the Oracle to marry his Daughters to a Boar and a Lion, when they came a wooing unto them. Whereupon **Tydeus** came in a Boars skin, and **Panhintes** in a Lions skin, unto whom he gave his Daughters in marriage, taking it to be the meaning of the Oracle, that men clothed in these skins should be the Husbands of his Daughters. From hence came the common proverb: \*Indutis me Leonis exuviam,* you put upon me a Lions skin, to significie a man that taketh upon him more then he is able to perform, and spend more then their condition will afford, and the beginning of the proverb was taken from **Hercules**, who clothed in a Lions skin

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**Of the Lion.**
skin as we have said before, and baring in one hand a Club, and in the other a Bow, in which attire he went down to Hell to fetch out Cerberus.

Afterwards there was one Bocclus, which clothed with the same weed, and armed with the same weapons as like fort, in the imitation of Hercules, went down to Hell, to hear the famed disputations betwixt the two Poets, Euriptides, and Aeschylus, at the time when of Hesiodus laughing, told him, that such apparel did nothing at all become him, because he was wanton, tender, and enfeemled. For it is not available to have a rich ceremony, and that the true substance; a glorious outside, and a shameful inside; the armour of a Champion, and the heart of a base Coward; the outward show of holiness, and the inward love of profaness. Others do think that the proverb was taken from that Aes called Aesopus Cynamus, who being weary of his servitude and bondage, flipt collar, and ran away into the wilde Woods, where finding by chance a Lion skins, he crept into it, and wore it upon his body. Under colour whereof he ruffled up and down the Woods, to the terorr of all the Beasts, both with his tail and his fearful voice; and the Cunners themselves, which had never seen a Lion, were not a little afraid of this counterfeit beast. In this fashion he domineered a good time, until at last there came a stranger to Come, who seeing the counterfeit personate Aes-lion by the way, having oftentimes seen both Lions and Aes, knew it for an Aes in a Lions skin; for if all other conjurers failed, yet this proved true, namely the length of his ears; wherefore he beat him well, and brought him home to his Mafter, before whom he pulled off the Lions skin, and then his Mafter knew him to be his Aes. From which Socrates concludes wisely, that no man ought to be afraid of outward greatnes, because though the Aes was clothed with a Lions skin, yet he was but an Aes. And that the skins of Lions was used in garments, the saying of Euripides the Locandermonian doth sufficiently prove; for when he was blamed for his outward pomp, whereby he beguiled others, therefore condemned for foolish hypocrisy, he made this answer, *Siue Leo trium perrute pellic non potest, vulpinam effusse decerti, every man ought to have two futes of apparel, one of a Fox, and another of the Lion. For whither the Lions skin cannot come, the Fox will creep, and where the Fox cannot come, the Lion can. Clothes wrapt in a Lions skin killeth moths: also a mans body adorned with the fat of a Lion mingled with Garlick, so as the favour of the Garlick may overcome the Lions greatful, he shall never be molest with Wolves. Alfo if the folds of Sheep be compassed about with the melted greatful of Lions, there is no Wolves, nor ravishing beaws shall annoy the flock. And fo great is the fear of Lions to Wolves, that if any part of a Lions greatful be cast into a Fountain, the Wolves never dare to drink thereof, nor to come near unto it. Alfo Phiny affirmeth, that if an Amulet be made of Lions greatful, no man shall be harmed, wounded, or killed, by treachery or deceit: but you must understand, that this was an invention of the Magicians or Wise men, that by such pretences and promises of great matters, they might insnuffe themselves into the favour of Princes and Noble men, and so make fools of the world; and therefore they preface the fat which is taken from betwixt the eye lids, or from the right part of their mouth or teeth, and the hairs from the neather chap. It is likewise affirmed, that a man annoited all over with the bloud of a Lion, shall never be destroyed by any wild Beast.

There is an herb which Democritus calleth Helianthe; growing in the Maritime Mountains of Cilicia, and Lycia, therewithal the fat of Lions decocted with Saffron, and Paulm Wine, with which all the Kings of Persia were annoited, to make them beautiful bodies to look upon: And above all other things, the Magicians prescribed this composition, to make a man invincibl: the tail and head of a Dragon, the hairs of a Lions fore-head, and the marrow of his bones, the snume or white mouth or a conquering Horse, bound up together with a Dogs claws in a Harts skin, with the nerves of a Hart or Roe. The dung of a Lion drunk in Wine, maketh a man for ever more to abhor Wine.

It was also wont to be obserued, that when Lions forsook the Mountains and Woods, to come and live in fruitful and fertile foils, it did fore-shew some great drought; and the like divination did Agras the Mother of Pericles make upon her dream, when she was with childe, for the thought she brought forth a Lion, and so in short time after she brought forth Pericles, who was a valiant man, and a great Conqueror in Gracia. The fight alfo of a Lion as a man travelleth by the high ways, is very ominous, and taken for an evil figne. There was alfo a Propheye given out by Pythias, concerning Osipileus, the fon of Acteion, which fayd in this manner;

*Conspit in petris aqua emicura Lemen*  
*Rhabulium, fevum, genua & qui multa refolvat.*  
*Hec bene nunc animi verfate, Cornitiba prolis*  
*Quo collit pulchrum Pallatium, atque Cornimum.*

A monster live a Lion. The Images and several Attributes of Lions.

In the year of our Lord 1274. there was a certain Noble woman in the Bithoprick of Kefhiner, which brought forth a childe like to a Lions in all parts, but it had the skin of a man: Unto this diſcourſe I may add the Images of Lions, both in Temples, and also upon ﬁelds; and firt of all in the Temple where the shield of Agamemnon hung up, (as Pausanias writeth) there was the picture (f. e.) drawn with a Lions head, because as the Lion fleapeth little, and in his sleep his eyes be open; for in the condition of Fear, for we have shewed already, that the Lion when he sleepeoth hath his eyes open, and when he waketh he flurreth them, and therefore the Ancients did symbollically picture
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picture of a Lion upon the doors of their Temples, and upon the Ships also, in the fore-part of them, they ingraved the figure of Lions, according to this saying of Virgil:

Aeneis puppis
Prima tenui rostro, Phrygios subjecdai Leones.

It was also a usual custom to picture Lions about Fountains and Conduits, especially among the Egyptians, that the water might spring forth of their mouths; Quamiam Nilus avum Aegypti novum aquam invexit, sed transeunte Leones; because that Nilus did overflow the fields of Egypt, at what time the Sun pass’d through the sign Leo. Therefore also the River Alpheus was called Leontius po- ros, the Lions, because at the heads thereof, there were dedicated the pictures of many Lions. There was a noble Harlot called Leans, which was acquainted with the tyrannies of Har- modius, and Aristogiton; for which cause she was apprehended, and put to grievous torments, to the intent she should disclose them, but the endured all unto death, never bewraying any part of their counsel: After her death, the Athenians devising how to honour that vertue, and because she was a Harlot or common Curtizan, they were not willing to make a statue for her in the likeness of a Woman, but as her name was Leans, that signifieth a Lioness, so they erected for her the picture of a Lioness; and that they might express the vertue of her ferrelee, they cau’d it to be framed without a tongue. Upon the grave of Lairs, there was a covering containing the picture of a Lion, holding a Ram in his fore-feet by the buttocks, with an inscription that a Lion held the Ram; so do Harlots hold their lovers, which Alciatus turned into this Epigram:

Quid sculptus fibi vult aries, quem parte Leans
Unguis abpreensum postieriora tenet?
Non alter captio quod & ipsa tenet amantes,
Vir gregis efl aries, clausa tenetur amantis.

There was also a Lion at Delphi, which weighed ten talents of gold; and at the entrance of Thespis upon the Tombe of Leonidas the Captain of the Spartains, there stood a Lion of stone: Upon the steps of the Capitol of Rome, there were two Lions of black Marble touch-flone. And the Cyziceni ingraved upon one side of their money the picture of a Lion, and on the other side the face of a woman. King Solomon built his Ivory Throne upon two Lions of Brass; and upon the steps or stairs ascending up to that Throne were placed twelve Lions, here and there. And from hence it came, that many Kings and States gave in their Arms the Lion, Rampant, Passant, and Regardant, distinguished in divers colours in the fields of Or, Argent, Azure, and Sables, with such other terms of Art. The Earth it self was wont to be expressed by the figure of a Lion; and therefore the Image of Aeternus was supported with Lions. Oehele the famous Goddess of the Mountains was carried upon Lions. And it is signified that the Curtizan, which nourish’d Jupiter in Creet, who was committed to them by his mother Rhea, by the anger of Saturn, were turned into Lions, who afterwards by Jupiter when he reign’d, were made the Kings of beasts, and by him enjoyed to draw the Chariot of his Mother Rhea, according to this verse;

EI jujde currum Domine subiere Leones.

There is a constellation in Heaven called the Lion, of whom Germanicus writeth in this sort, that he is the greatest and most notable amongst the figures of the Zodiac, containing three stars in his head and one clear one in his breast, and that when the Sun cometh to that signe which happeneth in the month of July, at which time the vehement heat of Summer burneth the earth, and dryeth up the Rivers. And therefore because the Lion is also of a hot nature, and seemeth to partake of the sublimate and quantity of the Sun, he hath that place in the Heavens. For in heat and force he excels all other beasts, and as the Sun doth all other stars.

In his breasts and fore-part he is most strong, and in his hinder-part more weak, so is the Sun, encreasing until the noon or fore-part of the year, until the Summer, and afterwards seemeth to languish towards the setting, or later part of the year called the Winter. And the Lion also seemeth always to look up with a fiery eye, even as the Sun which is patent with the perpetual and infaetical flight upon the earth. The Lion also is a signification of the Sun, for the hairs of his mane do resemble the streamings of the sun’s beams, and therefore this constellation is figured with the same Epithets that the Lion and the Sun are, as heat-bearing, seifive, ardent, ardent, calent, hot, flam- mant, burning, Hercules, mad, horrible, dreadful, cruel, and terrible. It is signified of the Poets, that this Lion was the Nemean Lion slain by Hercules, which at the commandment of Jove was fostered in Arcadia, and that in anger against Hercules after his death, she placed him in the heavens.

To conclude this story of the Lions, it is reported of the Devils called Omphali, that they flew themselves sometimes in the shapes of Lions and Dogs, and the Dog of Serrpis, which was signified to have three heads, on the left side a Wolves, on the right side a Dogs, and in the middle a Lions. We have shewed already, that the people called Aempraio, did worship a Lioness, because
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Lions nourished in Temples; & worhipped, because they killed a Tyrant. And the Egyptians built a City to the honor of Lions, calling it Leontopolis, and dedicating Temples to Vulcan for their honor. And in the porches of Helios, there were common thimpes for the nourishing of Lions.

As in other places where they are fed daily with Beef, and have also windows in their lodgings, with great Parkes and spaces allotted unto them for their recreation and exercises: with an opinion that the people that came unto them to offer and worship them, should see a speedy revenge through divine judgement upon all those that had wronged them by perjury, or broken the oath of fidelity.

To conclude, in holy Scripture we finde that our Saviour Christ is called the Lion of the tribe of Judah; for as he is a Lamb in his innocency, so is he a Lion in his fortitude. The Devil also is called a roaring Lion, because Lions in their hunger are mofk of all full of fury and wrath. And so I will conclude and end this story of Lions with that Emblem of Aletia, describing how little Hares did rejouyce and leap upon dead Lions:

\[ \text{Execlude maris piscibus fulsidae Hector,} \\
\text{Quy vites foftes victor ante suus;} \\
\text{Confrimere haud patis vocem infultus illius,} \]

\[ \text{Dum curtus \& pedibus metrre vincis parant.} \\
\text{Disfrabite ut hibitum est; facessi leone Leonis} \\
\text{Comellant barbam vel timidi Lepores.} \]

The medicines of the Lion.

The blood of a Lion being rubbed or spred upon a Canker, or upon a sore which is swelled about the veins, will presently and without any pain cure and ease the grief thereof. Whosoever doth anoint his body all over with the blood of a Lion, may safely and without any danger travel amongst any wilde beasts whatsoever.

\[ \text{Albiterius.} \]
\[ \text{Sextus.} \]

\[ \text{Alculeptor.} \]

The flesh of a Lion being eaten either by a Man or Woman which is troubled with dreams and fantasies in the night time, will very speedily and effectually work him safe and quietness. The same also being boiled or baked, and given to them which are drunke of their wits to eat, doth bring them safe and comfort, and renew their wits again; it is also very good for the pains of deafness or the ears. And being taken in drink, it helpeth those which are troubled with the shaking of the jounts or the Pallite.

Whosoever shall have those made of the hide or skin of a Lion or Wolf, and wear them upon his feet, he shall never have any pain or aches in them. They will also defend him that useth them from the Gowt, or swelling in the feet or leg. The skin or hide of a Lion is also very good for either Man or Woman which are troubled with the piles or swelling of the veins, if they shall but at some several times stir it upon it.

The fat of a Lion is reported to be contrary to poision, and venomous drinks, and being taken in Wine, it will by the fent expell all wilde Beasts from any one; and it doth also refit and drive away the fent or smell of Serpents, by which they follow men to destroy them. Whosoever doth anoint his body all over with the tallow or sweat of the reins or kidney of a Lion, shall by the fent and flavour thereof expell and drive away from him all Wolves, how greedy and ravenous soever they be.

A Man being thoroughly anointed with the grease of a Lion being melted, doth drive away from him and put to flight any living creature whatsoever, and also venomous and poifonous Serpents themselves.

If any wilde Beast be anointed with the tallow or sweat of a Lion which is dissoiled and clarified, he shall neither be troubled with the stinging of Flies or Bees. The fat or grease of a Lion being mingled with Oyl of Roses doth keep the skin of the face free from all blainings and blemishes, being anointed thereupon, and doth also preferve the whitenees thereof, and being mingled with Snow-water, doth heal any flesh which is burnt or scorched upon a man, and doth also cure the swelling of the jounts.

The sweat or fat of a Lion being mingled with other ointments, and anointed upon the places of either Man or Woman who have any blemishes in any part of their bodies, doth presently expell the same. The same virtue hath the dung or dirt of a Lion being mixed with the aforefaid unguent.

The grease of a Lion being dissoiled and presently again conglutinatet together, and so being anointed upon the body of those who are heavie and sad, it will speedily extirpate all sorrow and grief from their hearts. The same also being mixed with the marrow of a Hart and with Lettice, and so beaten and bruised, and afterwards mingled all together; it is an excellent remedy against the thinning of the Nerves and ffinews, and the aches of the bones and knuckles about the legs, being anointed thereon.

The grease of a Lion by it self only, mixed with a certain ointment, is also very profitable to expell the Gout. The same being mingled with Oyl of Roses, doth eafe and help those which are troubled dayly with Agues and Quarten Fevers. The same also being dissolved and powered into the ears of any one which is troubled with any pain in them, will presently free him from the same.
There is also in this Lion’s greese, another excellent virtue which is this, that if the jawbone of any one be swelled and anointed over with this greese being melted, it will very speedily avoid the pain thereof.

The fat or fewel of a Lion being melted and mixed with certain other things, and so mixed unto any one that is troubled with the wringing of the bowels, and bloody flux, in the same manner as a glytter is used, is commended for an excellent remedy for the same. The same also being mingled with a certain Oyl and warmed together, and anointed upon the head of any one, whose hair doth fled, or is troubled with the Foxes evil, doth immediately help and cure the same. The seed of a Hare being mixed with the fat of a Lion, and anointed upon the privie members of any one, will stir and incite them up to hui, how chait forever they shall be.

The fat of a Lion mingled with the fat of a Bear, and melted together, being anointed upon the belly, doth alay and affiige the hardneth thereof, as also any other pain or grief in the same.

The brains of a Lion, as also of a Cat, being taken in drink, doth make him mad unto whom it is given. The same being mingled with some small quantity of Oyl of Spike, and powered or distilled into the cares of any one which is deaf or thick of hearing, will very effectually cure the deafnes.

If the eye teeth of a Lion be hung about the neck of a young child before that he eat his teeth, and the beginning of his second or new teeth, they will keep him for ever from having any ait or pain in them. The heart of a Lion being beaten into small powder, and taken in drink, doth very speedily cure and heal those which are troubled with Agues or Quaetain Fevers.

The liver of the Lion being dryed, and beaten to powder, and put in the purest wine which is possible to be gotten, and so drunk, doth take away the pain and grief from any one which is troubled with his liver.

The gall of a Lion being taken in drink by any one, doth kill or poison him out of hand. But some do impute this venom to be in the gall of a Leopard. The gall of a Lion being mixed with pure water, and anointed upon the eyes of any one, will take away the blemishes thereof, and cause them to see clearly: and the fat of the Lion being added thereunto, is an excellent remedy against the Falling sickness. A very little part or dram of the gall of the Lion being put in wine and so drunk, will speedily help and cure those which are troubled with the Yellow Jaundice. The same disease is also cured by yellow Carets being flamed and put in wine, and so given in drink.

For the fores or blemishes in the eyes, the gall of a Lion being mingled with Hony, and so anointed upon them, is commended for a very special and effectual cure or healing. The gall of a Lion, a Bear, or an Ox being mixed with certain other unguents, is very much used for the extending or moving forward of conception.

The right stone of a Lion being beaten together with Roses, and so strained hard till some liquid juice or water doth proceed from them, and so taken in drink, doth make that party barren unto whom it is given: it hath the like effect in it, if it be eaten either roasted or broyled, or raw and bloody.

The fat which proceedeth from the privy or secret parts of a the Lion being put in a vellif made of Ivory, and so being temperately mollified, is commended for a very effectual and speedy means to hinder conception.

The dung or dirt of a Lion being dryed into powder, and mixed with some certain soft and easie ointment, with which any one may be easily anointed over all his body, doth drive away the blemishes and spots in the skin.

The hurts or fores which are bitten either by a male or female Lion, are so full of matter and filthy corruption, that the running thereof can be played and reprefed neither by lapping of clothes about them, nor by washing them by spunges: they are cured by the same means as the fores which are bitten by ravenous Dogs are, as I have before declared in the cures of the Hyenas.

The wounds which are made by the teeth of a Lion are very hurtful; for as much as the venome of their interior parts doth go into the wounds, and when the wounds are tied, the venome issueth from them into the things with which they are tied, and the same being again bound upon the wound, doth so infect it, that it can be cured by no other means but by the aforefaid medicine.

The biting of Lions and such like Beasts are so dangerous, in regard of their strength and fierceness, for they do not only bite, but also wrack and tear the wounds which they make with their teeth or nails. And thus much shall suffice for the cures of the Lion.
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Of the **L I N X**.

The figure of a Linx once in the Tower of London, which was first described by Doctor Cay.

The names of the Linx, or as others write Lux, or Lux: among the Germans is named Lucibs, by making a name from the Linx; or Lucius: amongst the Italians is at this day called Lupo servoro, or Cervecio, being engendered betwixt a Hinde and a Wolf; and likewise amongst the Rhetians which speak Italian: and the Sabaudians, and the Dalmatians or Illyrians, Cerviri. But there was a certain Bohemian of late, which declared that the Linx as he conjectured, was called among the Illyrians, Kys, (and that it was called Lucibs among the Germans) but that amongst the Illyrians was lesser than the other, yet very like. The Spaniards do as yet call him by the Latin name Lince, even as certain Italian writers in their vulgar tongue, as Alumnus doth tell us. In certain places in Helvetia, and about Sedunae, they call him Thierwolf. Amongst the barbarous writers he is called by the name of an Ounce: which I do suppose to be a Panther. Fr. Alumnus doth say, that this Beast was called of certain Italian writers in the vulgar tongue, Lanza, some interpreting it to be a Lion's, some a Pardal, a Panther, or a Wolf, engendred of a Hinde and a Wolf.
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Ounces do commonly seem to be called rather Linxes then Panthers; but although some late belles, writers do attribute the name to a Leopard or a lefser Panther, it seemeth notwithstanding corrupt from the Linx: for he is a creature very like him both in his craft and shape of his body, but a Linx hath his tail shorter, and his longer. Libardsbane doth kill Leopards and Linxes.

Avicenna.

These Figures were taken by Olaus Magnus, wherein the Linx pursueth a wilde Cat.

The Latin call this beast Lupus Cersevius, and Lynx of the Greek word Lux, from whence the German, ein Lufti: and it hath been believed, that the Latin name was given unto it, because they were ingendred between a Wolf and Hind, but there is no wise man that will suppone or be easily induced to believe, that Beasts of such holithy, and advers dispositions in nature, should ever ingender or suffer copulation together; and therefore I rather suppone that it is called Cersevius, either because it hunteth Harts and Hinds, or else because it imitateeth their young ones in the outward colour and spots in the skins.

There was a Beast (faith Pliny) which was called Chaos, and by the French, Rapflus, brought in publick spectacle by Pompey the great, out of France, which in shape refemblith a Wolf, and in spots a Leopard; and therefore I think that Chaos, Rapflus, and Lupus Cersevius, are divers names of one and the same wilde Beast, and yet by divers writers it is confounded with the Thers, or with the Panther, or with the Ounce.

But I cannot agree thereunto, seeing it is written by Pliny, that about the River Padus in Italy, there are certain Beasts called Lynxes, from whence cometh the Lynxew, which by Zosimus are called Lange, and by others Langwite. And Solinus alfo agreeeth thereunto, taking Lupus Cersevius, for a kind of Linx.

Some have faid, that there is a Beast called Lynceum, which Swedes and Varnus call Oruderchers: Two kinds of Linxes, and they say, that the eyes of it are the bell sighted of all the Beasts in the world. Oppianus maketh two kind of Linxes, one a greater, and hunteth Harts and great Beasts; the other a smaller, and hunteth wilde Cats and Hares. And first of all I will let down the description of this Beast, according as it was taken in England by that learned Phyfitian D. Cary, whose words I do here expreffe.

There is in the Tower of London, (faith Cary) a Beast which earath felfi, his whole body being of the greatness of a Lamb of two moneths old, having his head, mouth, eye, and nails like to a Cat. But concerning his beard and tail, his beard hangeth down on both fides, divided in the middle with fundry colours, the former being white, and the latter black; his tail is fhort and thick, being from the middle to the uppermoft part red, and to the lower part black; his eyes being yellow, the hair of the eye-lids obscurely waxing white, his ears ered upright, as the ears of a Cat, being replenifhed within with white hair, without covered with white and black, but fo that the upper part is black, the middle (for it is divided into three parts) be white, and the lower black again. Neither is it content to be ended in his own course, except alfo that his former parts, or the firthelf briskes or edges, and alfo his latter may be bended on the other fide, in like manner as the edges of the Priëls hat of the Gretean Church are folded a- mongt the Venetians.

In the top of his ears there are placed some black hairs, as it were a foteropor tuft. The colour of this beart in the outmoft parts ered, in the innermoft white, but sprinkled here with black spots, and almoft by rows, and there with spots somewhat lighter then the other, all his hair being for the moft part white all over: all his body, except the aforesaid spots, as it is in certain black skins of young Cowes. And on both the fides of his nofe there are four spots fet in order. In both his lips, as now we will declare: in his uppermoft lip there are five or odd rows, being of a very equal distance.
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In the first row, and the upper, four; in the second, five; in the third, eight; in the fourth, five; in the fifth, there are four; and these also everyone in his order, having an equal distance. In the lower lip there are only seven more manifest and evident, being placed in two rows. In the first, four, to the very mouth of the lip; in the second after them three others; after these, other fewer but not placed with so certain and true order as the uppermost.

In the upper lip on both sides there are certain white hairs being rougher then those in Cats and Lions. His nose is somewhat of a pale red colour, being somewhat diffus, or apart from the rest it of his face on every side with a black line. Another line also doth divide the outermost part of his nose by length (as in an Ounce) but only being lightly lead by the top or highest parts, not improved higher by the lowermost.

The skin of his feet are exceeding hard, and his nails are hid in his feet (as the nails of an Ounce and a Cats are) neither doth he put them forth at any time, unless in taking of his prey as they do.

He doth climb wonderfully, so that what he may be able to do in that thing (either in his cave or den) nature her self doth teach. He is a quick-moving creature, and cannot stand still in a place, so that except (by more chance) the voice of a Wood-pecker in the basket of a certain Countryman (who came then only to see the Lions) had made him quiet and attentive, there had been no hope of the portraiture out the picture of his body. He being present he was most quiet; but he going away, he would never stand still: wherefore I was constrained to send my man after the Countryman to buy the bird, which being present, he stood very still until the businees was dispatched and the work absolutely perfected.

Our Countrymen call it Lucarnus, it is doubtful whether we should call it Leucus, or Lynx, in the affinity of the words. His skin is used by Noble men, and is sold for a great price. He is angry at none but them which offer him injury; his voice is like a Cats, when he would snatch away the food from his fellow. He is loving and gentle unto his keeper, and not cruel unto any man. So far Didor Cay.

Unto this description of Doctor Gaius, I may add another description that was taken by the sight of the skin of this Beast. The length whereof from the tip of the nose unto the very tail, was four spans and five fingers; and the length of the tail, four fingers; the breadth of the shoulder-blades of his back, and the top of his neck, was two palms fix fingers and a span; the length of his forelegs, a span and five fingers; and the length of his hinder-legs, a span and three fingers; the hair was very soft, but yet thick and deep. The tips of the hair upon his back were white, but in the tendermost parts they were red, and they are most white which fall downwards on both sides from the middle of his back.

In the middle they are more red and dusky, the middle of the belly, and especially the lower part is white, but both sides of it are white and red, and every where upon his belly there are black spots; but most plentiful in the bottom of the belly, and on both sides. The uppermost part of his neck, right over against his ears, hath great black spots, his ears are small, and not bigger then a little Triangle, in the edges they are black, although with the black hairs there are mingled some white. His head is mixed with black and white hair, which hair is great like to bristles. The teeth are most white, and the upper canine teeth hang over the nother the breadth of a finger, whereof six are small, and of those six two are the greatest, and all the residue are very small on the outer chap; and to conclude, all the teeth were like a common Weasils or Martil. His feet were very rough, being five distinct claws upon the fore-feet, and four upon the hinder, which claws were very white and sharp.

The tail was of equal bigness and thickness, but in the tip thereof it is black. These skins are fold for three Nobles a piece, and sometimes for six, and sometimes for less, according to the quantity of the skin and Country where in it is fold. And unto this description do Bellonius and Bonarius agree. For Bellonius at Constantinople lwe two Linxs, much like unto Cats; and Bonarius had oftentimes seen them hunted in Molunina, Lutonia, Polonia, Hungary, and Germany; but he commendeth above all the Linxes of Scotland and Swedia, as most beautiful, having Triangular spots upon their skins. But the Indian and African Linxes, he faith have round spots, tharp-brilty short hair, and full of spots all parts of their body, and therefore they are not so delicate as the Linxes of Europe, which with good cause he conjectureth to be the Linx that Flinck speakes of, and not unlike to that which is bred in Italy. There are Linxes in divers Countries, as in the forenamed Russia, Lutonia, Polonia, Hungary, Germany, Scotland, so also they are most abundant in Scandinavia, in Swedia, so also about Thysfia, and Hellympia: likewise in all the Regions upon the Atles, and in Sylva Martinus, they are also very plentiful in Ethiopia, in France and Italy, about the River Padus, and in the Island Capribarth, and thus having discoursed of their Country and proportion, whereby their differences and kinds may be discerned, we will leave every one of them to their particular, and proceed to the treatise and description of their general natures.

There is no great difference between their outward shapes and proportion, for both the smaller and the greater have bright eyes, divers coloured skins, a little head, a nimble and clear eye, and the (Albertus faith) that their body is longer then the body of a Wolf, but their legs shorter, mistaking the Linx for the Tybes. Their eyes stand forth of their heads very far, their tongue like the tongue of a Serpent, and Textor affirmeth that they have paps or udders in their Breasts, but surely he taketh Lynx for Sphinx.
Their meat goeth into the belly straight through the maw, without buying, and therein is a note of their insatiable voracity, for none but inatifiable Beasts or Birds are so affected, as in Birds, the \textit{Commanant}. It hath no ankle bone, but a thing like unto it; the nails are very long, as you may see in two of the former pictures, but he hideth them within his skin till he be angry, ready to fight or climb, or otherwise affected, as you may see by the picture of the Linx taken in the Tower of London.

The inward proportion and anatomy of their bodies is like unto a man, and therefore Galen giveth this leffon to students in Phisick, \textit{Præfert imum hominim quod hominimum usu differentum sunt in exemplo exsetere infirmus, fina non deret, aliquanet proximam deliquia, at si nulla omnino Simia repertaria, Cynocepbalum, vel Satyrum, vel Lincem, summatim communi quibus attinente extrema in digites quibus, differentes font; } that is to say, It is good to digest their bodies which are likest to a man, when one would instruct himself in Anatomy, and if he cannot finde an Ape, let him take a Baboon, a Satyr, or a Linx, and generally any creature, the exteriority of whole lines and joints are divided into five fingers or toes.

There be some that have thought, that Panthers, Pardurs, Linxes, or Tygers, had been all of the kind of Cats, because of mutual resemblance in the greatness and strength of their nails, in the distinction of their skins, which are party coloured and fair, having also a round head, a short face, a long tail, a nimble body, a wild mind, and get their meat by hunting: but here in I leave every man to this own bent liking and opinion: for when we have done our best to expresse their natures and several properties, it shall be idle to spend time about disputacion to what rank or order every beast ought to be referred. For every one that readeth our story, and seeth our pictures may either be satisfied, or else amend our labour.

The Linx therefore biteth most cruelly and deep, and therefore is accounted, \textit{Rapax animal, instar lapi, led callis}, a Beast as ravening as a Wolf, but more crafty; they get up into trees, and from them leap down upon very great beasts, and destroy them, being enemies both to men and beasts, and at their pleasure, according to necessity, let upon both. They are taken sometimes in Germany, in the Dutchy of Wurtzberg, and that it was once credibly affirmed, one of them leaped down from a tree upon a Cowtrey man, as he passeth under the same tree, but being weary, and having an Ax on his neck, received her on the thirp edge thereof, and so killed her, otherwise she would soon have killed him.

They live in the mountains also, where they are killed by poifon, or else hunted by armed men on Horsfe-back, and included with multitudes, for their hunting is perilous; and therefore they must be inclosed with great company. Some take them with ditches, as we heard before Lions were taken; others in snares or guns laid upon the rocks, and stones, and whenever they are hunted with Dogs, they run directly to the woods or to the next trees, wherein they are killed by gun flor.

In the Summer time they are very weak and live among the Rockes, never straying far from their own lodging, hurting no man till the Autumn. They hunt wilde Goats, whom they follow from Rock to Rock, leaping as fast or slower then the Goats. They hunt also wilde Cats and Hares, and some other little Beasts; but the greatest Linxes hunt Haris and Alves, and their manner is, as we have said already, to get up into trees, and there to lie in wait for their prey; until they epy it under the boughs, and then suddenly leap into the neck thereof, whether it be a Man or a great Beast, wherein they fix their claws so fast, that no violence can shake them off, but with the thorns of their teeth, bite into the skull, and eat out the brains, to the utter destruction of the Man or Beast, whomsoever they light upon, but if it be a small Beast, they eat the whole body thereof, and not only the brains.

Yet this is a wonderful secret in their nature, that although they be long affected with hunger, yet when they eat their meat, if they hear any noife, or any other chance caufe them to turn about from their mea, out of the sight of it, they forget their prey notwithstanding their hunger, and go to seek another bootie, never remembering that which they had before them, nor yet return back again to eat thereof. The voice of this Beast is called by a special word in Latin, \\
\textit{Oroso,} or \\
\textit{Corcor,} which I may English Croaking, or Whining, for the voice thereof is not great, and therefore the Author of Philonela, faith, \textit{Dum Linces arcando fremunt, usus fumus usque; } While the Linx croaketh, the wilde bear whineth, and \textit{Arctius} faith, \textit{Corcorum vocis lapis Corvus; } to croak is the voice of a Linx. The voice of Linxes.

It is thought that of all Beasts they see most brightly; for the Poets saigne, that their eye fight pierceth through every solid body, although it be as thick as a wall; yet if you offer unto it any thing which is transparent, it is much offended, and sometimes blinded, but I cannot tell, whether the light be attributed to the Linx truly according to nature, or fabulously in imitation of the Poetical fiction of \textit{Lynx}, of whom it was said in ancient time, that he saw through stone walls, of whom \textit{Horace} writeth thus:

\begin{quote}
\textit{Si pennis aculea, quantum contendere Linxus,}
\textit{Nun tamendico coruscans lippus inangis.}
\end{quote}

\textit{Marcus Tullius} also faith in this manner, in the admiration of \textit{Lynx} eye-fight, as though darkness \textit{Orpheus}, did not hinder it, \textit{Quis est tam Lynxus qui in tanta terribi nil obsolet? } \textit{Apollonius} faith, that so great

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great, and was the perfection of this man eye-light, as he was believed to see perfectly down into the earth, and what was done in Hell. Plutarch faith, that he could see through trees and rocks. Pausanias writeth, that he was a King, and raigned after Danaus. Pindarus writeth, that Idas and Lynceus were the sons of Aphareus, and that a contention growing betwixt Idas, and Caflor, and Pallas at the marriage of Helen, because they twain would have ravished Phoebe and Lycus, the wives of Idas and Lynceus, Idas did therefore slay Caflor, and afterwards Lynceus slew Pallas when he fpyed him like under an Oak, from the mountain Lyg LONG. Wherefore Jupiter flew Ides with lightning vp, and placed Calli and Pallas in heaven amongst the stars. There was another Lynceus husband of Hypereuryphora, Daughter of Danaus, which Danaus having commanded all his Daughters in the night time to kill their Husbands, the only spared her husband Lynceus. But the trutl is, that Lynceus of whom there is so many fables of his eye-light, was the firit that found out the mines of Gold, Silver and Braffe in the earth, and therefore fimple people seeing him bring Gold and Silver out of the earth, and coming now and then upon him while he was digging deep for it, using the light of Candles which he never brought out of the pits, they foolishly imagined, that by the light of his eyes he was firit of all led to seek for thefe treasures, and from hence came the common proverb, Light of their eye-light, for a man of excellent eye-light. And to conclude, others fay, that Lynceus could see the new Moon the fame day or night that he changed, and that therefore the fame of his eye-light came to be celebrated, because never any mortal man faw that light, himself excepted. And from these fables of Lynceus came the opinion of the singular puflicanufity of the Bealt Lynx: of whom as I faid before, as the light is very excellent, and to fo exhaling men (as Go Provincial) like as is alfo the fight of Eagles, fo I do not hold any fuch extraordinary and miraculous fenfe to be in this Bealt, after any other manner, then the Poets did fay it to be in Lynceus, except as before faid, Omnne imbexline fanum cernit pastisai, fialcarum Q Lynce ocumibus confervatur. And therefore the proofere before fpoken of, may as well be applied metaphysically to the Bealt Lynx, as Poetically to the man Lynceus; and fo much may fufice for the fight. It is reported alfo that when they fee themselves to be taken, they do fend forth tears and weep very plentifully. Their urine they render all backwards, not only the female but the male alfo, wherein they differ from all other Beasts: and it is faid of them, that they know a certain virtue in their urine, do hide it in the Sand, and that thereof comes a certain precious flone called Lynceum, which for brightness resembleth the Amber, and yet is fo congealed and hardned in the Sand, that no Carbuncle is harder, thinning like fire, wherewithal they make sealing Rings, which caufed Ovid to write thus;

Vita racemifera Lynce dedit Julia Bacche.
E gaftus, ut memorum, quicquid vestis remisit
Vertitur in Lpides, & congetat aere tatio.

But they fay that of the male cometh the fiery and yellow Amber, and of the female cometh the white and pale Amber. In Italy they call it Lararium, and the Bealt Languria, and Lange. This Lynceum is called of some Elecrum, Piercyphoron, and they fay it is the fame which will draw unto it leaves, fraw, and plates of Braffe and Iron, according to the opinions of Dioses and Theophras,us, and that being drunk out of water is good for the stomack, and very convenient for the flux of the belly, according to Diocritides; and that it cureth the pains of the reins, and healeth the Kings evil, according to Selinus: And Theophrasus goeth about to effallath this opinion by reafon, and laboreth to perswade it as probable, that the urine of a Lynx should congeale into a flone among fand, as well as the urine of a man, to ingender a flone in the reins or in the bladder.

And of this opinion is Pliny, Theophrasus, Hefychius, Varinus, Zonithmus, Plutarch, and Arifotle. But in my opinion it is but a fable: For Theophrasus himself confefeth that Lynceum, which he calleth Lyngurus, and Amber Hauser, is dugg out of the earth in Lynxia. Aquinor and Mecenes fay that there is a certain tree in Lignyia, out of which Amber is taken, and this tree is the black Popler, and it is also very probable, that seeing this Amber was firit of all brought into Greece out of Lynxia, according to the denomination of all strange things, they call it Lyngurium after the name of the Country, whereon the ignorant Latin did fake an etymology of the word Lyncium, quafi Lynce urinam, and upon this weak foundation have they raifed that vain building: and for further demonstration of this truth, Diocritides fay in his discourse of the Popler, that it growing about the River Eidona, tendeth forth a certain humor like tears, which groweth hard, whereby they make that which is caufed Elecrum, being rubbed, it smelleth sweet, and for that it hath not only power to draw unto it Braffe, Iron, and fuch things, but alfo Gold: it is alfo called Cherfephtes: unto this Lucianus subscribeth: and whereas it was faid that in Italy this Amber-flone is begotten, near the River Perus, where fland many white Poplers; my conjecture is, that fome fuch like humor may ifue out of them, and not only by accident, but through affinity of nature, and condeafiate into a flone, which the people finding, covered in the sand under the trees, and through their former per- swation, might eafily take it for the flone engendred by the urine of the Lynx.

Hermolauis alfo writeth this of the Lyngurium, that it groweth in a certain flone, and that it is a kind of Myfrocn, on Pafstilone which is cut off yearly, and that another groweth in the roome of it, a part of the root or foot being left in the flone, groweth as hard as a flint, and thus doth the flone encerne, with a natural fecundity: which admirable thing (faith he) I could never be brought to believe, until I did eat the: in mine own house.
Of the Linx.

Linx (as it is recited by Sylvaticus) saith that the urine of the Linx, *diminutus, general optimus fungus parid quanamia*, referred at home in ones house, bringeth forth every year the belt Moftrons. This is also called Lapis Lintae, and *Lapis prastis*, which is divided into three kindes, that is, *Lapis Armeniacus*, and *Lapis pitygium*, called also *Eliminatis*; wherewithal the Chyrurgians of Prussia and Fomerania, cure green wounds, and the Physitians break the stone in the bladder. But the true Linxurium which is extant at this day, and currant among the Apothecaries, is as light as the Pamet-fonne, and as big as fillith a mans fist, being of a blackish colour, or of a rufset, the rufset is more solid, sandy, and fat, and being bruised or eaten, tafeth like earth: both kindes are covered with little white skins, and there is apparent in them, a spungy tenacious substance, and this I take to be the Moftron whereof Hermaus Speaketh. And by the little stones and small skins, it may be con-jectured to be *Corpus heterogenet*, *in terra caedere* : A *Heterogenet* body increasent in the earth, wherewithal it hath no affinity.

There was another Stone of the urine of a Linx, to be seen in Savoy, the substance whereof was clearly crystall, the form of it was triangular, the hardeffe, as you might strike fire with it, and the colour partly white, and partly like Wine mingled with water; so that I will conclude, that the urine of a Linx may engender a stone, though not in such manner as is beforefaide. For the *Abraham* hath affirmed, that within seven daies after the rendring, it turneth into a stone; but it is not the Linxurium properly so called, for that is the Amber or Gum before spoken of, although catachreftically so called.

And if it be true, that there be certain Moftrons near the Red-fea, which by the heat of the Sun are hardened into stones, then also it may follow very naturally, that those stones may produce Moftron again, for both the dissolution and the constitution of things are thought to be grounded upon the same principles. And thus much shall suffice for the urine of the Linx, and the Stone made thereof.

The skins of Linxes are most precious, and used in the garments of the greatest fates, both Lords, Kings and Emperors, as we have shewed before, and for that cause are sold very dear. The claws of this Beaf, especially of the right foot, which he useth in feate of a hand, are excluded in silver, and fold for Nobles a piece, and for Amuletis to be worn against the falling sickness. The love of these beads to their young ones is very great, like as the Pardals, Lions, and Tygers. The King of Tartaria hath tane Linxes which he useth in hunting, in feate of Dogs. The antient Pagans dedicated this Beaf to Bacchus, feigning that when he triumphed in his chariot of Vine branches, he was drawn by Tygers, and Linxes. And therefore *Virgil* saith ;

*Quid Lynceus Bocchi varia.*

And *Ouid*;

*Dilige recemisero Lynces dedit India Bacthe.*

All the nails of a Linx being burned with the skin, beaten into powder, and given in drink, will make very much cohbithe and restrit abominable Lecchery in men : it will also restrit the luft in women, being sprinkle upon them; and also very effectually and speedily take away either itch or scurf in man or womans body. The urine of this Beaf is accounted very medicinable for those who are troubled with the Strangury, and running of the reins.

The fame is also very good and wholesome for the curing of any pain or grief in the winde-pipe or throat; *Bonarius Baro* both a affirm that the nails of Linxes which are in their Country, are had in great effimation and price amongst their Peers and Noble men, for there is a very certain opinion amongst them, that those nails being put upon the yard of either Horfe or Beaf whose urine is kept back or restraited, will in very short space cause them to void it without any grief at all. He reporteth also that their nails do there wax white, and that they include them all in silver, and do commend them for an excellent remedy against the Cramp, if they be worn (peradventure cause they are bending and crooked) by which periwafion there are some superflitious men which hang certain roots which are crooked and knotty about them against the Cramp. There are some which do a certify that these nails are good and ready helps for the foreneis of the Uvula which is in the Horfes mouthes: and for that cause there are many Horfemen which carry them continually about them.

The Linx or Wolf, which is begotten of a Wolf and a Hinde, the Musk-cat, the Weasill and all such other like Beas, do more hurt men by their biting teeth-wounds then by poifon. There was a certein Hunter, as *Colliner* reporteth, which told him that the flefh of a Linx being fed in some hot potage or broth, and afterwards eaten, would be a very good and wholesome medicine for the expelling of the Ague, or Quartan Fever; and that the bones of the same Beaf being burnt and pounded into powder, would be a very excellent remedy for the curing of wounds which are old and flale, and full of putrification, as also the Fufilaeas which grow in the thighs or hips of men.

*Arnoldus.*
The several names.

Two kinds of Martins.

Places of their abode.

The use of their skins, and how to chafe the beft.

Of the Marsder, Martel, or Marten.

This beast is called in the Hebrew, Oach, or as some say Zim; amongst the Arabians, Easte, or rather Kachbebon, or Kachimos; in Latine, Martes; the Germans, Marsar, or Matter, like the English; the Italians, Marta, Marta, or Martorella; the French, Marsar, or Poyne; the Spaniards, Mala; the Illyrians and Polonians, Kuna; and some latter Latines use the words Marta, Martarua, Martura, and Marturelias; and the reason, or etymology of this Latine word is taken from Martia, which signifieth Martial, because this beast in warlike and hostile manner, doth destroy her adversaries, and liveth upon the prey of Hens, Birds, and Mice. The Germans divide these into two kinds, which they call by the names of Teckmarder, Hufsmarder, Steinharder, Fuchsmander, Feldmarder, Wildmarder, Thammarder, Finckmarder, that is to say, the Fir-martin, the Rock-martin, the Tame-martin, the Beech-martin, the Field-martin, the Wilde-martin, and the Wall-martin. For they live either in houses, walls, and Temples, or else in rocks, fields, and woods: And yet is not their distinction taken only from the places of their abode, but also from the goodness of their skins.

And therefore the French call the word Martin by the name of Faines: And the skins of the Fir-martin, or House-martin, are far more beautiful to look upon; than those that live wide in the trees or Woods. Agricola calleth the Wood-martin Baummarder, because it liveth for the most part in trees, and faith that it never forfaketh the Woods, or very seldom, and therefore in that thing differeth from the Fir-martin. But herein he feemeth to be deceived, that he ascribeth to the Beech-martin, a loamy or red throat, and also a continual abode among the Woods. For they come sometimes to houses, and to Rocks; for which, as we have said already, it is called a House-marder, and Rock-marder. And all these multitude of names, do but express the two kinds afore-named, whereof the Fir-martin is most excellent; for Princes and great Nobles are clothed therewith, every skin being worth a French crown, or four shillings at the least. And they are so much the better, when there are more white hairs interpersed among the yellow.

For their ordinary colour is a deep brown yellow, and these that are clean white, are four times worfe then the former; and therefore are not sold for above three or four groats a piece, howsoever the saying of Martial, Venator capta Marte superstes est. Here cometh the proud Hunter that hath killed a Martin, may very well be applied unto them which take any of these beasts, for they cannot chafe but be very joyful, which get a good sum of money for a little labour, as they have for a Martins skin. By inspection of the Faines, that is, the Martins of the beeche; for the French men called a Beech, Fau, from whence cometh the word Faines, you may see, that their skins are more dusky, having a tail both greater and blacker then the Martins of the Firs. And therefore you must understand, that they of the Firs are by way of excellency called Martin,
and the other of the woods called Fonsa. There is no great difference betwixt their bigness: and if by their skins at any time there seem any inequality, in breadth, or length, it must be attributed to their age and difference of years, and not to any proportion in nature or disposition of kind. And as we have said that the Fir-Martins are absolutely the best, yet that is not to be understood generally. For the Martins of Poland are so brown, that they are altogether disliked, and are accounted no better than the common Beech-Martins. Wherefore the bright-brown alpèred with white hairs, is ever accounted more precious without all exception, and by that colour upon the back of the skin, the Skinner judgment of the worth, and not by the yellowness of the throat.

Of the Beech-Martins there are great plenty in the Alpes, especially on the South-side, which look towards Italy, but very few of the Wal-Martins. But on those parts of the Alpes which look towards Germany and the North, there are abundance of Fir-Martins with yellow throats, for you must remember that the wide Martin hath a white throat, and the Fir-Martin a yellow throat.

There are also of both kinds in Helvetia, and the most excellent are in the vales towards Cors Stella. In France there are no Mantins of the wall, but the Beech-Martins live in hollow beeches. There are also woods full of the Beasts in Drusia, which the people there call Gami. Lantacruza a wood of Scandentavia fourcore miles long, is full of Mantins. Also Mufcova, and Lithuania have store of these Beasts, and Sabtes. But they of Lithuania, are the whitenest in the world.

The people of Sarmatia in Europe, wear garments of these in Sables; and the inhabitants of Fe Bakemuri, Sycitia, Hungaria, near Tanais, do pay yearly unto the Emperor of Russia, once called the Duke of Muscovia, a certain number of Sabtes and Mantins skins. There are also store of Mantins neer Brahania, and generally in all parts of Europe except in England.

They are in quantity about the bigness of a Cat, having longer bodies, but shorter legs, with heads and tails like a Fox, their skins ordinarily brown, white on the throat, and more yellow on the back.

Their teeth are exceeding white, and unequal, one longer then another, being above measure sharp, and the canine teeth both above and beneath hang out very long. Amongst which on the either chap, stand fix small cutting teeth in a right line over against one another, which I think happeneth not in any other Beast of the world. The grinding teeth are like a saw, being triangular in fashion, eight above and eight beneath. Whereof the furthermost upon the uppermost side of the mouth, are more deep and inward in the palate, then all the residue, the whole number is thirty two. The long hairs upon their upward lip doe bend clean backwards.

Notwithstanding that there be two kindes of this Beast, as already we have said, yet do the Wood-Martins, or Beech-Martins, greatly defire' copulation with the other, wherefore Albertus, the Faec genus, & Martes phagi, sive sequitur, Martem abriuam, tanquam nobilissimam, ut faciam ex ea nobilissimam acquirat. The Beech-Martin followeth the Fir Martin, and defireth her copulation as the nobler kind, that he may thereby dignifie his own issue. It should seem that they breed in March, and make their nefts like the draies of Squirrels, and bring forth many at a time; for it was constantly affirmed by a Country-man of Germany, that he found a nest of these Mantins builded like a Squirrels, having four young ones in it, in the beginning of April.

If they be taken when they are young, both one and other kind grow wonderful tame and familiar with Men and Dogs. And Geiser had one of these, which loved a little Dog wonderfully, and would follow him abroad whithersoever he went, far or near. It would also play with Dogs and Men, with teeth and nails, lying flat upon the back like a Cat, and never give any little hurt. But looofed from his chain it would wander abroad into the neighbourhoods houles, and many times far off, but always returne home again. They which tame them, because that they are easily exasperated, and bite deeply when they are angry, do break off the tops of their canine teeth, with a pair of pinsons for the preventing of that mischief. Ruellius affirmeth, that the excrement of this Beast filvileth like a Musk-cat, and faith the reason of it is, because they feed upon sweet fruits; but we have heard that they eat Pullet-birds, Eggs, and Mice, but that they eat of fruits it cannot be proved. I rather attribute it unto their own nature. For as the Martine-ape filvileth sweetly after her meat, so may this Martin-wexel with a sweet excrement. To conclude, the skins of these beasts is applied to gowry legs, and the white hairs of the throat made into a cap, is very soverain for the head-act. They may be taken with Dogs, or in traps, but commonly they are taken in ditches or pitchals, according to this Verse of Cæleste, wtherewith I will conclude;

Et laqueo vulps, & discipe caii soles.
Of the Mole or WANT.

I do utterly dissent from all them that hold opinion that the Mole or Want is of the kind of Mice, for that all of them in general, both one and other, have two long crooked foreteeth which is not in Moles, and therefore wanting those as the ineparable propriety of kind, we will take it for granted that it pertaineth not to that rank or order of four-footed Beasts. But concerning the Hebrew name thereof, there is much variance and little certainty amongst writers. Some of them calling it Tintemebem, which word is found Deut. 14. which is also translated by the Chaldee, Bara or Beaver, a Swan, and the Septuagint and Jerom, Bat, and Rabbi Solomon in another place of the same Chapter tranlateth it a Bar, which the French call Claueter-fuivre. But in that place of Levit. 11. where the Sibio, the Lizard, and Tintemem, are reckoned unclean Beasts; Rabbi Solomon interprets it Talpum, the Mole. The Septuagint, Aphelox; the Chaldee, Achkata; the Arabian, Lambarras; the Per- sian, Angurab-dedex. There is a sentence, Isa. 2. in Hebrew thus, Lachap ferit vertepletim; which by Munster is thus translated, In die present homoaurus et argentos dies, in suflaurum Talpum et sepulturum. In that day shall a man cast away his goods of silver and gold into the holes of Moles and Bats. By S. Jeron it is translated thus, Proiecto bomo Idole, utque ut ad aereas talpes et sepulturem. A man shall cast away his Idols to worship Moles and Bats. Some again make but one word of Lacheprsetum, and translate it a Beast digging ditches; and the Septuagint, Idols or abominations, and think that they were so called, because their outward forme reprelenteth some fuch reptile creature, and Symmactium, unprofitable things; but Acilla, Ourum, digging Beasts: and therefore at this day all the learned take Prot for Moles, so called by reason of their digging. Aulica calleth it Pelagez, a blinde Moufe. In Grec it is called sometime Spalx, but more often Aphelox: yet Albertus calleth it a strange Grecian name Culti and Ksky, which he took from Aoicen. The Italians retain the Latin word Talpa; the Spaniards, Tepo, by which word the Italian at this day call a Moufe. The French call it Taupe; the German, Molwe, and in Saxen, Molweff, from whence is derived the English Mole, and Molewarp. The Helvettians, Seheb and Schermowe, and the Moebli they call Scherwen of digging. The Holander and the Flemings call it Mol and Molms, in imitation of the German word: the Hibernians, Kirke. And generally the name is taken from digging and turning up the earth with her nose and back, accord- to the saying of Virgil;

Aul calls capti solere cubilia Talpa.

Some are of opinion, that it is called Talpa, because it is appointed to an everlastings darkness in the earth; of which sort Ifidurus writeth thus, Talpa diffus est e gaud perpetuar e terrae dominata, et enim solique evis. It is called also in Greek, Indwnos, and Sophwos, or Sephemon the earth, because it liveth in the earth, and turneth it upward to make it hollow for passage. The like I might say of his other names, Ibiheba, and Orthoquentus. But this shall suffice for his name.

In Etruria about the Champagne's called Ochomontus agar, there are the greatest store of Moles in the world; for by digging they undermine all the fields, and yet in Lembata another Coun- try of Etruria, there are none at all, and if they be brought thither from any other place they will never dig but die. Rodolphus, Oppianus, and Albertus affirm, that they are created of themselves of wet earth and rain water, for when the earth beginneth to putrid, the Mole beginneth to take life.

They are all for the most part of a black duskie colour, with rough, short and smooth soft hair as wool, and those hairs which were whitem when they are young, are most glistering and perfect black when they are old: and Geher affirmeth that he saw in the end of October, a Mole taken which was very white, mixed with a little red, and the red was most of all upon her belly, betwixt her forelegs and
and the neck, and that it could not be a young one, because it was two palms in length between his head and tail.

The Beasts are all blinde and want eyes, and therefore came the proverb *Tulis ceteris, Tuli hodie*, robber blind then a Mole: to signify a man without all judgment, wit or foresight; for it is most elegantly applied to the mind. Yet if any man look earnestly upon the places where they should grow, he shall perceive a little passage, by drawing up the membrane or little skin which is black, and therefore *Aristratus* faith of them in this manner probably:

All kinds of Beasts want their fight, because they have not their eyes open and naked as other Beasts, but if a man pull up the skin of their brows about the place of their eyes, which is thick and shadoweth their fight, he shall perceive in them inward covered eyes, for they have the black circle, and the apple which is contained therein, and another part of the white circle or skin, but not apparently eminent; neither indeed can they, because nature at the time of generation is hindered, for from the brains there belong to the eyes twi strong nervie passages, which are ended at the upper teeth, and therefore their nature being hindered, it leaveth an imperfect work of fight behind her.

Yet there is in this Beall a plain and bald place of the skin where the eyes should stand, having outwardly a little black spot like a Millet or Poppy-seed, fasten'd to a nerve inwardly, by presting it, there followeth a black humor or mofliness, and by dissection of a Mole great with young, it is apparent (as hath been proved) that the young ones before birth have eyes, but after birth, living continually in the dark earth without light, they cease to grow to any perfection; for indeed they need them not, because being out of the earth they cannot live above an hour or two.

*Eph* hath a pretty fable of the Aife, Ape, and Mole, each one complaining of others natural wants; the Aife, that he had no horns, and was therefore unarm'd; the Ape, that he had no tail like other Beasts of his nature and quantity, and therefore was unhandome; to both which the Mole maketh answer, that they may well be silent, for that the wanteth eyes, and is unfasted, that they which complain, shall finde by consideration and comparision of their own wants to others, that they are happy and want nothing that were profitable for them.

*Opium* faith, that there was one *Piusius* which was first deprived of his eye-fight, and afterward turned into a Mole: It should seem he was condemned first to loofe his eyes, and afterward his life.

These Moles have no ears, and yet they hear in the earth more nimbly and perfectly than men can above the fame, for at very step or small noise and almoft breathing, they are terrified and run away, and therefore (Pity faith) that they understand all speeches spoken of themselves, and they hear much better under the earth than being above and out of the earth. And for this cause they dig about their lodging long passages, which bringeth noises and voices to them, being spoken never so low and softly, like as the voice of a man carried in a trunk reed or hollow thing.

Their snout is not like a Weasle, as *Solus* faith, but rather like a Shrew-moufle, or (it be lawfull to compare small with great) like to a Hogs. Their teeth are like a Shrews and a Dogs; like a Shrews in the neither teeth and furthermost inner teeth, which are sharp pointed and low inwardly: and like a Dogs, because they are longer at the sides, although only upon the upper jaw, and therefore they are worthily called by the *Grecians, Marmotation*; that is dangerous biting teeth, for as in Swine the teeth stand out above the upper, and in Elephants and Moles, the upper hang over the neather, for which cause they are called *Hypophorius*.

The tongue is no greater then the space or hollow in the neather chap, and they have in a manner as little voice as fight, and yet I marvel how the proverb came of *Loquus Tolpis*, a prating Mole, in a popular reproach against wordy and talkative persons, which *Ammianus* faith, was first of all applied to one *Julianta Capella*, after he had so behav'd himself, that he had lost the good opinion of all men.

The neck seemeth to be nothing, it is so short, standing equal with the forelegs. The lights are nothing else but dislinguished and separeated *Fibres*, and hang not together upon any common root or beginning, and they are placed or feated with the heart, which they encole, much lower toward the belly then in any other Beast. Their gall is yellowish, their veins like a Bears, and short legs; wherefore they move and run but slowly; their fingers or toes wherewithal they dig the earth, are armed with sharp nails, and when they feeleth any harm upon her back, frankly the turreth upward and defendeth her self with her snout and feet: with her feet the diggeth, and with her nose casteth away the earth, and therefore such earth is called in *Germany*, *Mol werff*, and in *England*, *Mole-bill*; and the lovethe the fields, especiall meddowes and Gardens, where the ground is soir, for it is admirable with what celerity the casteth up the earth.

They have five toes with claws upon each footsees, and four upon each foot behing, according to *Albertus*, but by diligent inspection you shall finde five behind also, for there is one very little and reuered backward, which a man lightly and negligently looking upon, would take to be nothing. The palm of the fore-feet is broad like a mans hand, and hath a hollow in it if it be put together like a fill, and the toes or fingers with the nails are greater then any other beasts of that quantity. And to the end that he might be well armed to dig, the forepart of her fore-legs consist of two solid and found bones which are fastened to her shoulders, and her claws spread abroad not bending downward, and this is peculiar to this Beall not compatible to any other, but in her hinder legs, both before and behing they are like a Mouns, except in the pate beneath the knee, which confiseth but
but of one bone which is also forked and twified. The tail is short and hairy. And thus much for the Anatomy and several parts.

They live as we have said in the earth, and therefore Cardus faith, that there is no creature which hath blood and breath that liveth so long together under the earth, and that the earth doth not hinder their expiration and inspiration; for which cause they keep it hollow above them, that at no time they may want breath, although they do not heave in two or three days; but I rather believe when they heave, they do it more for meat than for breath, for by digging and removing the earth they take Wormes, and hunt after virtuats.

When the Wormes are followed by Moles, (for by digging and heaving, they foreknow their own perishition) they fly to the superacies and very top of the earth, the filly beast knowing that the Mole their adversary, dare not follow them into the light, so that their wit in flying their enemy is greater, than in turning again when they are trod upon. They love also to eat Toads and Frogs; for Albertius faith, he saw a great Toad whole leg a Mole held taft in the earth, and that the Toad made an exceeding great noise, crying out for her life, during the time that the Mole did bite her. And therefore Toads and Frogs do eat dead Moles; they eat also the root of Herbs and Plants, for which cause they are called by Oppianus, Poisibagi Herbivores, herb-eaters.

In the month of July they come abroad out of the earth, I think to seek meat at that time when wormes be scanty. They are hunted by Wewflis, and wilde Cats, for they will follow them into their holes and take them, but the Cats do not eat them: whereas we have said already, that they have an understanding of mens speech when they hear them talk of them.

I may add thereunto a story of their understanding, thus related by Gillius in his own experience and knowledge. When I had faith he put down into the earth an earthen pot made of purpose with a narrow mouth to take Moles, it fortuned that within short space as a blind Mole came alone he fell into it and could not get forth again, but lay therein whining; one of her fellows which followed her seeing his mate taken, heaved up the earth above the pot, and with her nose cast in so much, till she had raised her companion to the brim and was ready to come forth: by which in that blind creature confined to darknes, doth not only appear a wonderful work of Almighty God, that endoweth them with skill to defend, and wisely to provide for their own safety, but also planted in them such a natural and mutual love one to another, which is so much the more admirable, considering their beginning or creation as we have shewed already. Because by their continual hearing and laboring for meat, they do much harm to Gardens and other places of their abode, and therefore in the husband-mans and house-wifes common-wealth, it is an acceptable labor to take and destroy them. For which cause it is good to observe their passages, and mark the times of their coming to labor, which being perceived, they are easily turned out of the earth with a spade, and this was the frist and most common way.

Some have placed a board full of pikes which they fasten upon a small fiek in the mole hill or passage, and when the mole cometh to heave up the earth, by touching the fiek the bringeth down the pikes and sharp nailed boards upon her own body and back. Other take a Wyar of Iron, and make it to have a very sharp point, which being fastened to a faffe and put into the earth where the Moles passage is, they bend and set up, that when the Mole cometh along, the pipe runneth into her and killeth her.

The Greecius (faith Palladius) did destroy and drive away their Moles by this invention, they took a great Nat, or any other kind of fruit of that quantity, recept and solidity, wherein they included Chaffe, Brimstone and Wax, then did they stop all the breathing places of the Moles, except one at the mouth, wherein they set this devise on fire, so as the smoke was driven inward, whereby they filled the hole and the place of their walk, and so stopping it, the moles were either killed or driven away.

Also Parmarum sheweth another means to drive away and take Moles: If you take white Hellebor, and the rindes of wilde Mercury in head of Hemlock, and dry them and beat them to powder, afterward sift them and mix them with meat and with milk beaten with the white of an Egge, and so make it into little morsels or bals, and lay them in the Mole-hole and passages, it will kill them if they eat thereof, as they will certainly do.

Many use to kill both Moles and Emets with the frooth of new Oyl. And to conclude, by fetting an earthen pot in the earth and Brimstone burning therein, it will certainly drive them for ever from that place. Unto which I may add a superfetitious conceit of an obscure Author, who writeth, that if you whet a mowing fythe in a field or medow upon the featl day of Chrifts Nativity (commonly called Christmas day) all the Moles that are within the hearing thereof, will certainly for ever forfake that field, medow or Garden.

With the skins of Moles are purfes made, for the rough and soft hair, and also black ruffet colour is very delectable. Pity hath a strange laying, which is this: Expelibum talpum cubicularia ut demus frigore; adeo ne religio quidem a se rentis summovet delicat; that is, We have seen the hangings of Chambers made of mole skins, so that no confience of religion cannot avert the monstros love of delights from the affection of men.

For all the ancient Wise men and Magicians did hold, that this beast was capable of Religion, Nullis aequus credenti existis: nullum Religione expansus judicant animal, ut quis ex ejus recentem regulationes; divaristi, divinationis et rerum efficiendarum eorum primitit; they give not so much credit to any intrails
intrials as to theirs; for they judge that no beast is fo capable of Religion, because if a man eat the heart of a Mole newly taken out of her belly and paniting, he shall be able to divine and foretell in- fallible events. Another faith, *Venerum monumentis traditum Gallus scelerum fibras maxime dies gratia ubi- derti sunt Talpaurum visera Magi verissima dixerat, ubi fide hac fedet quem sollemni verissima liteari, hoc enim sunt extra anys libera in quibus divina mens in se cruciat: that is, the fibres of Cocks were won among ancient Monuments to be accounted most acceptable to the Gods, even as the bowels of Moles (as the wife men say) and to offer thefe as a most Solemn sacrifice grateful to the Gods, and that in thefe intrials it was believed that the minde and pleasure of God was feared and engravèd; and a little alter he faith, that the bowels of Moles and Icogs do foretell many great and fortunate events.

But I will leave this paganism, and let it never enter into the heart of a reasonable man, that such beasts can love Religion, or that God hath planted in their bowels and corrupt parts, such letters of his wisdom and lore-knowledge, which he hath not granted to the immortal and incorruptible soul of man. Only this I finde by experience that before any rain and change of weather, the filly beasts heave up the earth more abundantly than at other times; and that in *Thessaly (as Varro faith) a whole Town was once undermined by Moles. They were wont to sacrifice this beast to Neptune, because of the affinity between their names, for in Greek *Alphalus, signifies Neptune, and *Alphax, a Mole. Almouno also writeth, that they were fancied and dedicated to Hell, because they keep continually within the bowels and bowels of the earth; and to conclude, because that Moles would not live in Coruces a part of *Bootea, before spoken of, and thereof came the common proverb, *Alphalea in *Corusum, A Mole is brought to Coruces, to signifie the hatred of a gift or ghelt to him that is forced to receive him. Thus much for his natural and moral story; now followeth his medicinal.

The Medicines of the Mole.

*There is nothing which is more profitable or medicinable for the curing of the bites of a Shrew, than a Mole being laid and clapped thereunto. The fame doth also very effectually cure and heal the blows or bites of a Scorpion. Pills being made with that which proceedeth from Moles with Hony, eaten nine days together, doth preserve the body of any one from swellings or bunches in the flesh, who shall eat them. For the avoiding or driving away the hairs which grow in any part of man's body, that they may never return or be renewed again: Take a Mole and lay her in water to be steeped or soaked, as long as the shall not have any hairs left upon her, with this water anoint the place which is full of hairs, and afterwards wash it with lie made of ashes, and then rub it with a linen cloth; then if you shall see the hairs to return again, wash it twice or thrice in the afore- named manner, and they will be quite expelled away, and by no means can be made either to renew or come again. For the renewing, and bringing again of those hairs which are fallen or decayed, take a Mole, and burn her whole in the skin, and minige the dust or powder which cometh from the same with Hony unto the thickness or fashion of an Ointment, and this being rubbed or anointed upon the bare or bald place will without doubt in some short time or space procure the hair to grow thick. For the renewing of hairs which fall from Horfes; Take a Mole and boil her in Oyl, until all the flesh be consumed and quite dissolved into a liquid juycye, with this Oyl anoint the place which is bare or deftitute of hairs twice every day for some short space, and it will make the hairs to grow in great abundance.

For the changing of the hairs of Horfes from black to white, take a Mole and boil her in Salt water, or lye made of ashes three days together, and when the water or lie shall be quite consumed, put new water or lie thereunto: this being done, wash or bathe the place with the water or lie fome what hot; presently the black hairs will fall and hide away, and in some short time there will come white. Whosoever shall take a Mole and hold her in his right hand until the die, shall have such an excellent vertue therein, that the shall ease the pain of a woman's breasts only by touch- ing them.

The dust of a Mole being burnt, mingled with the white of an Egg, and anointed upon a Sheep, is an excellent and medicinable remedy against the Lepric, which cometh oftentimes upon them. The dust of a Mole mixed with Oyl or Hony, and anointed upon the skin of either man or woman which is full of Lepry, will very speedily and effectually cure and heal the same. The fame being used in the aforefaid manner, is very good for the curing of those which are troubled with the disease called the Kings Evil, as also for those which have hard bunches or kernels arizing in their arm-holtes, and in other parts of their body.

The whole body of a mole being taken and burned in the skin into dry dust, or powder, is an excellent remedy against the disease called the Phitala, as also for the purging of the corruption in them and healing of them, being once taken by any man. The fame being also mixed with Hony, and rub'd upon the teeth of any one who hath pain in them, doth not only ease the pain and grief thereof, but also doth strengthen and make them fat. The blood of a Mole being killed, spread or anointed upon the head of any one which is bald, will very speedily renew and bring the hairs again. The head of a mole being cut off and beaten together with the earth which is thrifed up by Moles, and wrought into a paste, and rowled together like a little loaf, is very much used for the healing of all swellings, and for those things which they call Impolultes; as also for all swellings or kernels.
The History of Four-footed Beasts.

which arise in the neck; so that in the time of the curing of these things, the party which is pained and grieved, be not suffer'd to eat any Swine's flesh.

The tooth of a living Mole taken out and tyed or bound to the teeth of any who is grieved there- in, is commended by the Magi, or Wise-men to be an excellent remedy and cure for the same. The heart of a Mole being eaten nine days together, doth very speedily and effectually cure either him or her which shall so eat it, of that pelliterous disease call'd the Kings Evil, if it be so that it hath not been of too long continuance with them. The same is also very good and profitable for the affwaging of Wens, being used in the aforesaid manner. The liver of a Mole being beaten between the hands of him that is troubled with bunches or swellings in his back, and afterwards put upon the same, is a present help and cure. The same effect hath the right foot of a Mole for the affwaging of bunches and swellings arising in the fleth.

of the vulgar little M O U S E.

As we have handled the natures, and delivered the figures of the great beafts, so alo mult we not disdain in a perfect History to touch the smallest: For Almighty God which hath made them all, hath disseminated in every kinde both of great and small beafts, seeds of his Wildom, Majesty, and glory. The little Moulfe therefore is jufly termed, Incola domus nostre, an inhabitant in our own houses, Et auro omnium rerum, a gnawer of all things. And therefore from the found of her teeth which the maketh in gnawing, she is called Sorex. Although we shall shew you afterwards, that Sorex is a special kinde, and not the name of the general. Wherefore seeing there be many kindes of Mofe, and every one of them defireth a particular tractate, I thought good to begin with the Vulgar little Mofe, and so to defend to the severall species and kindes of all, according to the method of the Philofopher, A natura ad minum nota, from things that are most known to them that are left known. In Hebrew it is called Anc, Levitz. 11. where the Sepuwigins tranlate it Mous; the Cludens, debra; the Arabians, Fyf., or Fber; from whence cometh the Sorex, the word Pte- ra. The Seldianis, Au Mus, the Latines, Mous; the Italians, Topa, or Sorex, Alergius. O Ratz, Di cafe, although Ratz signifieth a Rat, both among the Germanis, French, and English. The Spaniards call the little Mofe, Ratt; and the great Rat, Rattaz; the French the little Mofe, Sauris; which word seems to be derived from the Latins, Sorex, and the Great Mofe they call Ratt. The Germanis the great ones Ratx, and the little one Mufs; the Englifh and Polonius, My佛is, which is the Greek word; and the great one they call Scebro; the Venetians call the Rat Pantege, of Pontis the vulgar Greek name, and the Romans, Sourco. Now the dignity of this little beaft, may appear by the name, which hath spread it self both to beafts, fiftis, men, herds, and Cities. To beafts as we have shew'd before in the Icneumon, which is vulgarly called the Indian Mofe, or Phobobis Mofe And to fiftis, for there is a little fift called Musculus, and in France, Myfetus, the Whale-mofe, because it leadeth the way, and fheveth the Whale whither hover the Swimmeth; for the avoiding of Rocks, (according to Pliny) although Ron- deletius affirmeth otherwise, namely, that that guide of the Whale is call'd Egeron, and Egetur, and Myfetus (he feaeth) is a fifti-fish. Generally molt kinde of Oyters are also call'd Mysis, because sometimes they gape and make a noife like a Mofe, and clofe their thells again. The purple fiftes be also call'd Mysis; there is likewise a kinde of precious Stone called Myse, about Bofborus Taracius, and many other fuch kinde, hath the name of this beaft attained.

There was one Myse, the fervant of that famous Philofopher Epicurus; likewise the name of a Champion or Challenger, in Suidas and Varinz, and there was another called Mus, of excel- lent skill for ingraving in Silver, and therefore did draw upon the Shield of Mineraz, the fight betwixt the Latitha, and the Continus, and many other things. Whereupon Martial made this verfe;

Quis labor in Ibia? deae Myse? an me Myronis?

There
Of the Mouse.

There was a Conful of Rome, whose name was Mure, and therefore Camerarius made this Riddle of the Mouse; *Paras mihi domus est, sed jam aetern openata. Acutissimi lanceae, faturae vivae, & cedad mihi non met. * Rome quoque, Confal habebit.* The Thracians call’d Algiar a Mouse, and the City which he built Argol. His city was a City of Mines, and a Citizen of that City was called Mytius. Mytius a City of Luci in Epirus, and the people thereof are called Moiures. Mytius, a little Region between Tanur & Lebogia, and according to Stephanus, an Island near Egipt; the first Port or Haven of Egipt, called Mus morus, the Moiures haven, and Mys also seemeth to be derived from their stem. There is an Island under the Equinoctial line, called Ulydra Marium, the Moiure Island, because of the abundance of Mice therein; and to conclude, even the herbs and plants of the earth, have received names from this little beast, as Herodium Marium Myconob, Spriga, Myperus, Myoton, Myrurus, Mytturn, Moue-foot, and fich like. There have been also Comedies made of Mys, as that of Carfu, called Myt, wherein the Wefal stript the night-wandering Mys. And another Greek, called Logopontus, that is a fight between Cats and Mice, wherein the Poet doth most plainly fign names of Mys, as their King he calleth crelius, that is, a lecherous, and his eldest Son Pteropax, a corn-eater, and his fcond Son Pterolopax, bread-eater, and his eldest daughter, Leptopsite, candle-eater; and all his Ancestors Carpopontus, that is, fruit-eaters. And then he bringeth other Mice in as Turbicis, Psycedizes, Cobolocyllos Homer in his Iliad, such is, a fight between Frogs and Mice, doth very eagerly describe divers proper names of Mice. As Pteropax, whose father was Typhon, and his mother Lyconile, daughter of Petronelaea the King, and then other Mice, as Lycopon, Tropicis, Embaflactis, Lyconile, Troglogites, Apholus, Pterolopax, Pteronopas, Copenkylactes, Stibopas, Anthropas, Medarsopa, and Tboleopox, all which are not only out of the abundance of the Authors wit, but invented for the expressing of the Moiures nature.

The Epithets of Mice are thefe: short, small fearful, peaceable, ridiculous, ruffick, or Country Mouse, urbane, or City Mouse, greedy, wary, unhappy, harmful, black, obscene, little, whiner, biter, and earthly. And the Greek ones are express'd before in the proper names, and thus much may suffice for the names of Mice. Now to come to their several nature and fignifications.-First of all concerning their colour. It is divers, for although Callus muralus be a common term for a Moiure colour of Alles, yet notwithstanding Mice are sometimes black, somete times white, somete times yellow, somete times brown, and somete times another colour. There are white Mice among the people of Sauve, and Drophus in France called Albroges, which the Inhabitants of the Country do believe they feed upon food. But the white Moiure is above all other most valuable and serviceable; and therefore it came into a proverb, *Myt Lucare, Myt Cannabis,* the white Moiure is an ill Moiure, or of whole milk Aristocles made this Emblem; Delis a & bulimia, Mus eredius altus, Aspera, at rati, non fat aperta mihi es, An quad in natura fatix, & multa libi es?

Ornant Romanus an naule pelle meus? Sarramini Musurus devest pigment, zelobum, Est celebris fatis es & hisque Musar Arabs.

Of all which conjurers of the Poets, the firft is most probable; for the Ancients were wont to call wanton and effeminate men Pyrgari, and Leuopygot, from their beauty and whiteness. And as there is difference in their colours, fo also there is in their quantity: for some are very great, some meanly great, and some very small. Their heart is very great, and their liver and lungs increase in the Winter time. Alfo the fibres that are in them, do increafe and decrease with the waxing and waning of the Moon. For every day of the Moons age, there is a fibre increafed in their liver. And therefore Lucullus said well, *Luna sit fera, & implet equinoctia, & Musibus fibris auger:* that is to say, The Moon feedeth Oysters, fillith Hedgehogs, and encreafeth fibres in Mice. Some of these Mice have a gall, and some have none, as Aristocles and Pliny fwear in many places.

The Moiures place of conception have many holes in it, during the time the bearings her young ones. There is no creature that hearth more perfectly then a Moiure, they dwell in holes of men, especially near fuppofing and dining rooms, kitchens, or larders, where any meat is liring. And they make themselves places of abode by gnawing with their teeth, if they finde not convenient lodgings prepared to their hand, and they love the hollow places of walls, or the roofs of houses; and therefore the Waps which in Aristotles names are Called Drophe, that is, gnawers of roots, are to be understood to be Mice, because Myt Drophiis is a Moiure in the houfe top. In the day time they lie ftil, as long as they either fee or hear a man, or any other beast harmful unto them, for they defcrve their enemies, not fearing an Ox, though they run away from a Cat.

They are very defirous of bread, and delight in all those meats which are made of fruit, for the nourishment of men. It is a creature very diligent and equipt, both to compas, feek out and chufe the fame, fo that therefore it doth often endanger and lofe its own life: and finding any cubboards, wood, or fuch like hard matter, to withiland his purpofe, and hinder his paffage, it ceafteth not to weary it felf with gnawing, until it obtain the purpofe. All kinds of Moiure love grain and corn, and prefer the hard before the foft; they love alo Cheete: and if they come to many Cheeyes together, they rath far, but they eat of the bell. And therefore the Egyptians in the Hieroglyphicks do picture a Moiure, to fignifie a found judgement and good choice. Buclinus is very accknowledgable to Moiure, and the Moiure in the Ile Pan, in Tarches, in the Iland Cyprus, which is one of the Ilands of the Speicles in Cyprus, and in Chelee, they did eat Iron, as appeareth by Aristocles, Allemont, and Hercules. And
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Pliny.

Albatus.

Mice cannot drink without danger.

Theophrastus.

Generation of Mice, and their carnal copulation.

It was also found, that in a certain Island near Clithber, Mice eat and devour gold, and therefore the Gold-smiths did cut them in pieces among their metals. Plutarch, in the life of Marcus, faith, that there were many prodigies and fearful figures that did precede the war of Marius, amongst other, he faith that Mice did eat the Gold hanging in the Temple, and that one of the Temple-keepers in a certain trap took a female Mouse alive, who litted five little Mice in that place, and devoured three of them. Anthologians reheareth a witty Hexamilion of Antipathus, upon a Mouse that was fit for another, for certain Gold-dufl, which she had devoured, whereby was signified how men procure unto themselves exquisite tortures, and unavoidable mortal harms by feeling, and increasing of riches signified by Gold. vulgar Mice do runimate or chew the cud as well as the Pontick, and they drink by licking or lapping, although their teeth be not sawed. It is reported that the Mice of Ajfick, and especially of Lyiba, die as soon as they drink. And the reason thereof we will afterwards in the taking of Mice, when we come to discourse of their poisons. And for the present it should feem their temperament, or constitution is so moit, that nature can endure no addition. Yet in the plains of Arcadia, there are Mice which drink of a certain Fountain without any harm.

The generation and procreation of Mice, is not only by copulation, but also nature worketh wonderfully in ingendering them by earth and small flowers, as we will shew in the discourse of wide Mice.

But the house Mouse whereof we now treat, is engendered by copulation betwixt male and female, and they are in general most libidinous, as may appear by that saying of Cratinus against Xenophon, flere non ex abitores Kastapisamen muros affropo Xenophontes, go to now, for from the skies I will strike by lightning the Marius wantonness of Xenophon: and the female is much more venerate than the male, as appeared by that fable of Ispiratis describing the rage of a lustful woman. Poetram judici me delectabilis lera, dederant per Dionam, per quiddam, per Periphatastum, fe esse vitalum, esse virginem, effe pulchrum, effe innotian, et ilia myenia erot. Then followed me that detestable band, swearing by Diana, and Periphatastus, that she was a Heifer never touched, a Virgin never dined, and a Celt never covered; but the truth is, she was as good a Maid as a Mouse. Politianus in Read of et ilia myenia erot, hath et ilia carum erot Mortoni, that the she was a Mouses hole, signifying that her virginity was lost, and that she suffered any lovers, as a Mouse-hole doth any Mice. And from hence came that verse of Martial, describing the speech of a lover to his love, calling him her Mouse and her Joy:

Nam cum me Murentus, cum mea lumina dies.

So that in general all Mice, and not only the white Mouse, are most defirous of copulation. And when they are in copulation, they embrace with their tails, filling one another without all delay. By raffing of Salt, they are made very fruitful, and therefore Aristophane, and the Soul-diers of Alexander the Great, do report, that Mice by licking one another, and by the licking of Salt, do indender & conceive with young without any other copulation. But what reasons they have to lead them to that opinion, I know not; but this wonder reported by Pliny and Arisippo, that in a certain part of Persia, a female Mouse being fit for another alive, all the young females within her belly are also found pregnant conceived with young.

It is very certain, that for the time they go with young, and for the number they bring forth, they exceed all other beasts, conceiving every fourteen or sixteen days, so that it hath been found by good experience, that a female Mouse having free liberty to litter in a vessel of millet-feed, within less compas then half a year the hath brought forth one hundred and twenty young ones.

They live very long, if they be not prevented of their natural course, and dying naturally, they perish not at once, but by little, and little, first one member, and then another, (Pliny faith) E volutibus birundineis sunt indiciles, et terrefribus Mures, among the Fowls of the air, the Swallows are undiscourable, and among the creatures of the earth, a Mouse; Albatus writeth, that he saw in upper Germany, a Mouse hold a burning Candle in her feet, at the commandment of her Master all the time his guests were at Supper.

Now the only cause why they grow not tame, is, their natural fear, such as is in Conies, Hares, and Deer. For how can any man or beast love or hearken unto him, who are persuaded lyeth in wait for their life, and such is the perwission of all them that fear; which perwission being once removed by continual familiarly, there is no cause in nature, but that a Mouse may be docile as well as a Hare or Cony, which we have shewed heretofore in their stories.

It is also very certain that Mice which live in a House, if they perceive by the age of it, it is ready to fall down or subject to any other ruin, they foreknow it and depart out of it, as may appear by this notable story which happened in a Town called Helice in Grecia, wherein the Inhabitants committed this abominable act against their neighbours the Greeks. For they slew them, and sacrificed them upon their Altars: Whereupon followed the ruin of the City, which was premonished by this prodigious event. For five days before the destruction thereof, all the Mice, Weasils, and Serpents, and other reptile creatures, went out of the same in the presence of the Inhabitants, every one affembling to his own rank and company, whereat the people wondered much, for they could not conceive any true cause of their departure; and no marvel. For God which had appointed to take
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to take vengeance on them for their wickednes, did not give them so much knowledge, nor make them so wise as the beasts to avoid his judgement, and their own destruction; and therefore mark what followed. For these beasts were no looner out of the City, but suddenly in the night time, came such a lamentable Earth-quake and strong tempest, that all the houses did not only fall down, and not one of them stood upright, to the slaughter of men, women, and children, contained in them; but left any of them should escape the strokes of the timber and gable-rops, God put a flood such a great flood of waters, by reason of the tempestuous wind which drove the waters out of the Sea upon the Town, that swept them all away, leaving no more behinde then naked and bare sig-ification of former buildings. And not only the City and Citizens perished, but also there was ten ships of the Lacedemonians in their port all drowned at that instant.

The wildom of the Mouse appeareth in the preparation of her house; for considering she hath many enemies, and therefore means must be sought from place to place, she committed not her self to one lodging alone, but provideth many holes; so that when she is hunted in one place the may more falsely repose her self in another. Which thing Plautus expresseth in these words; Sedamen cognitus, Mus pullius, quam apies sit festa, atatum qui mai cubilis numquam commitit suam; cum omnem objiceret, atunde perfugium querit; that is to say, it is good to consider the little Moufe, how wise a beast she is, for she will not commit her life to one lodging, but provideth many habres, that being molested in one place the may have another refuge to flee unto.

And as their wildom is admirable in this provision, so also is their love to be commended one to another, for falling into a vessel of water or other deep thing, out of which they cannot afford again of themselves, they help one another, by letting down their tails, and if their tails be too short, then they lengthen them by this means: they take one anothers tail in their mouth, and so hang two or three in length, until the Mouse which was fallen down take hold on the heathermoft, which being performed, they all standed up, and drew her out. Even so Wolves holding one another by their tails, do swim over great Rivers: and thus hath nature granted that to them which is denied to many men, namely, to love, and to be wise together. But concerning their manners, they are evil, apt to theft, invidious, and deceitful; and men also which are of the same disposition with these beasts, learning to do any thing publicly, and yet privately entice many deceits, are justly reproved in imitation of such beasts. For this cause was it forbidden in Gods Law unto the Jews, not only to eat, but also to touch Mouse, and the Prophet Elias. ch. 66. faith, Comedentes earnem suillum, et abominationem, atque maren, fimul conjugantur, inquit Dominus, that is, they eat Swines flesh, abomination, and the Mouse, shall be defroyed together,faith the Lord: wherein the Prophet threateth a curse upon the people, that broke the first Law of God in eating flesh forbidden; and the Physitians also say, that the eating of the flesh of Mice engendereth forgetfulness, abomination, and corruption in the stomach.

The eating of bread or other meat which is bitten by Mice, doth encrease in men and children a certain distempe in their face, and in the flesh, at the roots of the nails of their fingers certain hard bunches, called by the Venetians, Stelli; and by the German, Leidjiffen; and by the Latines, Dentes Maria: yet it is affirmed, that the flesh of Mice is good for Hawks, by giving them every day, for each one other day together with the skin; for it helpeth their intrails, purgeth flesh and choler; restrainseth the fluxions of the belly; driveth our stones and gravel; stayeth the dilatation of the head to the eyes; and finally corroborateth the stomach. Yet we have heard that in the Kingdom of Calcut, they do eat Mice and Fishes roasted in the Sun. And it is said by some Physitians and Magicians, that the flesh is good against melancholy, and the pain of the teeth: but the medicinal vertues we referre it to its proper place.

Pline affirmeth a strange wonder, worthy to be remembred and recorded, that when Hanmbilé besieged Caselum, there was a man that fold a Moufe for two hundred pieces of coin, so great was the extremity of famine, that the man which fold it, dyed for hunger, and as it should seem through the want of it, but he which bought it lived by eating thereof; the which thing argueth, that necessity, hunger, and famine, maketh men for the safegard of life, to make more reckoning in extremity of the basest creatures, then in prosperity they do of the belt. For that person which gave so much money for a Moufe, at another time would have reverence to have given so much for four Oxen.

And on the other side, the wretched love of gain, which causeth a man to endanger his own life for love of silver. But I rather think that it was the hand of God himself taking vengeance of such a covetous disposition, which would not suffer him to live, that like Midas had gotten so much gold.

The enemies of Mice are many, not only men, which by sundry artificial devices kill them, because of harm, but also beasts and wilde fowl do eat their flesh, and live upon them. And first of all Cats and Weefils do principally hunt to catch Mice, and have been therefore by the late Writers called Marius, for their taking of Mice. And the nature of the Weefil is not only more inclined to hunt after them, then the Cat, but is more terrible also unto them; for if the brains of a Weefil, the hair or remet be sprinkled upon Cheefe, or any other meat whereeto Mice refert, they not only forbear to eat thereof, but also to come in that place. They are also driven away by the sprinkling of the ashes of Weefils; and as all noises make them afraid, so none so much as the sketching or crying of a Weefil, for at the hearing thereof they all fall asomnous. And beside, they have more opportunity to follow and take them then Cats, because their bodies are leerrer, and their noises and howers longer, and therefore they follow them many times into their holes, and very
nibly pull them forth when they think they are most secure. Foxes also kill Mice; and in Italy there is a black Snake called Carbonarius, from his colour, resembling coals, which I think to be the same that the Graecians call Mygros, from his hunting of Mice: This Snake doth also eat and devour Mice. Hawks eat Mice, and all the night-birds, especially the night-crows and Owls. How hateful a Mouse is to the Elephant, we have shewed already in that story, how in the presence thereof he will not touch his meat, nor eat any thing over which a Mouse doth run. Nor yet eat in the cratch or manger wherein a Mouse hath been. Postumus affirmeth, that there is great love between Mice and Serpents, for sometimes they play together.

There is a hatred betwixt Bats, Frogs, and Mice, as may appear by Anthologius, Museus, and others. It is said also that they are hateful to Oysters, whereof I know no reason, except it be because they love their fish. And Alciatus hath a pretty embleme, which he entitlèth Captivus ob gulaem, wherein he sheweth, that a Mouse watcheth an Oyster when he gapeth, and seeing it open, thrusteth in his head to eat the fish; affoone as ever the Oyster felt his teeth, presently he closeth his shell again, and so crusheth the Mouses head in pieces, whereby he decipeth the condition of those men which destroy themselves to serve their bellies. And thus much for the love and enmity betwixt Mice and other Beasts.

Now concerning the actions of men, they hunt Mice to be rid from their annoyances, because they do not only destroy the things they eat, and live upon other mens colt; and therefore parasites are compared unto unto them whom the Germans call SCHERMOERZER, and Tellerlecker, that is, small-sea, and lick-spickets, are compared to Mice, because they live at other mens tables. But also Mice do defile and corrupt, and make unprofitable whatsoever they touch; and therefore the Egyptians when they would describe corruption, do picture a Mouse.

For these causes have men invented many devices, snares, and gins, the general whereof is called by the Latins, Musépula: and by the Graecians, Mânpula, and Myggra, the divers and several forms whereof I will not dilate to set down. For the wise Reader must consider, that it is as necessary, or rather more necessary for most men to know how to take Mice, then how to take Elephants.

And although every woman, and sily Rat-catcher can give instruction enough therein, yet their knowledge cannot excuse my negligence, if I should omit the inventions and devices of the Ancients, whereby they delivered themselves from the annoyances of these beasts. And therefore first of all to declare the manner of catching them in places where corn is kept: Let your Mousetrap be placed to catch Mice, right against the door, but let there have room to come in, and in short time it will to fear them, that they will trouble you no more. But if Mice breed in the ground under crevices, except you fill all the crevices with Mousetrap, you will never catch them, which the inhabitants of the illand Pamataria are fain to do.

There are other kinds of Mousetraps which do catch Mice alive: and others which do kill them, either being prised down with the weight of it, or lifted with water, or otherwise, as with a strong piece of Iron being small, and hung right against the button of the trap, on the which piece of Iron they hang meat, and so by that means the Mouse is catched by putting her head through the hole to snatch at the meat; for by lifting the Iron doth loosen the button, and so her head is shut fast in the hole. And there are other kinds of Mousetraps which are covered all over, into the which the Moue may run; and if you have put any water therein they are presently stifled. Of all which kinds of traps shall be severally tractèd: And first of all those which do catch Mice alive.

The common kinds of this Moue-trap is made of wood, long, and four-cornerwise, and is framed of four boards, but the hinder part is strengthened with strong wiers of Iron, that it may without danger look in to see what the mouse may get there; and that the smell of that which the findeth there, may allure her to come to it. And the former part hath a hole in the top, through which there is put a small piece of Iron; and also there is made a trap-door in form of a Peculis, to the which the Iron is very lightly hung, that when the Mouse cometh to catch at the meat, the is suddenly taken by falling of the same; but the meat which you fallen to the nearest end of this Iron hook must be fat, or the crust of cheese or bread; which if it be a little toasted at the fire, it will not be amiss, that the Mouse may smell it far off. Some do make these kinds of traps double, with one door at one end, and another door at another end. These kinds of Moue-traps PETRUS CRESENT. doth call traps belonging to holes, which shall be spoken of hereafter.

The other kind of Moue-trap is made with Iron hooks hung in the round circle; in the midst of which is put a great many of the same wiers, which being made sharp at every end, are after the form of the top of a crest, or helmet, or as it is made in a bow-net to catch fishes; and upon the hook let there be hung meat, by which means the Mouse coming to the meat, foothers herself upon the hooks. The manner of making leffer Moue-traps is with Walnut-tree, and that the middle part of it be not covered, and that there be put to the mouth or brim thereof some kinder of mistle, so that the open part may bend inward, and that the Mouse may not gnaw that which is within, except the crepseth under; which if the shall do, the shall presently be shut in by lifting the trap.

Also there is another kind of Moue-trap which is covered with the bark of a tree, which is cut into equal pieces, and laid cross one over another; but there is tied a Swineskin in the middle, and also an earthen pot covered with the same bark, being first sprinkled with corn, that the Mouse may eat it to come to it, and being dryed with lying, they break in pieces, but you must lay them together.
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together again, and fill your pot with water, by the which means alone as ever they are upon the same, they fall into the pit, and so are lifted.

And alo it is reported of thefe which have tryed the fame, that if Mice fall into a vessel without water, and remain there a long time without meat, that then they devour one another, but if they remain there fo long until one among them all be left alone, that is to say, the strongest of them all, and that he be suffered to go out, wherewith he shall finde any Mice he will eat them up, and they shall have much ado to escape him, because he hath been so long accustomed unto them. I was told alo of a certain friend of mine, that a man of Senenfis did set a purlie in a hollow place, and made it to open and shut by some devise, so that at length he took a Mouse, which Mouse he fed only with the fleethylene, and after he had fed it fo a long time, he let it go, who killed all the Mice he did meet, and was not satisfied with them, but went into every hole that he could finde, and eat them up alo. Alo Mice are taken in vefells, from Creffeufien, whence they cannot escape, upon the which vefell let there be put a small cffe, which is fo cut in the middle, that the may only hold her self by the meat, and when you have fo done, put the kernel of a Nut upon the middle of the cffe, to the which the Mice coming, doth fall into the vefell with the cffe, and they will be lifted if there be any water: but if there be none the will be killed.

And again, he telleth of another manner of catching of Mice, which is as great as the firft, and it is after this manner: Take two smooth boards about the length of thy arm, and in breadth half thy arm, but joyn it fo together, that they may be dilfant from the lower part in length some four fingers or little les, with two small stiples or clefts, which must be at every end one, and fallen Paper under them, and put a piece of paffe therein, being cut overthwart in the middle, but you must not fallen it nigh the middle, and let it be fo bound, that it may easily be lifted up between the stiples, that if by flipping it should be altered, it might be brought again to the fame form. But the two stiples spoken of before, ought to be joyned together in the ends above, and beyond them another small pindle to be made, which may hold in the middle a crooked wedge or botten, upon the which may be hanged a piece of Hogs skin, so that one of them may easilie be turned updidedown with the skin, and put thereunto a little piece of earth or flock, that the Mice may easilie come to it: So that how many Mice ever so shall come thereto, and to the meat, shall be taken, always by rowing the Paper into his wonedt place.

There is another manner alo, which is to make a round piece of wood fastened on both sides with Needles, and made fo that the hinder part of it weigh heavier then the former, and that it stand an inch higher then the other, and then when you have fo placed it, throw some corn thereon, that the Mice may be allurethereto, and tie alo a piece of cffe upon the former end of it; and fo the Mouse going into the middle, by the rowling of the fame, flippeth into the cffe which standeth under it, which must be half full of water, the circle prentient being as it was before, that very often many Mice are caught in one night by this work, all falling into the cffe. Alo there are many kinds of Mouse-traps, where Mice do perih by the weight thereof, and they are made of a small piece of wood made hollow, into the which shall fall down another small piece of wood; but it must be made fo, that it may fall weightily to press down the Mice going to the meat, and let the meat be tied to another little small piece of wood, which being touched, the heavy piece doth presently fall down, and fo by that means the Mouth is taken.

Our Country men do make a trap which is somewhat like to this, let two pieces of boards be joyned together one foot broad, & two four long, and afterwards let there be put in them a wooden pin, which you must fallen to the lower board, so that it may not touch the uppermoft, and you must let it fo, that the former part may easilie move backward and forward; but moreover, the former board must be fastened to the hinder, like the fashioned of a Giber or Gallows, with two pieces of wood standing upright, one being put overthwart, or after the fashioned of the Greek letter ι, and it must stand some nine inches high, and as broad as the board will suffer you, and let the meat be hung in the middle of it, but that board which is uppermoft, must touch both the ends of the other, and notched according to the breadth, the notch made after the form of a wedge divided into two parts; and another small piece of wood must be put to that which is uppermoft, almoft two fingers long, and one finger broad, and let there be put into the lower notch a piece of wood with meat at it, fo that it may be lightly fastened to the brim of the uppermoft, that the meat be presently touched, the other may be easilier fall.

And you may lay a stone upon the uppermoft board, that it may fall the heavier. And there are some alo which to the lower board do fallen iron pins, made very sharp; against the which the Mice are driven by the weight of the fall. Furthermore, there is another kind of trap made to cover them alive, one part of it cut out of a small piece of wood, the length of the palm of thy hand, and the breadth of one finger, and let the other part of it be cut after the form of a wedge: and let this piece of wood be erected like a litte pillar, and let the wedge be put into the notch of another piece of wood, which must be made equal with the other, or very little shorter: and this pillar must be so made, that the Mouse may not perih before he come to the meat: the wood where the meat muft stand, ought to be a span long, and you must fallen the meat about the middle of it, but the former part of it must have a cleft, which must begin a little from the brim, and shall be made almoft the length of two fingers, and you must make it with two straight corners, and take away half the breadth of the wood. These three pieces of wood being thus made ready, thou
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thall ereat a little pillar, so that the wedge may be downward, whereby the Moufe may see the meat every where: and let the meat be hung in the former corner of the pillar, so if the Moufe shall touch the meat, he shall be pressed down with the fall of the board. Mice also by the fall of a cleft board are taken, which is held up with a pillar, and having a little fpatticular of wood, whereon the meat shall lye, so made that the pillar doth not open being parted, except when the Moufe cometh to touch the meat, and so by that means it is taken.

There is also another manner of Moufe-trap used among us, which is, let there be a hole made and compassed about with a board of a foot long, and five or fix fingers broad, the compass whereof of must be four fingers; into this hole let there be put a veffel made of wood the length of one or fift, but round and very deep; and in the middle of each fide of this veffel let there be made a hole, wherein there is put in a thread made of Iron with meat, and let it be compassed about with a finall thread which musl be falfed over and the hole: and the part of the thread which hangs down must be crooked, that the meat may be falled thereto, and there must be a piece of the thread without, to the which may be tied a stronger piece of wood, which is the thread whereon the meat is hanged, by the which the Moufe is taken, by putting her head into the veffel to catch at the meat.

And also Mice are taken otherwife, with a great Cane wherein there is a knot, and in the top of it let there be made a little bow with a Lute string, and there fliek a great needle in the middle of the pole of the Cane, and let the pole be made just in the middle, and let there be bound a piece of flieh beneath, fo prepared, that when the Moufe shall bite, and move the skin, that then the fling flippeth down, and fo the needle pierceth through his head, and holdeth him that he cannot run away. But among all the reft, there is an excellent piece of workmanship to catch Mice; which I will here fer down: Take a piece of wood, the length of both thy fifts, one fift broad, and two fingers thick, and let there be cut off about some two fingers, a little beyond the middle of half the breadth. And that breadth where it was cut, ought to be more declining and lower, after the manner of this letter A. And you might put to the fide of this a piece of wood, half a circle long, bending, and in the middle part of each fide holes pierced through, fo that the half circle may be lipt, and plainly placed to the foundation of the wood, that the trap being made, it may reft upon the fame half circle, and upon this half circle let there be placed Iron nails very fthrap, fo that the instrument by falling down may cover the Irons of the half circle afoon as ever they touch the fame.

Furthermore, there is another manner of trap, when a veffel out of which they cannot ecape, is filled half up with water, and upon the top thereof Oatmeal is put, which will swim, and not sink, making the uppermoft face of the water to seem white, and fold, whereunto when the Moufe cometh, the lepeth into the Oatmeal, and so is drowned: And the like may be done with chaffe mingled with Oatmeal: and this in all traps must be obferved, wherein Mice are taken alive, that they be prefently taken forth, for if they make water in the place, their fellows will for ever fupset the trap, and never come near it, till the favour of the urine be abolition.

Pliny faith, that if a Moufe be gelded alive, and fo let go, the will drive away all the reftinate; but this is to be underfoot of the Sorex. If the head of a Moufe be flead, or if a male Moufe be ffead all over, or her tail cut off; or if her leg be bound to a poft in the houfe, or a bell be hung about her neck, and fo turned going, she will drive away all her fellows. And (Pliny faith) that the fmoke of the leaves of the Ewe tree, becaufe they are a poifion, will kill Mice, fo also will Libbards-bane, and Henbane-feed, and Wolf-bane, for which caufe they are fervially called Mydalia, and the roots of Wolf-bane, are commonly fold in Surrey unto the Country people for that purpofe.

In Germany they mingle it with Oatmeal, and fo lay it in ball to kill Mice. The fume of Wallwort, Calcante, Parfcly, Orignon, and Deaths-herb do also kill Mice: you may also drive them away with the fume of the fone Hamatric, and with green Tamartis, with the hoof of a Mule, or of Nitre, or the afhes of a Weefil, or a Cat in water, or the gulf of an Ox put into bread.

The feed of Cowcumber being fod, and sprinkled upon any thing, Mice will never touch it, likewise wide Cowcumber and Coloquintida, kill Mice. To keep Mice from Corn, make morter of the froth of Oyl mingled together with chaffe, and let them well dry, and afterwards be wrought throughly, then plainfer the walls of your garnery therewith, and when they are dry cast more froth of Oyl upon them, and afterwards carry in your corn, and the Mice will never annoy it.

Wormwood laid among clothes, and skins, defend them from Mice: And also the water of Wormwood fod, sprinkled upon clothes hath the fame operation.

Ink tempered with water, wherein Wormwood hath been washe, or fod, canfeath that the Parchment and Paper written therewith, shall never be eaten, or touched with Mice.

Antolini and Tarentinus, in the difcoufe of the granery or barn, do write, that Milk-thiffe mingled with Hony, Water, and fine Flower, or Mil-duft, made into little balls, and laid where Mice may eat of it, doth make them blind e if they tafi thereof. White Hellebore mixed with potage, or the seeds of wide Cowcumber, Coloquintida, and Meal, mingled with black Hellebore, and put
Of the Mouse.

Put into Cheese or Bread, or any other kind of fat meat, killeth both Rats and Mice. So likewise a white Camelion fod in broth, mingled with water and Oyl, killeth Dogs, Swine and Mice.

The Joyce of the root of the herb Camelion, mixed with Water and Oyl, draweth Mice unto it, and killeth them by tainting thereof, if they drink not presently: so also doth Henbane. The roots of the bramble Tree, mingled with Butter, Bread, or Hony, Elicampane, and Sea Onions, Scammony, wilde Sparagine, Arckeneck, Mug-wort, otherwise called Moule-wort, mingled with Lard in small pieces, with Auripigment, killeth Wolves and Mice; and in some Countries, for the better dispersing of the poiyon, let drink befoide the same, whereof afoon as they take, they swell and die; but I have seen them die without drinking at all. Mice and Wolves, if they taft of the wilde Roife, and drink after it, do not only die, but also fall into madness and bite their fellows, communickating the quality of the disease to every one they bite. Flesh cut into little pieces, and fried with Butter in a fying-pan, and afterwards when it is cold, addhe halfe of much foft pitch thereto, and mingle it together, rowling up the flesh in the Pitch, then distribute it uppon little bords, and let it in the place, and places wherunto the Mice do much refort, and water before it, and when that they have taited of it a little, they are fo eagerly a thirlth, that they drink and die.

The like I may lay of Rats-bane, Quick silver, Sublimate, and Precipitate, and divers other things; and thus much may suffice for the catching, taking, and killing of Mice, whereunto I may add the use of their members and parts, not medicinal, but natural, although I have toucht it here-tofore in part.

The Scythians were wont to clad with the skins of Mice and Wolves, and it is observed, that when Mouse cry and sreeketh above their ordinary custom, it presageth an alteration and change of the weather; and thus much shall suffice for their natural discourse.

Having thus discoursed of the nature of the vulgar Mouse, I may also add the moral use thereof, as I finde it recorded among learned Writers, delivered either in History, or in Proverbs. It is reported of Glaucus the fon of Minos and Peipho, that while he followed a Mouse to take her, he fell into a veffel of Hony; and after Polypes the Prophet, by laying an herb on him, raised him again to life. Hatto an Archbishop of Metz in the frontiers of Germany, was destroyed by Mice, or as other fay by Rats; but the words of Textor are:

Hatto Archiprefcopus Moguntinus a muribus feterus deditur.

And the error may proceed, because that Muis is a general word for the Rat and Mouse; and therefore they which have thought it an unreasonable thing, that fo small beasts should destroy fo mighty a Prince, have rather atributed it to the Rats then to the Mice; but they ought to have remembred, that it was an extraordinary judgement of God to punish a cruel covetous wretch, and that therefore it was as easie for him to make the little Mouse his instrument, as the great Rax: for we read, that Herod was devoured by Worms; and other have been eaten up with Lice. Adrian the Pope was strangled by a Fly; and therefore Hatto an Archbishop might aifwell perifh through the affliction hand of God by a multitude of Mice.

Hellogabalis that wretch, amongst other his monstrous deformities, and Tyrannical commands, Lampridius affurment, that upon a time he commanded, that there should be brought unto him thirteen thousand Mice alive, a thousand Weefils, and a thousand Scourer, or wilde Field-mice, fo base were his thoughts, that while he should have attended his Empirical calling, and heartened to the suits and complaints of poor distressfed subjects, he was busied in killing of Mice, and therefore in ancient time, a Mouife-killer was taken for an opprobrious speech, for a base, flagitious, and idle companion.

The like is reported of a Mufcovian Emperour, who to affilice his people, and to gather mony from them, commanded the Citizens of Mufco, to bring him a peck full of Fleas, wherunto the people answered, that if they could take fo many, yet could not they keep them together from leaping away. And Mice have been brought into publick peftacles, because at Lavinium they gnawed afunder the shieldes of silver; and it was afterward judged a prodigy; for there followed the Marfick war. When the Scythians underflood that Darius with his great Army, flood in need of victuals, they sent unto him a Provanc-mafter with these prefents or gifts, a Bird, a Mouse, a Frog, and five darts. At the receit whereof the Persians wondered what should be meant thereby; and demanded of the messenger the meaning of the mystery. But the Ambaffador answered, he knew not any significacion of his prefents, but only received charge to deliver them, and make halfe back again, and to bid the Persians, if they were wife, to lay their wits together, to know and understand the meaning thereof. When the Persians heard him say fo, they fell to consultation. Darius gave his opinion, that the Mouse, signified the earth; the Frog, the waters; the Bird, Horfes; and the Darts, warlike furniture and strength of forces; and that the Scythians by fending all these unto them, yeelded that the Persians should be Lords of their Land, Sea, Horfes, and themselves, and that therefore they ought to be of good courage.

But one Gobrias, a grave Counfellor, who was one of the seven that flew the Magi, or Wizards, answered otherwise, for his conjecture was more true: for said he; O Perfe, nisi effe ef fatis oves subver- voles in Calum, aut in Muris subvera terram, aut in rana infiltratis in palude, non remeobitis unde venisit his sagitis confell: O ye Persians, except ye become like Birds, to flye up into heaven; or like Mice, to creep into the earth; or like Frogs, to leap into the waters, you shall not return.
back again unto the place from whence you came, and so indeed it came to pafs. We read 1 Sam. 5, that when the Ark of God was taken by the Philistines, and they kept it in their Temple at Haz-zaah, the hand of the Lord fell upon their Princes, and he smote them with Emroids, in the bottom of their belly, that is, God punished them with Mice, for he afflicted their bodies, and the fruits of the earth, for which cause cap. 6 they advice with themselves, to send back again the Ark of the Lord with a present of Golden Mice. Ovid, Homer, and Orpheus, call Apollo Smythrus, for the Cretans in ancient time called Mice Smythre: Now the flagged caufe thereof is thus related by Aelian:

There was one Critis, which was a Priest of Apollo; who neglected his daily sacrifice, for the which through abundance of Mice he was deprived of the fruits of the earth, for they devoured all. At which losd Apollo himself was moved; and taking pity of the misery, appeared to one Hordas a Next-heard, commanding him to tell Critis, that all the caufe of that penury was, for that he had omitted his accustomed sacrifice, and that it was his duty to offer them again diligently, or else it would be far worse afterward. Critis upon the admonition amended the fault, and immediately Apollo killed all the devouring Mice with his darts, whereupon he was called Smythrus. Others again say, that among the Cretans, at Troas and Hamaxius, they worshipped Mice and Apollo both together, and that under his Altar they had meat and nourishment, and also holes to live in safely: and the reason was; because once many thousand of Mice invaded the corn fields of Aolia and Troy, cutting down the fame before it was ripe, and also frusta
ing the husbandman of fruit and hope: this evil caused them to go to Delphi, to ask counsel at the Oracle, what they should do to be delivered from that extremity; where the Oracle gave answer that they should go sacrifice to Apollo Smythrus; and afterward they had sacrificed, they were deliv ered from the Mice, and that therefore they placed a statue or figure of a Mouse in the Temple of Apollo.

When the Trojans came out of Cret, to seek a habitation for themselves, they received an Oracle, that they should there dwell, where the Inhabitants that were born of the earth should set up on them; the accomplishing whereof fell out about Hamaxius: for in the night time a great company of wild Mice set upon their bow's, quivers, and strings, leathers of their bucklers, and all such soft instruments, whereby the people knew, that that was the place, wherein the Oracle had assigned them to build the City; and therefore there they builded Ida, fo called after the name of Ida in Cret: and to conclude, we do read that Mice have been sacrificed, for the Arcadians are said first of all to have sacrificed to their Gods a Mouse; and secondly a white Horse; and laftly the leaves of an Oak.

And to conclude, Aelianus telleth one strange story of Mice in Herocles, that there is not one of them which toucheth any thing that is consecrated to Religion, or to the service of their Gods. Inso
much, that they touch not their Vines which are sacred to religious ues, but suffer them to come to their natural maturity, but depart out of the Island, to the intent that neither hunger nor folly cause them to touch that which is dedicated to divine ues. And thus much for the natural and moral hory of Mice; now followeth the medicinal.

The Medicines of the Mouse.

The flesh of a Mouse is hot and soft, and very little or nothing fat, and doth expel black and melancholy choler. A Mouse being flayed or having his skin pulled off, and afterwards cut through the middle, and put unto a wound or fore wherein there is the head of a Dart or Arrow, or any other thing whatsoever within the wound, will presently and very eafily exhale and draw them out of the fame. Mice being cut and placed unto wounds which have been bitten by Serpents, or put to places which are flung by them, do very effectually, and in short Space of time cure and perfectly heal them. Mice which do lurk and inhabit in Houses, being cut in twain, and put unto the wounds which are new made by Scorpions, doth very speedily heal them.

A young Moufe being mangled with Salt is an excellent remedy against the biting of the Moufe called a Shrew, which biting Horses and labouring Cartel, it doth venen unto it come unto the heart, and then they die, except the aforefaid remedy be used. The Shrew also himself being bruised and laid unto the place which was bitten, is an excellent and very profitable remedy against the same.

A Mouse being divided and put or laid upon Warts, will heal them and quite abolish them, of what kind soever they shall be. The fat which is diffiluted from Mice, being mixed with a little Goose-grease and boyled together, is an excellent and medicinable cure for the auffaging and mollifying of swellings and hard lumps or knots which do usually arise in the flesh. Young Mice being broken into small bits or pieces, and mixed with old Wine, and so boyled or baked, until they come unto a temperate and mollifying medicine; if it be anointed upon the eye- lids, it will very easily procure hair to grow thereon: the fame being unbeaten and roastd, and so given to little children to eat, will quickly dry up the frouth or spittle which aboundeth in their mouth. There are certain of the wife men or Magi, who think it good that a Mousf should be fed, and given to thofe which are troubled with the Tooth-ach, twice in a month to be eaten. The water where in a Mousf hath been fed or boyled, is very wholesome and profitable for thofe to drink who are troubled with the inflammation of the jaws or the disease called the Squinty. Mice, but
but especially those of Africa, having their skin pull'd off, and well steeped in Oyl, and rubbed with Salt, and so boiled, and afterwards taken in drink, are very medicinable for those which have any pain or trouble in their limbs and lungs. The same medicine used in the aforesaid manner is very profitable for those which are troubled with a filthy, matterly, and bloody spitting out with retching.

Sodon Mice are exceeding good to refrain and hold in the urine of Infants or children being too abundant, if they be given in some pleasant or delightfulsome drink. Mice also being cut in twain, and laid unto the feet or legs of those which are gowy and an excellent remedy and cure for them. Mice being dryed and beaten to powder, do very effectually heal and cure those which are felled or burned with hot water, or fire. Cupres nuts being burned and pounded, or beaten into dust, and mixed with the dust of the hoof of a male or female Moule, being dryed or flanked small, and the Oyl of Myrtle added unto the fame, with the dirt or dung of Mice being also beaten: and with the dung of a Hedge-hog new made, and with red Arfienick: and all mingled together with Vinegar, and molift or liquid Pitch, and put unto the head of any one who is troubled with the abundance and loose hanging down or over-growing of his hair, it will very speedily and without any difficulty ease him of the same.

The dust of a Moule pounded and beaten to powder, and mingled with a certain Oyl, is very good and wholesome, for those which are griev'd with a Tetter, or scab, which may over-run their whole body. The brains or tail of a Moule being dryed and beaten to powder, is very medicinable for those which are troubled with the caiting and shedding of their hair; as also for the diseafes called the Foxes evil: but this operation will work more effectually, if the shedding of the hair doth happen by any venom or poyfon. The fame in operation hath the whole body of the Moule being used in the aforesaid manner.

There is also another excellent remedy to cure and heal the aforesaid diseafe, which is this: To Galle, take Mice which inhabit in houses, and to burn or dry them in a pot, and then beat them; and being so used, to mix them with Oyl of Laurel, and to rub the hairs which are like to fall or fheid with Garlick: and to put them all together into a Frontier or fore-head cloth, and daily to keep the fame medicine or plaster unto them, until the hair do grow faft, and they be rid of that diseafe. There is also another remedy for the fame diseafe, which is this: To burn Moule, and beat him into powder, and then to mingle the same with Hony, and the greef of a Bear, and so to anoint the head, and this is accounted for a very speedy and effectual cure.

The dust or powder of Mice being mixed with Hony and Oyl of Roses, and so baked, or boiled Pliny, together, and afterward diffilled into a clear water, and so poured into the ears of any one which is deaf, or troubled with any pain in his ears, and it will quickly bring him help and remedy. The dust of a dryed Moule being also mingled with Hony, and rubbed upon the teeth of any one which is troubled with a flinking breath, will preffently take away the favour thereof. If the urine of a man or woman be too fluent and abundant, let them take the dust or powder of a dryed Moule, being beaten and flanked, and mix it with Wine or with Goats milk, and so drink it up, and he shall speedily have remedy. The grievous and violent inflammation or turning of the eye-lids, is cured after this manner: First, they take the flesh of the Moule, as afore as ever it be beaten small, and mingle it with the yolk of an Egg, and mollifie it into a falfre or plaster like unto wax, and then put it into a linnen cloth, and so wrap it upon the eye-lids in the time of sleep, and it will easilie bring help and remedy. There is an excellent remedy for the over-spreading of the eyes, or to cure the diseafe in them, called the Pin and the Web, or to help them which are altogether blinde which is this: To take the bload of a Moule, the gall of a Cock, and some part or quantity of womans milk, and to take of each of them alike, and then to mingle or mix them together, and being well wrought or kneaded until it come to an ointment, to rub or spread it upon the eyes: and this will in very short space help them unto their fight: for it hath been tried, and hath help'd many.

The skin of a Moule being burned or dryed, and beaten into powder, and so mingled with Vinegar, and then anointed upon the head of any one who is pain'd or troubled with the Head-ach, it will preffently ease and help him. The head of a Moule being also born or carried in a linnen cloth, doth cure the fame diseafe. The heads of Mice being burned, and beaten into small powder, and then mixed or mingled with Hony, and so anointed upon the legs or feet of them which are troubled with the Gout, are excellent good and wholesome for the curing of that grievous diseafe. The same vertue hath the tails or bodies of Mice, being used in the aforesaid manner in them. Some do think, that the aforesaid diseafe is more speedily and effectually cured after this manner: First, to take a Beetle or Horf-fly, and flamp it all to pieces, and then to mingle it with foift and liquid Pitch, the skin being prepared or made ready with Nitre: but there must be great care taken, that it eat not too far in the flesh: then to take the head of a Moule, and the gall and dung of a Moule, and mingle them together with Ling-wort and Pepper, and so to anoint them, and spread them upon the aforesaid eaten or lanced wounds: and this is very much commend'd for a very good and medicinable cure for the aforesaid diseafe.

The heads of Mice dryed and beaten into powder or dust, and then mixed with Hony, and so anointed upon the eyes for the space of ten days together, will carifie the eyes, and expel all pain or blemishes from them. Of the heads of Mice being burned, is made that excellent powder, for the frowning and cleansing of the teeth called Tooth-soap: unto which if Spikenard be added...
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added or mingled, it will take away any filthy fent or strong favour in the mouth. The brains of a Moufe being taken and put or steeped in Wine, and stamped, and beaten small, and anointed upon the brow or fore-head of any one who is troubled with a pain or ache in the head, and he shall soon find ease and remedy. If any man shall but touch or kiss with his mouth the snout or nostrils of a Moufe, and be troubled with the diseafe called the Rhume, which falleth down and fluffeth the nostrils, he shall in very short fpace be eafed of the fame. The Magi or wife men do very much commend this medicine for the expelling of a quarrant Ague or Fever, which is thus; To take the nofe or snout of a Moufe, as also the very tops of the ears, and bruife them together, and afterward tie them in a linen cloth, which hath had Roses or Rofe-leaves in the fame, and then bind them unto the arms or wrists of him which is troubled, and they will very effectually and speedily cure and heal him. For the rottennefs and demifining of the teeth, the belt remedy is to take a living Moufe, and to take out one of her teeth, whether the greatest or the leaft it is no great matter, and hang it by the teeth of the party grieved: but firft kill the Moufe from whom you had the tooth, and he shall prcfently have eafe and help of his pain. The heart of a living Moufe being taken out, and hanged upon the left arm of any woman, is of fuch force and power, as it will caufe her never to conceive. The lapes or fillets of the liver of a Moufe, being beaten small and mingled with four drams of fowre and unpleafant Wine, is an excellent remedy for thofe which are troubled with quakings in their joints; as also for Fevers and shaking Agues. A Moufe being cut or parted in the conjunction of the Sun and the Moon, and the liver pulled out and roasted or boiled, and given to one which is troubled with the aforesaid difeafe to eat, will very speedily and without any difficulty or pain cure and heal him of the fame. The gall of a Moufe being beaten very small, and steeped or washed in Vinegar, and fo poured or diffufed into the ears of any one who is deaf or thick of hearing, or hath any ache or pain in the fame, is counted for the chiefeft, and most singular and chiefeft remedy or cure which is used for the fame.

The dung or dirt of a Moufe being new made, is very profitable for thofe which are troubled with the diseafe called the Scuticaf, or Hip-gout, anointed or rubbed upon the fame. Moufe-dung being also mingled with Vinegar and Oyf or Roles, and fo anointed or spread upon the fore-head or temples of any one who is troubled with the head-ach, will prcfently eafe and help him of the fame. The gum called Benzoin being mixed with Wine and Safron, and Pepper; as also with the dirt or dung of Mice being new made, and mixed with Vinegar, and mingled all in one medicine, and fo strained and given to one to drink, which is spare and lean, in some short fpace or time it will make him grow very fat.

The dung or dirt of a Moufe being mingled with certain other medicines, is very good and wholesome for thofe which are troubled with Tetterts, and dry feabs which over-run the whole Body.

The dung of Mice being mingled with the dust or powder of Frankincenfe, with a little red Arfencick added thereunto, is a very profitable and wholesome medicine for thofe to use which are troubled with little hard red bitches and fwellings arifing in divers and feparate parts of the body. Seven pills being taken out of the dung of a Moufe, and mingled with Vinegar, and anointed upon the fore-head and temples, of thofe which are grieved therein, will very speedily help and cure him.

The inward parts of earth mixed with Moufe-dung, white Pepper, and Myrthe, being of each of them half an ounce, and afterwards mingled with Vinegar all together; and fo anointed upon the head of any one which is troubled with the Megrim, will very effectually and speedily eafe and rid him of the fame. The herb called Struma beaten together with Moufe-dung, and afterwards mixed with Vinegar, is an excellent remedy againft the fwellings in the head, or little bitches which arifing therein become fores, and are full of matter and filthy corruption. The dung or dirt of Mice being melted, difolved, and mingled with Vinegar, and then rubbed upon the head of any one who is troubled with the fcurf or skaules thereon in a bath or stove, will prcfently expel and drive them quite away.

The dung of Mice being mingled with Frankincenfe, and fo beaten or tempered together until they come unto the likenefs or thickness of Honys, and then anointed upon the legs or feet of any one that is troubled with the Gout, he shall finde prefent help and remedy. The fame difeafe also is very effectually cured by the dung of a Moufe, and burned or scorched Barley mingled together, of each being the fame weight or quantity, and afterwards mixed with Vinegar all together, and fo spread or anointed upon the difeafe parts. There is also another excellent remedy for curing of the aforesaid difeafe, which is thus: To take Cantharides, and bruife them all to pieces, and mingle them with fof or liquid Pitch, and alo with Nitre, and fo anoint or rub them upon the skin being prepared for the purpose; but there must be great care had, that the skin be not rubbed or lanced too far. Afterward unto the wound fo made, there must be taken the heads, galls, and dung of Mice, being mixed with the herb Lingwort, and Pepper; and fo beaten all together until they come unto a temperate falt or medicine, and then anointed upon the said wounds, and they will in very short fpace cure the fame.

The hairs and dung of a Moufe, parched or dryed by the fire, and anointed upon the eye-lids of any one which are pidd or bare, will prcfently procure hair to grow thereon.

Moufe-dung being dryed in the shade is an excellent remedy againft the voiding or spitting of blood which floweth from some parts of the body, but especially from the belly. The
fame is also very good to staunch the bloud which iffeth from wounds being new made. White Sceny-feed, and the dung of a Moufe or Hare being put into broth, with the flim or flalk of Fennel, and fo boiled together, and afterwards given unto a woman who is delitute of milk in her breasts, will prefently and very speedily procure her milk in great abundance.

The dung of Mice being steeped or washed in rain water, doth eafe and refresh the swelling of womens dugs in their time of delivery. The dung of a Moufe being given in any drink or liquor to one that is troubled with the difeafe called the Colick and Stone to drink, will in very short space or time cure him of the fame. Moufe-dung being also taken in drink, doth baffle the body of either man or woman, how fast ever they be bound. There is an excellent remedy standing, from Moufe-dung against the Scelica, or Hip-glow, which is this: To take nine grains of a Moufs dung mixed or mingled with half a pinte of Wine, and given to the party grieved upon a bench or foot-broth to drink, fo that he drink it standing upon that foot only which paineth him, even at the Sun-rising; and having so drunk it, let him leap down, and afterwards let him leap three times, and let him do this but three days together, and he shall prefent help and remedy of his difeafe.

Moufe-dung mixed with Frankincence and sweet Wine, and fo drunk by any one which is troubled with the Colick and Stone, will prefently eafe him of the fame. But the dung of Mice mingled with Water, and Hony, and so boiled together, and drunk, doth not only drive away the pain of the aforefaid difeafe, but also doth break and quite diffolve the Stone. Moufe-dung also being taken in drink by it self alone, doth dissolve and melt the Stone in the Bladder. The fame being also boiled in water, is very good and profitable for thofe which cannot make water. The fame being new made and anointed upon the belly of any one who is troubled with the Colick or Stone, shall finde prefent eafe and remedy thereby.

There is yet moreover another excellent medicine proceeding from this dung, whereby the fruit in a womans womb may be brought forth either dead or putrified, without any hurt or prejudice unto the woman, which is thus; First to take Egyptian Salt, Moufe-dung, and Gourds which are fowen in Woods; and afterwards to pour in half a pinte of Hony, being half boiled, and to cast one dram of Rozen into the Hony, the Gourds, and the Moufe-dung, and beat them well and thoroughly together, and then rowl them up, and fashion them in the manner of Acorns, and put them to the belly of the party fo grieved as often as you shall think it meet and convenient, and in using this some short space or time, you shall fee the aforefaid putrified fruit to proceed and issue forth.

Moufe-dung being parched or burned, and mingled with Hony, is very good and medicinable aswell for thofe which are troubled with the swellings in their legs and feet; as also for thofe whose eye-lids are pilled and bald, to make hair to grow again upon them, being spread or anointed thereupon. The dung of Mice being dryed and beaten into small dust or powder, and put into the teeth of any one which are hollow, will prefently expel away all pain from them, and also confirm and make the teeth strong. The dust or powder which proceedeth from Moufe-dung, is also very good to cure any difeafe in the fundament of either man or woman.

The urine of a Moufe is of fuch strong force, that if it thall but touch any part of a mans body, it will eat unto the very bones. The bitings of Mice are healed by no other means but by green Figs and Garlick being mixed or mingled together, and fo anointed thereupon.

Of the RAT.

Here is no doubt that this Beall belongeth alfo to the rank of Mice, and the name thereof we have thewed already, is common both to the French, Spanish, Italian, and English, and it may seem to be derived from the Greek word Rattis, orHenex, or Ritas, for the Graecians use all those words. And this beall is four times fo big as the common Moufe, being of a blackish dusky colour, more white on the belly, having a long head, not much unlike the head of the Martin; short and round ears, a reafonable rough skin, short legs, and long claws, and exceeding great eyes, such as can see very perfectly in the dark night, and more perfectly than by candle light; with their nails they clime up steep and hard walls, their tails is very long, and almoft naked, void of hair, by reafon whereof it is not unworthily called venous; for it seemeth to partake with the nature of Serpents. The quantity of their body is much like a Weefils; and sometimes you shall fee a Rat exceeding the common stature, which the Germans call Ratzen Ku nig, the King of Rats, because of his larger and greater body; and they say that the jeffer bring him meat, and he yeeth idle. But my opinion is, that as we read of the Dor-moufe, the nouritheth her parent when she is old; so likewise the younger Rats bring food unto the elder, because through their age, they are not able to hunt for themselves, and are also grown to a great and unweedy stature of body. Sometimes you shall see white Rats, as was once seen in Germany, taken in the middle of April; having very red eyes standing forth of their head, and a rough and long beard. And at Aussieg in Germany, about the Temple called the Church of S. Huldrid, they abound in greater number then in other places. They do not lie in the earth like Mice, except in the vally of Iseubim, where for the Summer time they forfake houfes, and go into Coby holes, but

Sererer, Marcellus, Avice, Piny, Hipocrotat.
but in the Winter time they return to the houses again. They are more noylyme then the little Moufe, for they live by fleath, and feed upon the fame meat that they feed upon, and therefore as they exceed in quantity, so they devour more, and do far more harm. They are killed by the fame poyfons and means that the common Mice are killed, except Wolf-bane; for if they eat thereof, they vomit it up again, and are fafe. They are also taken in the fame traps, but three or four times fo big: Their fleath is far more hot and sharp then the fleath of the vulgar Moufe, as we have gathered by the defcription of it, and therefore in operation it is very like that it expelleth and dryeth more then the other.

The excrements are also of the fame vertue; and with the dung of Rats the Phyfitians cure the falling off the hair. And it is saide also that when they rage in luft, and follow their copulation, they are more venemous and dangerous then at other times. For if the urine do fall upon the bare place of a man, it maketh the fleath rot unto the bones, neither will it suffer any scar to be made upon the ulcer; and thus much of the vulgar Rat.

Of the Water-Rat.

Names of Water-rats.

Seeing there are two kindes of Rats, one of the earth called Rattus terrestris, and the other of the water called Rattus Pluviatilis, of which we are now to entreat, being also called of the Laiters, Mus aquaticus; by the Germans, Taffermannus, and Waferrat; by the Italians, Sorgomogange; by the French, Rat d'eau. This beast hunteth fishes in the Winter, and have certain caves in the water sides, and banks of the Rivers or Ponds: For which occa- sion it being feen in the waters, deceiveth their expectation which look for the return of it to the land. And this beast hath been forgotten by the Ancients, for they have left of it no description nor story, because it liveth partly in the water, and partly on the land, and therefore he fayd true, that Ephe of the habitation and place of abode of this beast, in this fort; Ego non in flavis, nec alis aquis magnis, sed parvis tantaq vivis etq terribus omnium ripis, hoc anim- nat frequentat num verfari audito. That is to fay; That this beast doth not keep in great Waters or Rivers, but in small and little currents and Ponds, where abundance of grafs and other weeds do grow on the sides and banks; Pliny attributeth that to the Water-rat, which is proper to the Tortoife; for indeed there is some similitude of natures bewixt these beasts, with this exception, that the females in this kind have three visible passagges, for their excrements, one for their urine, another.
Of the Alpine Mous.

The Alpine Mous taketh her name from the Alps, wherethin she is bred, and although there be many other kinde of Mice bred in the Alps, yet this being the principal thereof, receiveth denomination from the Mountains, because she is bred in the very tops of the Mountains, and seldom or never come down to the roots. The Italians call it Marmotta, and Marmint, and according to Mathurin, Marmontula; the Hebrews, Marmotta, and in some part of Italy, Vassoia; in France, Marmotte; although Marmot be also a word among them for a Monkey. The Germans, and especially the Helvetians, by a corrupt word drawn from a Mouse of the Mountain, Marmelthier, and Marmelle, and some Frisbeiler, by reason of his sharp whining voyce like a little Dog. In Latin it is called aliis Emitteres, which leemeth to be composed of Emuler, and this is the least kinde of Alpine Mice, which is found in all the German Regions; of which we will speake in the end of this story. Some take this to be called Taurus, amongst whom Brasseninus is one, yet it hath no property with the Alpine Mouse, except lying in a Cave; for it doth not sleep in the Winter, nor hath no outward resemblance with Mice, neither can have any affinity in disposition or manner of living, and therefore I cannot afford theteto, Grapalus & Alnus, both learned Italians, say, that the Armitians are called Alpine Mice, whereunto they are led, because they sleep all the Winter long, like the Alpine Mous; but we shall shew in their due place, that these belong to the Weeds, and not to the Mice, which living in cold Countries, grow white in the Winter time: the Hebrew word is Saphan, according to some Authors, and is translated Achtemuin, but we will shew in due place, that the Arkemyn is the Cycetus, or Gryet Moufe, and the Saphan we have shewed already to be the Cony.

These Alpine Mice are in the tops of the Alpina hills, and none of the Ancients except Pliny make mention thereof, and it is doubted whether he doth describe it or no. For his words are, Sunt his Marmibus Alpina pares & in Egypto, similisres in cubibus & hinis pedibus gradantur, simpliciter ut manus utatur, that is to say, there are Mice in Egypt like to the Alpine Mice; for they fit upon their buttocks, and go with their fore-molt two feet, which also they use instead of hands, by which we collect, that they are not the same, but like the Alpine Mice.

The Alpine Mous is in quantity like a Hare, or at the least betwixt a Hare and a Cony, being more fat, and of a thicker body than a Cat, but shorter legs, in outward appearance more mild like Mause, and therefore it is called an Alpine Moule. The back of it is very broad, and the hair harder and sharper than a Comes. The colour for the most part is yellow, which in some is more clear, and in others more obscure and brown. Their eyes of a reasonable quantity, standing far out of their heads. Their ears very short like crooke ears. The head like a Hares, and their feet with long nails; his fore-teeth like a Squirrels, two above, and two beneath, but long and sharp like a Beavers, in colour yellow; about the nose and upper lips he hath long black bristle hairs like a Cat. The tail is half a cubit long, according to Stumpfius, but two palms according to Agricola. His legs very short and thick, covered with long deep thick hair, like to the bottom of his belly. The toes of his feet are like a Bears, and his claws long and black, wherewithall he diggeth the earth to make his den; he goeth upon his hinder-feet like a Bear, or like an Ape, by jumps, and with his fore-feet he taketh his meat like a Squirrel and an Ape, fitting in the mean time upon his buttocks. His back is also very fat, although all the other parts of his body be lean, and yet that on his back cannot be said to be fat, but rather like a Cows udder, neither fat nor fleith, and they encrease or grow more in breadth then in length.

Secker describeth them in this manner, a Marmot (faith he, for so he termeth an Alpine Moule) The description in French is a Bear about the bigness of a Badger, having hair and tail much like it, and after the
The History of Four-footed Beasts.

the same manner short legs, and little or no ears, long, sharp, firm, crooked, strong and black claws, which is numbred amongst the kindes of Mice, with whom it holdeth little correspondence, except that like a Squirrel it taketh his meat in the fore-feet as with hands, and eateth fitting upon his tail. They agree also with the Dog-mouse in their sleep, for they pass over Winter sleeping. Their teeth are like to the teeth of Hares and Mice; after that they are made tame, they are not hurtful to men or children, except they be provoked. Being kept in houses, they will eat and gnaw all linen and woollen cloth; thus far Scaliger. But we have shewed already, that the outward appearance of it is like a Mouse, and that therefore it is fitter to follow Pliny, Albertus, Mathæus, Stumpfius, and others, then his sole and singular opinion; they keep as we have laid already, in the tops of the Mountains, wherein they make their cave with wonderful art and circumpection, making two different passages into their Den, one above another a poles length, which meet in the middle like a fork, or the conjunction of two Rivers or Path-ways, making the seat of their rest to be very deep in the Mountain, and therein they remain five, seven, nine, or eleven of them together.

They play many times before the mouth of their Den together, and in their sport or pastime, bark like little Dogs. When they go out of their cave into the Mountains to gather food, or to play, or to fetch in grafts; always one of them remaineth like a Watchman near the mouth of the cave upon some high place, looking moit diligently and vigilantly, both far and near; and if he see either a man or wilde beast coming towards them, then he suddenly cryeth out, and with his voyce giveth the warning word, whining like the whistling of a pipe, if his fellows be far off; or else barking like a Dog, if they be near at hand. When the residue hear it, they presently repair home, and he which kept the watch, entereth into the Den laft of all. And it is reported by a certain Greek Writer, that if their speculator do not give them the watch-word, but that they are endanger'd by any man or beast through his negligence, they tear him in pieces with their teeth. There is no beast so strong as this, considering the quantity; for it hath been seen, that when a lufty young man took one of them by the hinder-leg,...
Of the Alpine Mouse.

As it ran into the Den, he could not with all his might pluck it back again. The claws of it are exceeding sharp, and fit to dig; so that it is thought if a man finde them in the earth, and seek to take them by digging unto them, he shall labour in vain, because the Beast diggeth fatter from him then he can follow her; they cannot run very fast in the plain ground, but are easily killed by a man, except they get into the earth: with their teeth they bite deep, for they can shear alender wood with them like Beavers, they eat or live upon fruits, and especially being tamed when they are young; they refuse not bread, flesh, fish, or poogage, and above all they desire milk, butter, and cheese; for in the Alps they will break into the little Cottages where milk is kept, and are oftentimes taken in the manner fucking up the milk, for they make a noise in fucking of milk like the pig. In the month of May they are much delighted to eat Hornets, or Horde-flies, also they feed upon wile Sagepan of the meddow, and seeded Cabbage, and while they are wilde in the Mountains, they never drink; the reason is, as I suppose, because in the Summer time they eat mostly green herbs, and in all the Winter time they sleep.

Towards the feast of Saint Michael, the Archangel, and of Gospul, they enter into their Caves; and as Play faith, they first of all carry provision of Hay, and green Herbs into their Den to rell upon, wherein their wit and understanding is to be admired; for like Beavers one of them falleth on the back, and the residue load his belly with the carriage, and when they have laid upon him sufficient, he geteth it fast by taking his tail in his mouth, and lo the residue draw him to the Cave; but I cannot affirm certainly, whether this be a truth or a falsehood. For there is no reason that leadeth the Author thereunto, but that some of them have been found beld on the back. But this is certain, when the Snow begins to cover the Mountains, then do they enter into their Dens, and shut up close the passages, with ficks, graves, and earth, both so hard and so thick, that it is easier to break the solid ground, then the mouths of their Caves, and so being safely included both from the fear of the Hunters, from snow, snow, and cold, there live they until the Spring, without all manner of meat and drink, gathered round together like a Hedgehog, sleeping continually; and thereby the people inhabiting the Alps have a common proverbe, to express a drofllie and sleepy fellow in the German tongue thus: Er mufje zuwege geblaffen haben wie ein muscheltier in Latinu, Accefe babet certum, dormiendo, tempesti conjurare, infkr muria Alpini. He must needs sleep a little, like the Moule of the Alps. They sleep also when they are tamed, but it hath been found by experience, that when a tame one hath been taken a sleep, and laid in a warm barrel upon Hay, the mouth being shut and cloed to keep out rain and snow, at the opening thereof it was found dead; and the reason was, because it lacked breath, and therefore this is most wonderful, that in the Mountains, notwithstanding the close breathing of the mouth of their Caves, yet they should not be deprived of refrigeration, that is, freth air, for expiration, and respiration.

But this is to be considered, that after they have been long tamed, they sleep not so much as when they are wilde; for I think that their continual eating of raw and green herbes, ingendereth in them to many humors as cannot be dispersd without a long continuing sleep; but afterwards when they are diered with such meat as is provided for the nourishment of man, they are caded of the cause, and to the effect ceaseth. During the time that they sleep, they grow very fat, and they are not awakened very easily, except with the heat of the Sun or fire, or a Hot-house. Now the manner of their taking while they are wilde, is thus:

In the Summer time when they go in and out of their Caves, they are taken with snakes set at the mouth thereof; but in the Winter time, when they go not abroad, there also are Inhabitants forced to another device, for then in the Summer time, they set up certain pillars or perches near the mouth of their Den, whereby they may be directed, when the snow doth cover the Mountains. For the pillars or poles stand up above the snow, although the snow be very deep. Then come the Inhabitants upon round pieces of wood in the midst of the Winter, fastned to their shooe-foles over the deep snow with their pyrones and diggers, and carry away the snow from the den, and fo dig up the earth, and not only take the beasts, but carry them away sleeping, and while they dig, they diligently observe the frame and manner of the blossing of the Moues den. For if it be long and deep, if is a sign of a long and a hard Winter, but if they be shallow and thin, of the contrary: so coming upon them as we have said, they take them and carry them away asleep, finding always an odd number among them; and they diligently observe, that whilst they dig, there be no great noise, or that they bring not their fire too near them. For as Stumpyus faith, Esperrelli enim capi non passiunt, non sumant; lorem sicut venatum, ipsa solutum solumiter et retrocedunt et pedibus quum effodientes, terram recipiendo fessero impedit. That is to say, If they be once awakened, they cannot be taken, for howsoever the Hunter dig never so manfully, yet they together with him, dig inward into the Mountains, and call the earth backward with their feet to hinder his work.

Being taken as we have said, they grow very tame, and especially in the presence of their keepers, before whom they will play and sport, and take lie out of their heads with their fore-feets like an Ape. Infomuch as there is no beast that was ever wilde in this part of the world, that becometh so tame and familiar to man as they; yet do they always live in the hatred of Dogs and oftentimes bite them deepily, having them at any advantage, especially in the presence of men, where the Dogs dare not resist or defend themselves. When they are wilde, they are also killed alive, by putting of a knife into their throat, whereas their fore-feets fir a little, but they die before they can be awaked.
Their blood is laved in a vessel, and afterwards the Mouse it self is dressed in hot scalding water, like a Pig, and the hair thereof plucked off, and then do they appear bald and white; next to that, they bowl them, and take out their intestines: afterwards put in the blood again into their bellies, and so feethe them, or else salt them, and hang them up in smoke, and being dressed after they are dryed, they are commonly eaten in the Alpine Regions with Rapes and Cabbage, and their flesh is very fat, not a fluxible or loose fat like the fat of Lambs, but a solid fat, like the fat of Hogs and Oxen. And the flesh hereof is commended to be profitable for Women with childe; and also for all wounding and g roaring in the belly, not only the flesh to be eaten in meat, but also the fat to be anointed upon the belly or navil: And for this caufe it is used to procure sleep, and to strengthen decayed and weak fisneys: the flesh is always better salted then fresh, because the fat drieth up the overmuch humidity, and also amendeth the gravity and rankness of the favour: but whether it be fat, or whether fresh, it is always hard to be digested, opprefling the stomacks, and heating the body overmuch.

The ventricles or maw of the Mouse Alpine, is prescrib'd to be laid upon the belly against the Collick. If the hands of a man be anointed with the fat of this beast, it is said he shall be the better able to endure cold all that day after: Also the same fat being drunk up in warm broth by a woman in travall, are believed to accelerate and haften her delivery.

Certain Horse-leeches, in the cure of that disease which they call the Worms, which are certain ulcers rising in the body, do mingle this fat with other medicines which are very drying or fitprik.

And Mathesius doth prescribe it for the softing and mollifying of contracted nerves and joynts in the body.

By the discourse aforefaid, it doth appear, that of these Alpine Mice there are two kindes, one great like a Badger, and the other in stature of a Hare or Coney: This latter feemeth to be proper to Germany, which there they call Embodor, of the Latin word Emptura, a Mouse of the Mountain.

The story whereof I thought good to express, being short, out of Stumpfam and Agriculta. The males and females say this of their kindes, do gather together wide corn which growth among the Rocks in the Summer time against the Winter, and carry the same into the holes of the earth, where their lodging is.

Now the female in this kinde is crafty, and more apt to devour; the male on the other side more thristy and sparing, wherefore he driveth his female out of the Den in the Winter time, and toppeth the mouth of his Cave, to forbid her entrance, but the geteth behinde the same, and diggeth a secret hole, whilest the male lyeth at the mouth asleep, the consumeth the whole flore behinde him: wherefore in the Spring time he cometh forth very fat and comely, and he very lean.

And therefore in my opinion, the makers of emblems may very well describe an unthrifty Wife, that consumeth her Husbands wealth, by the picture of this female, as by the picture of the As behind Omen, biting atunder the cord that he weareth, as we have shewed before in the History of the As. These beafts give them selves much to sleep, and when they are awake they are never idle, but always carrying into their Den straw, hay, flacks, rags, or pieces of cloth, whereby they fill their mouth so full, that it may receive no more, and if they meet with any thing which is too big for their mouth, by the help of their feet they draw and rowl it to their own Den.

Whereas they are nourished tame in houses, it is observed, that they are a neat and cleanly kinde of beast, for they never defile their lodgements with their excrements, but seek out some secret corner, wherein they both render urine, and empty their bellies. With their teeth the gnaw wood, and make holes in bords, so large as their bodies may pass through; and while they live, they have a very rank and strong favour like a Mouse, especially in the Summer time while they are lean, and before they grow fat; for such is the nature of this beaft, that in the Summer time they labour and grow lean; but in the Winter time they sleep and grow fat. And thus much for the Alpine Mouse.

Of the DORMOUSE.

The Dormouse is called in Latin, Gisus; and in Greek, Myoxos; the reason of the Latin name Gius, is taken from glisere, which signifieth to grow fat, according to the saying of Columella, Palin vero glisere fere omnes regiones abundant Asinus glisere; that is to say, an As's growth fat by eating chaffe which aboundeth in all Countries. This word Gius, signifieth not only a beast, but a piece of fat earth, and also a Thistle; whereupon Svetovoc at made this verse:

Gius animal, glis terra tenax, glis lappa vocatur.

The Italians call it Lo Galero, Lo Giler, or Giero; the Spaniards, Liron; the French likewise Liron, and Rat, Lioren, and Vignoyer, and Vignaret; the Germans, Ein greut; the Helvetians, Ein rel, or Rel mut, or Geras biselemus; but our English, Dormouse, seemeth to be a compounded word of Dormans mur, that is, a sleeping Mouse. The Polonians call him Sowres. But concerning his name Myoxus, there is some question among the Authors. For Saint Jerom writing upon the eleventh chapter of Leviticus
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Of the Dormouse.

The Philosophers which are cunning in the nature of things do write, that the Dormoufe doth lie hid, and bring forth many young ones in the same place where he lyeth, five or more at a time, and the Vipers do hunt these to destroy them: now if the Viper finde their self, because she cannot eat them all at one time at the first, she filleth her self with one or two, and putteth out the eyes of the residuum, and afterwards bringeth them meat and nourisheth them, being blinde, until the time that her stomack serveth her to eat them everyone. But if it happen that in the mean time, any man chance to light upon these Viper-nourished blinde-Dormoufe, and to kill and eat them, they pouyon themselves through the venom which the Viper hath left in them: so faireth it with thee O Origen, for thou art blinde with the Gracians doctrine, and doth vomit out that pouyon into their hearts which do believe thee, that thou art made unto them a venemous meat, whereby thou doest wrong others, as thou hast been wronged thy self.

Py which is manifest, that Myoxus is neither a Toad nor a Frog, but the Dormoufe. And the charm which is made for the Ailes urine, as we have showed already in his story, Gallus hibit, & non meit, Myoxus meit, & non hibit. The Cock drinketh, and maketh not water, the Dormoufe maketh water, and never drinketh. But whether it be true or no that the never drinketh, I dare not affirm: But this is certain, that the drinketh but very seldom; and it ought to be no wonder that she should make water, for tame Conies, as long as they can feed upon green herbs, do render abundance of urine, and yet never drink.

The Gracians also do call this Beast Elyos, although that word do likewise signifie a Squirrel. In Media a Wood of Italy, there is never found Dormoufe, except at the time of their littering.

They are bigger in quantity then a Squirrel, the colour variable, sometimes black, sometimes grizzle, sometimes yellow on the back, but always a white belly, having a short hair, and a thinner skin then the Pontique Moufe. They are also to be found in Helsitius, about Clarona. It is a biting and an angry Beast, and therefore seldom taken alive. The bear or snowt is long; the ears short and pricked; the tail short, and not very hairy at the end; the middle of the belly swelleth down betwixt the breast and the loins, which are more narrow and trussed up together, they are always very fat, and for that caufe they are called Lardiroi.

Buck-meat is very acceptable meat unto them, and doth greatly fatten them, they are much delighted with Walnuts, they clime trees, and eat Apples, according to some: but Albertus faith more truly, that they are more delighted with the juice then with the Apple. For it hath been of tentimes

The description of the Dormoufe out of Epiphanius.
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The means to take the Dormice.

They nourish their parents in their old age, with singular piety. We have shewed already, how they are destroyed by the Viper, and it is certain, that all Serpents lie in wait for them. Their old age doth end every Winter. They are exceeding sleepy, and therefore Martial faith:

Somnificus illi portigris glires.

They grow fat by sleeping, and therefore Aesopus hath an elegant verse:

Dic, essente cibo, somnis quis operin est? glia.

Because it draweth the hinder-legs after it like a Hare, it is called Animal tralibis, for it goeth by jumps and little leaps. In the Winter time they are taken in deep ditches that are made in the Woods, covered over with small flicks, straw, and earth, which the Countrymen devise to take them when they are asleep. At other times they leap from tree to tree like Squirrels, and that they are killed with Arrows as they go from bough to bough, especially in hollow trees: for when the Hunters finde their haunt wherein they lodge, they stop the hole in the absence of the Dormouse, and watch her turn back again; the sly Beast finding her passage closed, is bufied hand and foot to open it for entrance, and in the mean season cometh the Hunter behind her, and killeth her. In Tellus they are taken by this means: The Countrymen go into the fields, carry in their hands burning Torches in the night time, which when the sly Beast perceiveth, with admiration thereof, fleapeth to the lights, whereunto they were come, they were so dazled with the brightness that they were falk blinde, and might so be taken with mens hands.

The use of them, being taken, was to eat their flesh, for in Rhettia at this day they eat it and eat it, because it is sweet and fat like Swine's flesh. Antistius Marcellinus wondereth at the delicacy of his age, because when they were at their Tables, they called for ballances to weigh their flesh, and the members of the Dormouse, which was not done (faith lie) without any dislike of some present, and things not heretofore used, are now commended daily. Apisim also prescribes the muscles and flesh inclosed in them, taken out of every member of a Dormouse, beaten with Pepper, Nut-kernels, Parsely, and Butter, fluffed all together into the belly of a Dormouse, and fewed up with thread, and so baked in an Oven, or sodde in a Kettle, to be an excellent and delicate dish. And in Italy at this day, they eat Dormice (faith Calpurn. i.) yet there were ancient laws among the Romans, called Leges confide, whereby they were forbidden to eat Dormice, strange birds, Sheil-fish, the necks of Beasts, and divers such other things. And thus much shall suffice for the description of the Dormouse.

The Medicines of the Dormouse.

Dormice being taken in meat, do much profit against the Bullimond; The powder of Dormice mixed with Oyl, doth heal tho' which are seared with any hot liquor. A live Dormouse doth presently take away all Warts being bound thereupon. Dormice, and Field-mice being burnt, and their dust mingled with Honey, will profit those which desire the cleanliness of the eyes, if they do take thereof some small quantity every morning. The powder of a Dormouse, or field Mouse rubbed upon the eyes helpeth the aforefaide disease. A Dormouse being fried, roasted and anointed with Oyl and Salt, being given in meat, is an excellent cure for those that are short winded. The fame also doth very effectually heal those that spit out filthy matter or corruption. Powder of Dormice or field Mice, or young Worms, being mixed with Oyl doth heal those that have Kibles on their heels, or Chiiblains on their hands. The fat of a Dormouse, the fat of a Hen, and the marrow of an Ox melted together, and being hot,
not infused into the Ears, doth very much profit both the pains and deafness thereof.

The fat of Dormice being boiled, as also of field-mice, are delivered to be most profitable for the elchewing of the Pallie. The fat of a Dormoufe is also very excellent for those which are troubled with a Pallie, or fencing of the joints. The skins and inward part of a Dormoufe being taken forth, and boiled with Hony in a new vefsel, and afterwards poured into another vefsel, will very effectually heal all diseases which are incident to the ears, being anointed thereupon. The skin of a Dormoufe, or a Silkworm being pulled off, and the inward parts thereof being boiled in a new brazen vefsel with Hony, from the quantity of twenty seven ounces, even to three, and so kept, that when there is need of a certain bathing vefsel, the medicine being made warm and poured into the ears, doth help all pains, deafness, or inflammation of the ears. The fat of a Dormoufe is commended to be very medicinable for the aforenamed diseases. The fame is profitable for all pains, aches, or griefs in the belly. The urine of a Dormoufe is an excellent remedy against the Pallie. And thus much shall suffice concerning the medicinal vertues of the Dormoufe.

of the Hamster or Cricetus, the first figure taken by
Michael Horus.

The second picture taken by John Kentman, and it is her fashion and and protractions to live thus when she is angry, for so doth her colour appear both on the back and belly.

This Beast is called in Lateine, Cricetus, and in the German tongue Hamfer, Tran, and the names, Carnfaerla, that is, Figs of the corn. It is a little Beast, not much bigger then a Rat, dwelling in the earth of the roots of corn, she is not drawn against her will out of her Cave at any time, but by pouring hot water or some other liquor. The head of it is of divers colour, the back red, the belly white, and the hair sticketh so fast to the skin, that it is easier to pull the skin from the flesh, then any part of the hair from the skin. It is but a little Beast as we have said, but very apt to bite and fight, and full of courage, and therefore hath received from nature this ornament and defence, that it hath a bony helmet, covering the head and the brain when it standeth up upon the hinder-legs: It resembelth both in colour and proportion a Bear. And for this cause some Writers have interpreted it
The History of Four-footed Beasts.

Of the Ant-Cat

His meat and food.

Hamster is cum sua

Prudens coniugi conjuge,
Sabat pressaenum pluribus
Per tona pectorant remissibus
Pugilique fuit sa frui
Lettis acretis bordel
Aerat in terris creadam
Extrudit arte coniuge,
Serva, inquit, extensit saras,
Calit eere et plebisc.
Sed faminum qui inflam,
Vincent dolis affluant 

Novum parant curriculum,
Furatur omne trichum.
Egena maritus persidem
Squit et anta coniugem.
Nec se repellat blandum
Demulcit inventam sanum,
Ille esse jam communia
Servat dum finit bonum.
At persifitor multiplices
Opponit inimic obsides.
Barbatissent mentis
Antius, eibus, amplexibus.

This Beast doth devour all kinds of fruit, and if be nourished in a house he eateth bread and flesh: he also hunteth the field Mice. When he taketh his meal, he raiseth himself upon his fore-feet: he is also wont with his fore-feet to stroke his head, ears, and mouth; which thing the Squirrel and the Cat do also, and as the Beaver amongst those creatures which live as well by water, as by land: but although in his body he seemeth but small, notwithstanding he is by nature apt to fight, and very furious being provoked, with his carriage in his mouth: he beateth away
Of the Norician Mouse. 413

away with both his feet that which refiilth him, directly invading his enemy: In the spirit and af-
faulting of his mouth he is wayward and threatening, from whence our Countrymen were accustomed to say of any one which was angry; he breatheth his wrath out of his mouth like a Hamfler: Du

The anger and fury of this beaff.
ofreift wuie ein Hamfler: neither is he easily affrighted, although he be far unequal unto those in

strength with whom he is in combate.

Wherefore some do give in the place of a Proverb, that our Countrymen do call a man which is

madly raff, Ein tiven Hamfler, as fool-hardy as a Hamfler. He flieith from any one that doth sharply

refiil him, and doth greedily follow after them that flie from him. I my felf faw one of thefe, who

by afaulting a Horfe get him by the nofe, and would never leave his hold until he was killed with a

fword: He is taken by divers means, for he is expelled either by hot water poured into his den, or

is choaked within; or being dug up with a matchock or fpade he is killed; or by Dogs. He is fometi-
times pulled out by the Fox, or hurt: or opprefled by some fnares, a great weight being put about it:

or to conclude, he is taken by Act alive, and that in the night time, when he goeth to seek his prey,

for in the day time for the maff part he lyeth hid.

Before his usual Cave (as I have faid) he is taken by the path which is worn, by a pot which is put

into the earth, and afterward made plain about it like other places of the field; there is earth call

in the bottom of the pot to the deepnefs of two fingers, above every where covering the pot where

there is placed a flone, which is held up by a piece of wood, to which there is bound below a fragment

of bread: In the space between the Cave and the pot there are crums of bread scattered, which he

following and leaping into the pot, the wood falling, he is taken. Being taken after the manner of

other beafts, he toucheth no food: If a broad flone, fuch as one with which they cover pavements, or

of which they make roof tiles, fhall be joined unto the pot, and the beaff be taken, he will be very

hardly known in the morning; for the spirit of the beaff being flue in, and waxing wrot, piercing

for thimefl doth moilten the flone. The skins of Hamflers are very durable, of which there are cer-
tain long coats which come down unto the heels, and divers coloured cloaks made, which the wo-

men of Mifena and Silfja do ufe, and account them very honorable, of a black and red colour, with

broad guidens or edges of the skins of Orters: the fame coats are for the maff part valued at the price

of fifteen or twenty Renemfan crowns: for it doth out-wear in length three or four garments made

either of linnen or woollen cloath.

In Turingia and Mifena this beaff is frequent, notwithstanding not in all places, for in Turingia his

chiefest abode is about Efardunum, and Salcenfis in Mifena, about Lipfia, and the field Pegenfis, the

plentifull and moft fertile places of both thefe Regions. In Luvatica about Radeberge, he is dig-

ged out of those places where Painick groweth. At Mulberge and Albis, he is found in the Vineyards,

for he is alfo fed with ripe Grapes. Our Country men are wont to burn a living Hamfler in a pot,

being flue, for the medicines of Horfe. It hath been feen that one of thefe hath leaped up

cought a Horfle by the nofe, never letting go his hold until he was cut off with a fword. The skin

is of three or four different colours, besides the spotted sides, and therefore the skin is

very precious. They abound in Turingia where the foil is good, and there is alfo great store of

grain.

Of the NORICIAN MOUSE.

The Norician Mouse is called in Latin, Citellus, and it keepeth like the wilde Mice in the caves

dens of the eartb. The bodye is like to a domestical Wefelins, long and fender, the tail very

short, the colour of the hair like to a gray Conies, but more bright. It wanteth ears like a

Mole, but it hath open paffages in head of ears, wherewithal it hear eth the found, as you shall

fee in many birds. The teeth are like the teeth of Mice, and of their skins (although they be not

very precious) they ufe to make garments. In Germany they call it Pile and Zifel, and of this Ger-

man word was the Latinus Citellus leigned; and it appeareth by Agricola, that there are two kindes

of thefe: one greater, which are call'd Zifell and Zefelle, and another leffer (call'd Pile) which may

be the fame that is also called Bithmell, and differeth from other, because it is used for meat. These are

bred in Croatica, and in the Country about Venice. They have a strange smell or favour, which is faid

to be hurtful to the head: They eat both falted and hung in the fmoke, and alfo fresh and new kil-

led. With their skins they edge the skirts of garments, for it is as foft as the skin of a Hare: and be-

side the common nature of Mice they are tamed. They alfo have very large cheeks, wherewith they

gather an innumerable quanti?ty of grain, and carry it into their den, as it were in bags againft the

Winter. They live thirty and forty together in a Cave, and are not driven forth but by infufion of

hot water. They gather great store of Nuts into their Caves, and therefore as well as for their

fieth do men hunt and feek after them.

Of the MOUSE PONTIQUE.

The name, de-

cription, and

dispofition.

Agricola.

The name of this Moufe is given unto it from the Ifland out of which it was firft brought, Oldus mag-
named Pontus, and for this caufe it is alfo called Venetum, because it was firft of all brought into

Germany from Venice. It is called alfo Varus by Laurus, from whence cometh the German

N n 3

word
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The word *Walnut* from the diversity of the colour *Grauwaller*. It is called also *Funiculus*, as it were *Puniqus sinn*, or rather of *Balick*, because they were wont to be brought in bundles or to be sold figly together, and they were sold for twenty groats. *Volutania*, and *Hermolaus* are of this opinion, that the white one in this kind, be called of the *Italians*, *Armeline*, and the *Germans*, *Hermelin*, but we have promisèd already to prove that *Hermelin* is a kind of Weefil, which in the Winter time is white, by reason of extremity of cold, and in the Summer returneth into her colour again, like as do the Hares of the *Alpes*. This *Pontique Moufe* differeth from others only in colour, for the white is mingled with ash colour, or else it is sandy and black, and in *Polonka* at this day they are found red and ash coloured. Their two lowermost teeth before are very long, and when it goeth, it draweth the tail after it like Mice; when it eateth it useth the fore-feet in stead of hands, and feedeth upon *Walnuts*, *Chefsnut*, *Filbeards*, small *Nuts*, *Apples*, and such like fruits. In the Winter time they take lie in stead of meat: And it is to be remembered, that the *Polonians* have four kinds of precious skins of *Mice* which they use in their garments, distinguished by four several names. The first of grizel colour, called *Papetisz*. The second is called *Graunshai*, a very white *Beaut* all over, except the tip of the tail which is all black, and this is the *Hermelin*.

The third is called *Nepogrodela*, from the name of a *Town*, and this is white mingled with grizel, and this is also a kind of *Pontique Moufe*. The fourth *Uniework*, of a bright Chefsnut colour, and this is the *Squirrel*, for they call *Squirrels*, *Weefils*, and *Hermelins* all by the name of *Mice*. *Thefe Pontique Mice* have teeth on both sides, and chew the cud. In the Winter time as we have said they lie and sleep, especially the white ones, and their sense of taste doth excel all other, (as *Pinty* writeth) they build their nests and breed like common *Squirrels*.

Their skins are fold by ten together, the two belt are called *Lizafohna*; the third, a little worfe, are called *Crakina*, and the fourth next to them *Porofina*, and the last and vifest of all *Moleshohna*; with these skins they hem and edge garments; and in some places they make Canonical garments of them for *Priests*, unto which they liew their tails to hang down on the skirts of their garments; of which cullom *Hermolam* writeth very excellently in their words. *Institiuit, & ex maribus luxuriam quam vitam, alias magiam frigoribus, alias medio anni tempore, a septentriobus petebat, armatus corpora, & debellatus animos*. That is to say: The life of man hath learned to be prodigal, even out of the skins of *Mice*, for some they use against extremity of cold, and they fetch others out of the farthest Northern parts, for the middle part of the year: Thus do we arm and adorn our bodies, but put down and spole our mindes.

Befide, there is a flying *Pontique* or *Scbian* Moufe, which we may call the broad *Squirrel Moufe*, whose skin is here expressed as you may fee, and for the description thereof, I have thought good to add an Epistle of *Antonius SCHNEBERGUS* the *Litterianus of Vilna* unto *Gefar*, in these words following:

I fend unto thee a little skin, the upper place of the hairs thereof being of a white ash colour, but the root of the hair or inner part thereof is a black brown. They call it *Poyelceza Lataczza*, that is, a *Pontique* flying Moufe: It is always so moift, that it can never be dresse d by the Skinner, or Lether-dreffer.

The people use it to wipe fore running eyes, having a perfluation that there is in it a singular vertue for the easing and mitigating of those pains: but I think that the foffenes was the first cause which brought in the first use thereof, but if the hairs do not cleave hard to the skin, it cannot be done without danger. Also the hairs hanging as it were in a round circle against or above the two former feet, they call wings, wherewithal they
are thought to flee from tree to tree. Thus far *Antonius*. Gefier after the receipt of their skins, being willing to preserve them from moths, because they were raw, for experience gave them to a leather drier, who presently dressed them with Vinegar, and the Lees of Wine, so that it appeared the Skinners of *Lituania* had not the skill how to dress it.

After they were dressed they were so soft, that they stretched above measure, so that every one of them were square, that is to say, their length and breadth were equal, for they were two palms or eight fingers broad: and no more in length, the head and tail excepted: wherefore it may well be called a square Moufe, or *Sicuras quadrata*, because we are sure of the former, but not of the flying; the tail was as long as four or five fingers are broad, being rough like the tail of other Squirrels, but befted with black and white hairs, the whole colour both of the belly and upper part was white, as we have said, but black underneath, the hair is so soft as any filk, and therefore fit for the use of the eyes. The ears shorter and rounder then a Squirrel: the feet did not appear by the skin: the neither part was distinguished from the upper part, by a certain visible line, wherein did hang certain long hairs, which by their roughness and solidify under the thin and broad frame of their body, might much help them to flee, even as broad fitches swim by the breadth of their bodies, rather then by the help of their fins. The *Helvetians* wore these skins in their garments. It is reported by *Elianus*, that the Inhabitants of *Pontus*, by making supplication to their Gods, did avert and turn away the rage of Mice from their Corn-fields, as the *Egyptians* did, as we have said before in the story of the vulgar Moufe.

**Of the Moufe called the Shrew, or the Erd Shrew.**

The word *Honake* of the *Hebrews* remembered in the 11. chapter of Leviticus, is diversely inter- preted by the translatours; some call it a repitile beast which always cryeth: some a repitile flying beast; some a Horfe-leach; some a Hedgehog: and some a Beaver, as we have heued before in the Hedgehog. But the *Septuagint* translate it *Mgale*; and S. *Jerom*, *Mus araneus*, that is, a Shrew. *Disquisideris* calleth it *Migale*; the *Germans* and *Helvetians*, call it *Matzer*; in some parts of *Germany*, from the figure of the snout it is called *Spitzmuth*, by some *Ziffmuth*, from the fiction of his voice, and some *Grafs Ziffmuth*; the *Hollanders* call it *Mull Mauffe*, because it femebleth a Mole. *Mathesius* for the *Italians* call it *Toporagno*; that is, a Mole-Shrew. The *Helvetians* call it *Bifemnus*, that is, a Musk-moufe, because it being dried in a furnace fmeleth like Musk. The skin pul- led from the fleth, fmeleth belt by it felf, and yet the fleth fmeleth well alfo, and fo do the ex- crements. But to return to the *Greek* name, why it should be call'd *Mgale*, there is not one opinion amongst the learned: but I do moft willingly confede the opinion of *Antius*, who writeth that it is called *Migale*, because in quantity it exceedeth not a Moufe, and yet in colour it femeleth a Weefil, and therefore it is compounded of two words, *Myt*, a Moufe, and *Gales*, a Weefil.

*Antius* is of opinion, that it is so called, because it is begot betwixt a Moufe and a Weefil, but this is neither true nor probable. For it is likely that Weefils and Moufe will couple together in carnal copulation, whose natures are fo contrary, the one living upon the death of another, that is, the Weefil upon the Moufe? And befoide the difference of quantity betwixt them, maketh it im- possible to have fuch a generation. The other derivation of *Mgale*, which is made by *Rodolphus* writting upon Leviticus, fetching *Mgale* from *Mur galicus*, that is, a devouring Moufe, it is again the order of all good Linguifts, to derive *Greek* words from *Latin*, but rather confonant to learning, to fetch the *Latin* from the *Greek*.

There is no lefs inquiry about the *Latin* name, why it should be called *Mus araneus*, seeing *Aranea* signifieth a Spider. This Moufe faith *Albertus*, is a red kinde of Moufe having a small tall, a sharp voice, and is full of poyfon, or venom: For which caufe Cats do kill them, but do not eate them. *Siponius* writeth thus, of this Shrew; *Mus araneus*, *exiguum animal*, *et to levifimum effe*, quod aranea modo tenuifimum filum, et gladii aciem confederit. That is to say, this Shrew-moufe is a little and light creature, which like a Spider climeth up upon any small thread, or upon the edge of a fword: and therefore you fee, they derive the *Latin* name from his climbing like a Spider.

But in my opinion it is more reafonable, to derive it from the venom and poyfon which it contains in it like a Spider. For which caufe *Silvaticus* writeth thus; *Mgali id eff*, *dracon mar-
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In, & animal venenum, posuitium muri simile: haum & araneum pipec, proper venenum pungentibus influm sinea, vetere opim, id efi, serpentum nominatur, & boice quam vulgo draconem vel drakenem. That is to say; There is a fish of the Sea, and a little Beast on the Earth like a Moufe, which by a general word are called Mojdes, and the Spider-fish called at this day a Dragon, or Dragonfish, was in ancient time called a Serpent, because by his prickly fins, he did poyfon those which were inrucken by him. And concerning the description of this Beast, it may be taken from the words of an ancient English Physician, called Doctor William Turner.

I have seen (faith he) in England, the Shrew-moufe of colour black, having a tail very short, and her fnow very long and sharp, and from the venemous biting of this Beast, we have an English Proverb or Imprecation, I behove thee, when we curfe or with harm unto any man, that is, that some fuch evil as the biting of this Moufe may come unto him. The Spaniards call this Beast Raton t equus ; the Hijiens, Vifudis kamy; and the Polonians, Kerti. They were wont to abound in Britany, as Hermidaw writeth.

They are also plentiful in Italy beyond the Mountains Apennnine, but not on this fide (as Pliny writeth) yet in the hither parts of Italy and Germany, there are many found, especially in the Country neer Trent, in the Valley Anona, where this is admirable, that by reason of the coldnes of that Country their bitings are not venemous. For the Scorpions there are not venemous, although in other places of Italy they poyfon deeply. This Beast is much lefs then a Weeffil, and of an ash colour, in molt places like a Moufe, although the colour be not alwaies the fame.

The eyes are fo small, and beneath the proportion of her body, that it hath not been unjustly doubted of the Ancients, whether they were blinde or no, but in their behalf their fight is very dull. And for this caufe the ancient Egyptians did worship it: for as they held opinion, that darknes was before light, so they deemed that the blinde creatures were better then the feeing. And they also believed, that in the wane of the Moon the liver of this Beast consumed. It hath a long and fharp fnow like a Mole, that it may be apt to dig. The teeth are very small, but fo as they fand double in their mouth, for they have four rows of teeth, two beneath, and two above, which are not only apparent by their defection or Anatomy, but also by their bitings, for their wounds are Quadruple, whereofever they faften their teeth. Their tail is flender and fhor. But the defcription of this Beast was better apprehended by Gofnor, at the fight of one of them, which he relateth on this manner:

The colour (faith he) was partly red, and partly yellow, mingled both together, but the belly white. The hinder-feet feemeth to cleave to the body or loins. It smelth well strongly, and the favour did bewray or dignifie some fecret poyfon. The tail about three fingers long, beft with very fhort hairs. The residue of the body was three fingers long. The eyes very small and black, not much greater then Moles, fo that next to the Mole they may juftly be called, the leaf fighted creature among all four-footed Beasts; fo that in old age they are utterly blinde by the Providence of God, abridging their malice, that when their teeth are grown to be molt fharp, and they fopk full of poyfon, then they fhould not fee whom nor where to vent it.

They differ as we have faid in place and number, from all four-footed Beasts, fo that they feem to be compounded and framed of the teeth of Serpents and Mice. The two fore-teeth are very long, and they do not grow fingle as in vulgar Mice, but have within them two other fmal and fharp teeth. And alfo tho fome long teeth grow not by themfels, as they do in other Mice, but are伴有 in the fide, in one continued rank. They are fharp like a faw, having fharp points like needles, fuch as could not be fen by man, except the tips of them were yellow. Of either fide they fhall have eight teeth, whereas the vulgar Mice have but four, befide the two long fore teeth, which alfo feem divided into two or three, which exceft one mark diligently, he would think them to be all one.

It is a ravening Beast, feigning it felf gentle and tame, but being touched, it biteeth deep, and poyfoneth deadly. It beareth a cruell minde, defiring to hurt any thing, neither is there any creature that it lovethe, or it lovethe him, because it is feared of all. The Cats, as we have faid, do hunt it and kill it, but they eat not them, for if they do, they consume away in time. They annoy Vines, and are feldom taken except in cold; they frequent Ox-dung, and in the Winter time repair to howes, gardens, and fables, where they are taken and killed.

If they fall into a Cart-road, they die and cannot get forth again, as Marcelus, Nicander, and Pliny affirm. And the reafon is given by Plises, for being in the fame, it is fo amazeth, and tremblieth, as if it were in bands. And for this caufe fome of the Ancients have prefcribed the earth of a Cart-road, to be laid to the biting of this Moufe for a remedy thereof. They go very flowly, they are fraudulent, and take their prey by deceit. Many times they gnaw the Oxes hooves in the flable. They love the rotten flefh of Ravens; and therefore in France, when they have killed a Raven, they keep it till it flinketh, and then call it in the places where the Shrew-moufe haunt, whereunto they gather in fo great number, that you may kill them with floues. The Egyptians upon the former opinion of holines, do bury them when they die. And thus much for the defcription of this Beast. The succeeding discoure toucheth the medicines arising out of this Beast; alfo the cure of her vnemous bitings.
The Shrew, which falling by chance into a Cart-rode or track, doth die upon the same, being burned, and afterwards beaten or dissolved into dust, and mingled with Goose greave, being rubbed or anointed upon those which are troubled with the swelling in the fundament coming by the cause of sofe inflammation, doth bring unto them a wonderful and most admirable cure and remedy. The Shrew being slain or killed, hanging so that neither then nor afterwards the may touch the ground, doth help those which are grieved and pained in their bodies, with fores called fellons, or biles, which doth pain them with a great inflammation, so that it be three times inuironed or compassed about the party so troubled. The Shrew which dyeth in the furrow of a Cart-wheel, being found and rowled in Potters clay or a linnen cloth, or in Crimson, or Scarlet woollen cloth, and three times marked about the Impollumes, which will suddenly swell in any mans body, will very speedily and effectually help and cure the same.

The tail of a Shrew being cut off and burned, and afterwards beaten into dust, and applied or anointed upon the fore of any man, which came by the biting of a greedy and ravenous Dog, will in very short space make them both whole and found, so that the tail be cut from the Shrew when she is alive, not when she is dead, for then it hath neither good operation, nor efficacy in it. The former hool of a Horse being scraped, and the fame fragments or scantlings thereof being beaten in the dust or earth, which hath been digged up by a Shrew, in four measures of water, poured down the mouth of a Horse which is troubled with any pain or wringing in his bowels, will soon give him both help and remedy. The Shrew being either applied in drink, or put in the manner and form of a platter, or hanged upon the fore which he hath bitten, is the most excellent, and most medicinal cure for the helping and healing thereof. A preparative against poyson, would be an excellent remedy, that neither man nor any other living creature, should be bitten if they should leave or would want that superstition called an enchantment against poyson, being hanged about the neck, whereof we will speak more in the curing of the bites of this Beast.

That the biting of a Shrew is venemous, and of the reason of healing in this kind.

In Italy the biting of a Shrew is accounted for a very strong poyson, and that except there be Piny, some medicine very speedily applied for the curing and healing thereof, the party so bitten will die. These Shrews are truly so venemous and full of poyson, that being slain or killed by Cats, whose nature is to kill whatsoever Mice they take, they will not offer to touch or eat the least part of them.

But the biting of a female Shrew is most obnoxious and hurtful when she is great with young, but most dangerous of all when the biteth any one which is great with young, either a woman or any other Bealt whatsoever, her self being also with young, for then it will hardly be cured.

If a Shrew shall bite any creature while she is great with young, the putres or biles will in time be broke which they make, and will come unto a very great and magnifiant wound and fore. If the Shrew do also bite any creature during the time she is with young, she will presently leap off, notwithstanding the bite more dangerous. There is nothing which do more apparently explain and shew the biting of a Shrew then a certain vehement pain and grief in the creature which is so bitten, as also a prickings over the whole body, with an inflammation or burning heat going round about the place, and a fiery redness therein, in which a black pufh or like dwelling with a watery matter, and filthy corruption doth arise, and all the parts of the body which do joyn unto it seem black and blew with the marvelles great pain, anguish, and grief, which ariseth and proceedeth from the same.

When the pufh or bile which cometh by the occasion of a Shrew cleaveth or is broken, there proceedeth and issueth forth a kinde of white fleth, having a certain rinde or skin upon it, and sometime there appeareth in the a certain burning, and sometimes the fame is eaten in and falleth out, but in the beginning there is a most filthy green corruption and matter which floweth in the same, afterward it is putrefied, and eaten in, and then the fleth falleth forth: the wrunnings alfo of the inward parts, the difficulty of voiding the urin, and a corrupted sweat doth follow and accompany the fame.

But Avicenna affirmeth, that in what place forever this Beael shall bite, the fores thereof with great anguish will pant or beat, and that in every hole wherein his venemous teeth have entred, there will a certain fiery redness appear, the skin whereof being broken, there will come a very white and mattery fore, which will breed much pain and trouble in all the parts of the body for the most part. The fores or wounds which are made alfo by this Beael are very manifestly known by the marks of the fore-teeth flanding all in a row together, as alfo by the blood which issueth from the wound, being at the first pure, clear, and exceeding red, but afterwards corrupt, blackish, and full of putrefaction.

There do also divers bitches arise in the fleth usually after the biting of this Beael, which if any man shall break, he shall see the fleth which lyeth under them corrupt, and divided with certain
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Aetrica. certain clefts or riffs in the same. Moreover the nature of this Beast is fuch, that for the molt part he doth covet to bite those whom he can come unto by the ftones or genital, not only men, but also all other brute Beasts whatsoever: and thus much shall suffice concerning the biting of this Beaf.

Dissectores. Wormwood being beaten or bruifed small, strained in a fine linen cloth, and mingled in Wine, given to the party, either man or woman, in Wine to drink, who is bitten by a Shrew, will procure him present ease and remedy. The fame alfo is an excellent remedy for the bitings or flings of a Sea-dragon. Vinegar is very medicinable for the bitings of the Shrew, and of Dogs, as alfo for the fith called by the Latins, Scophendus, (which voideth all her bowels out until the hook come forth, wherewith the is taken, and then fucketh them up again) the Scorpion and all other venemous Serpents.

But the Grecian Physicians affirm, that the fame ought to be mingled with other medicines for the helping of the aforefaid diseases, as to take the ashes of the Shrew being burnt, the gun or liquor of the Herb called Pemal-giant, dryed Barly beaten into small powder, Mustard-seed pounded small with the Herb called Purple, or Mothmullein, and mingle them all together with Vinegar, and being so applied they will prefently cure the aforefaid flings or bitings.

Garlick being bruifed, and the juice thereof anointed upon the place which was bitten by a Shrew, will prefently expel the pain, and wholly cure the fore. For the expelling of the Superfluities or the parings of the dead flesh, growing round about the fore, being not caft away but remaining thereon. Take Cummin and cover the wound or biting therewith, then apply Garlick beaten into Oyl thereunto, and anoint the places about the fore, as alfo the fore it self very diligently, and in very fhort space it will caufe the fame to fall away of its own accord.

For the healing alfo of the bites of this Beaf: Take Garlick, the leaves of a Fig-tree, and Cummin, mingle them very well together, till they come to a mollifying or temperate fulblance; then take the fame, and fahion it in the form or manner of a plaifter, and it will very speedily and effectually cure the fore.

The feed or leaves of Coleworts, being beaten together with Vinegar, and the herb called Alfa feida, is very good and profitable to be applied either to the bites of this Beaf, or a raving Dog. The dung of a Dog being taken and anointed upon either Man or Horfe which hath been bitten by a Shrew, will be an excellent remedy both for the curing and healing them of the fame. The hoof of a Ram being dryed, beaten into powder & afterwards mixed with Honey, will be likewise very good for thofe which are bitten with the fame Beaf, fo that they be firft tempered and fashioned in the manner of a plaifter, and then applied thereunto. The little white flacks which proceed from a black Fig. being beaten with the leaves of the herb called Moth-mullein, Wax, and Vinegar, until they come unto a mollifying juice or falt, will be an excellent remedy against the biting of the Shrew, being anointed thereupon.

The young or tender flacks of a wilde Fig-tree, be they never fo few or small, being firft steeped in Wine, then lapp'd in a leaf of the fame Tree, and fo applied unto the flings and bites of Scorpions, and the Shrew, will in very fhort time cure and heal the fame. Provided always that the wound be well and diligently bathed or wafted, before any thing be put or applied thereunto.

Dissectores, Aetrica., and Alharus, do affirm, that the excellenteft, and medicinableft cure for the bites of a Shrew is thus: To take the Spleen of the fame Beaf, and beat it together with Vinegar, and the Gum called Galbanum, then to anoint it or rub it upon the fore, and it will prefently expel away all pain, and in some fhort space altogether heal it. If the red bunches or ulcers which do usually grow about the bites of a Shrew, do fortunate to break; take very sharp and throng brace or pикle, and rub it both about, and within the fore, and afterwards apply Barly being burned and beaten into small dult or powder thereunto, which medicine although it feem somewhat grievous and painful, yet it is very good and profitable for the expelling either of the flings of Scorpions, or the bites of the Shrew or ravenous Dog.

The genital of a Hare being beaten into powder mingled with Vinegar, and anointed upon the bites of a Shrew, doth speedily cure them. Wild Melows being mingled with thofe Melows that grow in the Garden, have in them a very effectual force and power to cure all flings or venemous bitings, especially of Scorpions, Shrews, Wafps, and fuch like flinging creatures.

The Shrew being cut and applied in the manner of a plaifter, doth effectually cure her own bites. The Shrew being killed and anointed all over with Oyl, and durt or mire, applied into the Ulcers or red swellings which come by her venemous teeth, will very speedily procure them to break. The Shrew being cut or beaten into small pieces, dryed into powder, mixed with Vinegar, and fashioned in the form of a plaifter, will very speedily and effectually cure the bites of a Shrew, whether the be great with young or not, fo that they be well applied thereunto.

But there are fome which do think it nothing convenient to mingle the Shrew with any other thing whatsoever; but that it is only after this manner to be applied by it fell, as to take it burned or dry'd, and then to pound it in powder, and fo to sprinkle it in the wound or fore, which in very fhort time will easily heal it. The Shrew falling into the furrow of a Cart wheel doth prefently die: the dult thereof in the paffage by which the went, being taken and sprinkled into the wounds which were made by her poysonome teeth, is a very excellent and prefent remedy for the
the curing of the same. 

Hart-wort, a'vd Trifoly, unto the worts which wounds an. If the pimples or bladders which arise in the bites of a Shrew shall be thought convenient to be broken, for the performing of the same, take the skin of a baked or roasted Pomgranate, and spread it upon the aforesaid red pimples, as hot as possible may be suffered for some small time, and it will cause the ulcers to break, and all the corruption to issue forth.

If it grow unto an Impudence, take the little berries or pellics which are within the Pomgranate, being very well baked and apply them unto the fore some short time, and they will very eafily cure the same. Mustard-feed being mingled with Vinegar, annointed upon the bites of a Shrew, doth very effectually heal them. A Moul being bruised into small pieces, and applied unto the bites of a Shrew of the form of a plaister, is a very excellent remedy for the curing of them. Ditch and Trifoly being mingled very well, upon the bites of a Shrew, is accounted an admirable cure; but it is requisite that the fomentation be given unto none but such as are of a fofire and powerful body, and are also able to endure pain. The liquor of the Herb called Southernwood being given in Wine to drink, doth very much profit those which are troubled, and pained in their limbs with the bites of Shrews. Wormwood being used in the like manner, will cure those which are bitten by a Shrew.

The genital of a Lamb or Kid being mingled with four drams of the Herb called Aristolochia, or Hart-wort, and six drams of the sweetest Myrrh, is very good and medicinable for curing of those which are bitten or lungen with Shrews, Scorpions, and such like venomous Beasts. The leaves of Coleworts being dried, mingled with flower, and tempered together, until they come into the form of a plaister, will very much help against the venomous bites of the Shrew. The seeds of Coleworts, and the leaves of the same herb being mingled with Vinegar, and the herb called Alfa sativa beat or pounded together, do very well and speedily cure the bites of the Shrews, as also of a ravenous Dog: if the same in due time be applied thereunto. The liquor also of the leaves of Coleworts being given in any kind of drink, is good and wholesome for the curing of the aforesaid bites or wounds. The Nuts of a young Cypress tree being mixed with a certain syrup or potion made of Hony, Water, and Vinegar, and afterwards drunk, doth very speedily procure ease and help for those which are bitten by a Shrew.

The root of a white or black Thistle, being beaten or bruised and given in drink, doth very effectually help or cure those which are bitten by a Shrew. The like vertue hath the herb called Rocket in it, and also the feed thereof being given in any kind of drink. The gum or liquor which proceedeth from a kinde of Ferula, being given in Wine to drink, doth very much help and cure those which are bitten by a Shrew. The same vertue also in it hath the root of the herb called Gentian or Bitterwort, being given in Wine to drink. One or two drams of the youngest or tenderest leaves of the Laurel tree, being beaten small and given in Wine to drink, doth speedily cure the fores or wounds which are bitten by a Shrew: the same being also used in the faid manner, and given in some certain portion unto Horses to drink, doth quickly help and heal them. But there are some which before all other medicines do commend this for the belt, and chiefly, that "to take the juuyce which proceedeth from the leaves of the Laurel tree, and the leaves themselves, being moist and new growing, and to boil them in Wine, and being once cooled, to give it to any which is bitten by a Shrew, and this will in very short space altogether help them. A young Weefit being given in Wine to drink, is accounted very medicinable for those which are bitten by a Shrew, or lungen by a Scorpion or any other venomous creature. The herb called Balk'mint or Calmary, the herb called Bartram, or mild Pello, the herb called Beany, the herb called Water-mint, or Watercrees, the sweet and delicious gum called Storax, as also the herb called Vervin, being each of them severally by themselves, either given in Wine to drink, or applied in the manner of a plaister, or annointed upon the bites or wounds which come by the venemous teeth of a Shrew, will very effectually cure the pain thereof: The biting of a field Mouse or Shrew, is very troublesome or grievous to all labouring Beasts; for instantly after her bittings there do little red Pimples arise, and there is most danger of death in those Beasts which the bithe when she is great with young; for the aforesaid pimples will then presently break, after which the Beatt so bitten will instantly die. The Shrew doth also kill some labouring Beasts with poifon, as chiefly Horses and Males, but especially and for the most part Mares, which are great with young. There are some which do affirm, that if Horses, or any other labouring creature do feed in that pasture or grafs in which a Shrew shall put forth her venom or poifon in, they will presently die. In what place soever a Shrew shall bite in any creature, it will be compatified with an exceeding hard swelling, the Beatt also being so bitten, doth express his grief or sorrow with much pain, and training his body doth likewise swell all over, his eyes do in a manner weep, the swelling in his body doth sinue out matter, or filthy purfiation, he voideth poifon out of his belly; and doth vomit all sustenance up affoon as ever he receiveth it. If an Alfa being great with young be bitten by this Beatt, it is a very great chance if she scape death.

But if the Shrew do bite any Beatt when she is great with young, it is known by these things, or marks, there will certain red pimples compasse the fore round about, and also spread themselves over all the body of the bitten Beatt, and will in short space destroy him, except there be procured some
some present remedy. The Normans in France, do supposle the Shrew to be a Beast so full of venom, and poyson, that if he shall but pass over either an Ox, or a Horse lying down along upon the ground, it will bring such a dangerous disease upon them, that the Beast over which the shall pass, shall be lame about the loins, or shall seem as if he were immovable, and that he can be cured by no other means but by the same Shrew, who either of his own accord, or by compulsion must pass over the contrary side of the Beast, and that then he will be cured; which thing I do hold to be very vain and not to be believed.

For the curing of Beasts which are bitten by a Shrew, thou shalt boil the feed of Partly together with Wine and Oyl, and thou shalt cut the place which swelleth by a Pen-knife, by which the poyson may issue forth, and the wound being pointedly pulled or torn may wax raw: if by these the inflammation do wax more fervent and hot, thou shalt eat the fore with Iron instruments burning with fire, taking away some part of that which is whole and sound: then shalt thou renew the wound with the Iron instruments being governed rightly, by which the corruption may issue forth: but if that part do chance to swell by the exculceration, thou shalt sprinkle Barly being burned and dried therein; but before you do this, it is meet to joyn the old fat.

There is also another excellent medicine for the curing of the Shrew, which Startonius himself doth much commend, which is this: To lance or foraine the wound assoon as it is bitten, but especially if it be compassed with an inflammation, afterwards to sprinkle Salt and Vinegar upon it, then to encourage or provoke the Beast the next day following by some sweet water or liquor to run or go some little journey, first having anointed the fore with Fullers-earth, being beaten small and mixed with Vinegar, and then daily to nourish or bathe it with water which cometh from baths where some have washed themselves, and this in very short time being fouled, will very well and altogether cure the Beast. Against the biting of a Shrew Garlick is accounted for an excellent remedy being mingled with Nitre; but if there shall be no Nitre to be had, mix it with Salt and Cumin, then to dry and beat them all together into powder, and with the same to rub the places which are infected with the biting; but if the venemous wounds do chance to break; then to take Barly being scorched or burned, and pound it into small powder, and steep it in Vinegar, and afterwards to sprinkle it into the wound: This medicine Pelagon afterthohn, will only heal the bites of a Shrew, and that the grief of the fore, by the use of any other medicines doth rather encrease, then decrease.

The flour which is made of red Wheat, the herb called Dill, the liquor or Rozen which runneth out of the great Cedar, and two pound of the beet Wine, being mingled all together, in a potion, and poured down the throat of any labouring Beast which is bitten by a Shrew, will presently ease and cure him of his pain.

There is also another potion for the curing of the bites of this Beast; which is this: To take cloves of Garlick being bruised small, Salt, Cumin, and Wine, of each the like quantity; these being given to any Beast to drink, doth presently cure him; as also any man being anointed upon the wound, but not given to drink. The herb called Nard or Pepper-wort, being beaten to the quantity of two ounces and a half, and mingled with some sweet smelling Wine, will presently help any Beast which is bitten by the Shrew, being poured through his Nose, and his fore being at that instant time anointed with Dogs dung: the same is very medicinable or wholesome for men which are troubled with the said biting.

The bites of a Shrew being pricked with an Aul, and anointed with dust which is found in the furrows of Carts under the marks or signes of the Wheel, being mingled with sharp Vinegar, doth presently all生效, and heal the fore. The earth of the track of a Cart also mingled with stable or urine, being applied unto the bites of a Shrew, will very speedily cure them either upon Men or Beasts. A Shrew being new killed and rubbed over with Salt, applied unto the wounds which the shall bite in any Beasts, will instantly cure them: This vertue also hath the gall of a Rere-mouse or Bat, being mixed with Vinegar.

There is a very good remedy against the bitings of Shrews, or to preserve Cattle from them, which is this; to compass the hole wherein the lyeth round about, and get her out alive, and keep her so till she dye, and wax fife, then hang her about the neck of the Beast which you would preserve, and there will not any Shrew come near them; and this is accounted to be most certain. And thus much shall suffice concerning the bitings of the Shrews, and of the cures thereof.

Of Wilde Field-Mice.

This wilde Moufe called by the Latines, Mus agrestis, Mus Sylvatica, Sylvaticus, Subterraneus, and some say Nidulula, (although I rather take that word to signifie a Glaze-worm.) It is called also Enystus Mus, and Rafficus. The Greeks call it Nysa Areages; the Germans, Field-mouse, and Erd-mouse, that is, a Moufe of the Earth, and Nuidus, Nuidus, Schortarius, Schwermerus, Stoffmus, and Luckynus, by reason of her digging in the earth like a Mole. The French call it Mault. There is of these Mice two kindes, a greater and a lesser. The picture of the greater we have described here, forbearing the lesser, because in all parts it resembles this, except in the quantity.

This
Of the Field-mice.

This greater kind is not much leffer than a Rat, having a long broad tail like it. The ears of it are round, the head round and great; and the snow or chaps do not stand out long. They are of two colours in both kindes, some red and some black. They have a beard between their mouth and their eyes; and the lesser Mice have a short tail. A Physitian taking occasion of the writings of Baffinian Lamius, to dissect one of these Mice, found it to bee true which he faith, that their jaw and guts lie all straight and upright. We have shewed already, that all kindes of Mice are generated out of the earth, although also they suffer copulation. And in Egypt it is very common about Tebe, and the places where Nile overfloath, that in the decrease and falling away of the Waters, the Sun engendereth many Mice upon the slime of the earth; so that it is ordinary to fee at one time their fore-parts to have life, flesh, and motion, and the hinder-parts deformed, and nothing but earth.

And about this matter there is some disputition among the Authors, for there be Philosophers which affirm, that every creature as well perfect as unperfect, may be made both by feed and of putrified matter; and from hence came the opinion in the Poets, of the sons and daughters of the earth, and fo they say, that things grow by generation in infinitum. Some faith, that perfect creatures cannot be generated in that manner, but the imperfect ones, such as Mice are, may be engendered by feed and putrified matter, and afterwards beget more of his one kind.

But Aristotle confeth the first generation, and denyth the second, and faith; although they do generate by copulation, yet it is not 

Idem sed animal speciei diversum, a quo nihil, amplius gibus potest?

And therefore Jeromimus Gabncium endeth this controversy, saying; Mures ex putrione natui, generant quidem & ipsi, sed quod ex eis generatur, nec Mures alter, nec samina, nec amplius generat: that is; Mice engendered of putrified matter do also engender, but that which is begotten of them is neither male nor female, neither can it engender any more, that it may not proceed in infinitum, like a Mouse engendered by copulation. But concerning the beginning of their wilde Field-mice, and ther encreafe, Aristotle speaketh in this manner: We have received (faith he) the wonderful generation of wilde Field-mice, abounding in every place, and especially in corn-fields, which by their multitude, do infantly eat up and devour a great deal of grain, inomuch as it hath been seen, that divers poor Husbandmen, which have determined to day, to reap their corn on the morrow, in the mean season it was so destroyed by Mice, that when the Reapers came in the morning, they have found no corn at all.

And as the encrease of these Mice was extraordinary, so also was the destruction, for men could not drive them away, as in former times, by smoking them, or else by turning in Swine to root out their nests from the earth, or by sending Foxes, or wilde Cats among them, but their multitude did always prevail; and yet after a few days, the flowers of the clouds destroyed them. And Pliny faith, that this ought to be no marvel, that there should be so great a harvest and store of these Mice, seeing that men yet never knew how to hinder their generation, or to kill them, being engendered, and yet for all that they are seldom found in the Winter time either alive or dead. And faith, that we have entered into the mention of the damage of these wilde Field mice, it is profitable to let down some storied out of Authors, recording the place and persons, whom they have very much annoyed.

Pliny writeth, as we have sheweth in our former discourse, that the Inhabitants of Troas, were driven from their habitation by these Field-mice; because they devoured all their fruits, and when they dyed, there was a worm engendered in their heads. Diodorus Siculus in his fourth Book of ancient Monuments recordeth, that there were certain people of Italy, which by incursion of Field-
Field-mice were driven to flight and to forsake their patrimony, for they destroyed the roots of the corn, like some horrible drought, or some unrefractive cold frost. Celsa a Town of Umbria, in the days of Pliny, which at this day is called Orbis teum, was destroyed by Field-mice, (as Volaterranus writeth.) Nepos also faith, that he saw in one night, all the Corn-fields at Caetulum destroyed by the Mice.

There are such a number of thefe Mice in Spain, that many times their destruction caused pestilential diseases, and this thing happened amongst the Romans when they were in Cametria, for they were constrained to hire men by stipends to kill the Mice; and those which did kill them, scarce escaped with life. The Inhabitants of Cyamus, an Island of the Cyclades, after they had long resisted the violence of these Mice, yet at length they were fain to yield unto them, and forsake their Territory; and the Mice after their departure, through hunger did gnaw the Iron. We have shewed already how the Phoibistae were punished with Mice, before they fent away the Ark of the Lord, and how the Aeolians and Trojan, were annoyed with them, until they had sacrificed to Apollo Sminthius, and how the Mice of Heraclia, at the time of Grape-gathering, do go out of the Country and return again in the Autumn. When Senecacharib, King of the Arabians and Egyptians, invaded Egypt, it is said by Herodotus, that Vulcan in the night time fent upon his Army such an innumerable swarm of wide Mice, that before morning they had eaten a fburd of their Quivers, Arrows, Bows, and all warlike instruments, and therefore the next day, for the want of weapons, and fear of their enemies, they were constrained to take their heels and run away. And to conclude, by the fame means the Chaldeiensians were driven out of Elymum, a City of the Mountain Atlas; and thus much shall suffice for the harm of these Mice. They make their dwellings and habitation in the earth, according to this saying of Virgil:

Sapere aude quicquid parvo,
Sub terra pisalis; domos, aegyptiorum, focras fercit.

Yet now and then they come out of the earth, although it be but seldom. They heave up hills like Mole's, and they eat and devour the roots of corn and herbs. They make not very deep holes, but dig under the turfs and upper face of the earth; so that when a man walketh upon it, he may perceive it by the sinking in of his foot. Repifi the hole be opened with a Spade, they close it again as a Mole doth, but not so speedily, for they defer it two or three days together; and therefore if it be watched, they may kill her at her return by treading upon her; concerning the manner of taking them, those obervations following may be put in practice.

Their kind of Mice are driven or chased away with the ashes of a Weefil, or of a Cat mingled with water, and by sprinkling or scattering seed or corn abroad, or by some things well fodd'en in water; but the poyoning of these Mice is in the scent or favour of bread: and therefore they think it more profitable to touch the seed or corn lightly with the gall of an Ox. Apuleius doth affirm, that to foake the grain or corn in the gall of an Ox before you sprinkle it abroad, is very good against these Field-mice: also (as it is read in Geopon Grec.) it doth very much commend the gall of Oxen, whereas with him, if the seed or corn be touched, they shall be freed from the molestation or trouble of these Field-mice.

Notwithstanding in the Dog-days Hemlock-feed with the herb Heliebore is better, or with wild Cowcumber, or with Hen-bane, or being beaten with bitter Almonds, and Bears-foot, and to mingle with them just as much meal or corn, and beat and fmod them in Oyl, and when you have so done, put it into the hollow places of these Field-mice: and they will die asfoon as ever they shall taft of it. Aselin doth affirm also, that Hen-bane-feed doth kill these kinds of Mice, without the mixture of any other thing. Very many do ftop the paffages of them with the leaves of Rhododaphne, who do perifh in the time they are labouring to make their paffage, by the gnawing of them.

Apuleius also faith, that the people of Bitinava have had much experience of these things, who ftopped the paffages of these Mice with these Rhododaphne leaves, that so they defire to come forth by touching the fame often with their teeth: which truly fo soon as they shall touch or come unto, they shall presently die. But they use a kind of incantation which is this that followeth: I do adjure all ye Mice, which do remain or abide here, that ye do not offer me wrong, or fuffer me to be wronged of any other. For I do affign and appoint you this field (then he nameth the field) in which I should purprize you hereafter, I call Luna to witnefs, I will tear every one of you into feven pieces: When as thou haft writ this charm, bind paper falt to the place wherein the Mice haunt, and that before the rising of the Sun: so that the characters or marks may appear upon the outfive eaving to a natural hone of that place. I have written this (faith the Author) left any thing shou'd seem to be overskipped: neither do I allow or prove fhuch things can be done, but I rather counsel all men that they do not let their minde to any of these, which are more worthy of derifion then imitation. If thou fhal'l fill the paffages of thefe rufcical and Field-mice with the allies of an Oak, he shall be poffefled with a fervent defire to it, often touching it, and fo shall die.

Thfe Country Mice, that is to fay, thofe Mice which are found in the fields, being bruised and burned to ashes, and mingled with fresh Hony, doth comfort or reftrine the fight of the eyes by diminishing the darkefs of the eyes thereof; in what field forever you shall finde any thing, dig them up by the roots with a little flake or poll.
Of the **Wood-mouse**.

P**liny** doth oftentimes make mention of this Wood-mouse, or rather a Mouse belonging to the Wood, but he doth it only in medicines; but that it doth differ from this Country or Field-mouse we have have shewn in the chapter going before, because it doth not inhabit or dwell in the Countries or tilled places, as the Country or Field-mice do, but doth inhabit in Woods and Forrests. The Wood-mouse is called in Greek as the Country-mouse: but I think it to be a kind of Dormouse, which proceedeth from the kind of Wood-mouse. **Pliny** truly doth make the same remedy or medicines of a Dormouse, as he doth of a Wood-mouse, as I will a little after rehearse or recite unto you. Also I should have thought that a Sorex had been the same; because it is a Wood-mouse, but that, that one place of **Pliny** did hinder me, where he commendeth the ashes of a Wood-mouse to be very good for the cleansin of the eyes, and by and by after he declareth that the ashes of the Sorex were good also in the same use, as I will recite or rehearse below in the medicines or remedies of the Wood-mouse. **Agricola**, a man of great learning, doth interpret or judge the Wood-mouse to be that Mouse, to which they do appoint the name derived from **Aquilia**: but he doth account that to be the Sorex, which I will shew or declare beneath to the Slew. I do understand that there are properly two kinds of the Wood-mouse spoken of before. The one of them that which **Albertus** doth write, saying that there is a certain kind of Mouse which doth build or make her habitation in trees, and of a brown or swart colour, and having also black spots in her face, which only is called by the universal name of a Wood-mouse. Of the same kind **Pliny** doth mean, (if I be not deceived) when he writeth, that the malt of a Beech-tree is very acceptable to Mice, and therefore they have good lucceis with their young ones. The other which is peculiarly named the Sorex, which (faith **Pliny**) doth sleep all the Winter time, and hath a tail full of hair: whole shape or form we propone and set evidently before you. But that I may more distinctly handle those things which **Pliny** hath shewn us concerning the Wood-mouse; I will write her down separately, or by it itself, and afterwards concerning the Moule which hath her name derived from Fil-birds, which the Germans have left in writing, and which I myself have confidered or observed; and I oft of all I will write concerning the Sorex peculiarly and severally from the Ancient Writers.

The ashes of a Wood-mouse being mingled with Hony, doth cure all fractures of bones, the brains also spread upon a little piece of cloth; and covered with wool is good also; but you must now and then spread it over the wound, and it doth almost make it whole and strong within the space of three or four days: neither must you mingle the ashes of the Wood-mouse with Hony too late: Hony also being mingled with the ashes of Earth-worms, doth draw forth broken bones. Also the fat of these Beasts, being put to Kibes is very good; but if the Ulcers are corrupt and rotten, by adding Wax to the former things doth bring them to cicatrizing. The Oyl of a burned Locust is also very good; and also the Oyl of a Wood-mouse with Hony, is as effectual as the other. They say also that the heads and tails of Mice mixed with the ashes of them, and anointed with Hony, doth restore the clearnes of the sight, but more effectually being mingled with the ashes of a Dormouse or a Wood-mouse.

The medicines of the Wood-mouse, **Pliny**.

Of the **Nun-mouse**, Hafel-mouse, or Filbird mouse.

This Beast is a kind of Sorex, and may be that which the Germans name Ein grofs Hafelmouse, a great Hafel-mouse, so called because they feed upon Hafel-nuts, and Filbirds. The Flemings call it Ein Slipfair, that is, a sleeping Rat; and therefore the French call it by the name Le fil, where by also we have shewed already; they understand a Dormouse.
The History of Four-footed Beasts.

For this sleepeoth like that, and yet the flesh thereof is not good to be eaten. The colour of this Moufe is red like the Hafel, and the quantity full as great as a Squirrel, or as a great Rat: upon the back and sides it is more like a Moufe, and upon the head more red. His ears very great, and pilled without hair. The belly white, if also are his legs. The neathermost of his tail towards the tip white. His nothris and feet reddith. The tail wholly rough, but must at the end with white hairs.

The eyes very great hanging out of his head, and all black, so that there is not in them any appearance of white. The beard partly white, and partly black, both above and beneath his ears, and about his eyes, and the upper part of his tail next his body all black. Upon his forefeet he hath four claws or dindell toes, for he wanteth a thumb. But upon his hinder-feet he hath five. I mean upon each severally. The outside of his hinder-feet, from the bending to the tip of his nails is altogether bald without hair. And the favour of all this kindes is the smell of the vulgar Mice. They live not only in the earth, but also in trees which they clime like Squirrels, and therefore make provision of nuts and meat against the Winter, which they lodge in the earth.

The Countreymen finding in the Summer their caves and dens, do wisely forbear to destroy them, knowing that they will bring into them the bell Nuts and Fil-birds can be gotten, and therefore at one side they flock up a certain long rod, by direction whereof in the Winter time they come and dig out the den, justly taking from them both their life and store, because they have unjujustly gathered it together: Some have eaten it, but they were deceived, taking it for the Dormoufe.

Of the LASCITT MOUSE.

This Moufe is called by the Germans, Lajfitt, and also Harnebul, because of the similitude it holdeth with the Ermetine Weefil. The skin of it is very precious, being shorter then the Ermetine two fingers breadth. And forasmuch as else, there is no difference between the Lajfitt Moufe, and the Lajfitt Weefil, except in the quantity: My opinion is, that they are all one, and differ only in age.

And I am rather led to affirm thus much, because there are skins annually brought to the Mart of Frankford, out of Polonia (call'd Lajfitt) which are no other then the Weefils of Novo grodela, whole white skins are intermixed with griffeld; And thus much shall suffice to have said of this Moufe.

Of the SOREX.

I am of opinion, that this kindes of Moufe belongeth to the Hafel Moufe before spoken of, because it is wilder, hath a hairy tail, and sleepeoth in the Winter, all which things are by Pliny ascribed to the Sores; only this hindereth, that he maketh the Sorex to have rough hairy ears, and the Sorex of Germany hath bald ears. For answer whereof this shall suffice, that the other three notes being so great and pregnant, there is no cause why the want of one, and that so little as the hairs on the ears, should deprive of it his natural due and kinde. The Italian and the French use this word Sorex, for a domestical vulgar Moufe, and so peradventure did the Antients before them; but it is greater then the domestical Moufe, although Plinys Sorex be neither greater nor leffer. The Spaniards call a Sorex, Sorace, or Ratn Pequeno. The Illyrians, Viennicae Myfis, by which word also they understand a Shrew-moufe. The fibres of the intrails of the Sorex do encrease and decrease with the Moon, so that the number of them, do always answer the number of the days of her age.

Her ears as we have said are full of hairs, but in the lowest part or tip thereof. The reason of her name is taken from the skreeching voice the maketh in gnawing. For it is a very harmful biting Beast, cutting afunder with her teeth like a saw. Some do derive the Greek word from Harus, which anciently did signifie a Moufe, and therefore they call this Syraex, and Savrext, but I lift not to stand any longer upon the name, seeing the Beaf it self affordeth little worthy matter to entreat of.

It is reported by Varro, that in Arcadia there was a Hog so fat, that a Sorex did eat into her flesh, and made her nelt and brought forth young ones therein, which may very well be; for such is the nature of a fat Swine, that he will hardly rife to eat his meat, or sale himself of his excrescens: And besides, fatnes foppeth sene, burying both the Nerves and Arteries very deep: so that in the body of a man, his fattest part is least sensible. Lyscin the Emperor going about to restraine the inoficiency of the Eunuches and Courtiers, called them Tainen, Sorksefs, Palatins, that is moths and Sorices of the Court.

There was an ancient garment (as Pliny writeth) called Vefis Sortulata, and this was very preci- ous in my opinion, because it was garded or fringed with the skins of the Sorex. If this Beaff fall into any Wine or Oyl, the corrupteth the fame; and it is to be recovered by the same means, as we have formerly described in the vulgar Moufe. It should seem there was great force of
Of the Indian Mouse.

of them in the days of Hetcagabalus, for he commanded (as Lampridius writeth) to be brought unto him, not only a thousand of these Beasts, but also a thousand Weebs, and ten thousand vulgar Mice, as we have shewed before in the story of the vulgar Mouse.

When the Sooth-layers were about their divinations, Pliny writeth, that if they heard the squeaking of the Sorex, they brake off, and gave over their labour, holding it unprofitable to go any further therein: and it is also reported, that the voice of this Mouse gave occasion to Fabius Maximus, to give over his Dictatorship, and unto Caius Flaminius, to give over the Mastership of the Horlemen, such fear of silly Beasts, was begotten in the minds of gallant and magnanimous spirits, by the unprofitable and foolish behaviour and doctrines of the Magicians.

It is said by Nigidius, that these Sorics do sleep all the Winter and hide themselves like the Dormice. They also when they eat any corn, do screech and make a greater noise then other Mice, whereby they bewray themselves in the dark unto their enemies, and are killed, which was the occasion of that proverbial speech of Parmera in Terence, Ego mel indico miser, quasi Sorex territ. Saint Aufrine, and Saint Origin, do also make use of this proverb, the one in his Book of Order, the other in a Homily upon Genesis, which caused Erasius to write in this manner, Sed video ipse mei indicius capuni, that is, I have overthrown my self with my own tale. These Sorics do make hollow the trees wherein Emets or Ants breed, and there is perpetual hatred betwixt the Bittors, and them, one lying in wait to destroy the others young.

The Medicines of the Sorex.

Serenus and Pliny say, that if a woman with child do eat the finews of a Sorex, if her eyes be black, so shall the Infant be likewise;

Si praegnan.tarum captivi Soricheredit,
Dicatur fatus nigrarum lumina fingi.

The fat of these Beasts or of Dormice, is very profitable against the Palsey. The powder of the heads and tails anointed with Hony upon the eyes, refeth the clearness of sight, and with Hony at the tick, the powder and fat of a Sorex burneth, helpeth running eyes; and the same powder mingled with Oyl, cures both bunches in the eye.

There is another Mouse called by Muscaebolu, Mus Napelli, that is, a Wolf-bane-mouse: so called, because it feeddeth upon the roots of that Herb; although there be some of opinion, that it is not a creature, but another little Herb growing near unto it for a counter-poyson.

And Marcellus also maketh mention of Nafellus, and Antinellus, whereunto I should easily condescend, but that the eyecatch of Muscaebolu leadeth me to the contrary. For he writeth that he took one of them in the top of a high Mountain in Italy. And Sylvianus calleth this mouse Mus Siring, or Sucefimus, and calleth it a Counter-poyson to Wolf-bane, and that God might shew thus much unto men, he calleth it to live upon the roots of this natural vertue destroying poyson and venemous herbs.

The Indian Mouse, and divers other kinds of Mice, according to their Countries.

I do finde that divers times Mice do take their names from Regions wherein they inhabite, which happeneth two manner of ways: one, because the form of their bodies will somewhat vary: the other, because not only in shape, but also in wit they have some things in them common to Mice, over and above the Mice of our Countries; therefore we will briefly comprehend all their furnames of whatsoever regions they are in one order or Alphabet. In the Oriental parts of the world, there are great Mice, (as Alexander writeth) of the quantity of Foxes who do harm both men and Beasts, and although they cannot by their biting kill any man, yet do they much grieve and molest them.

American Vespucius writeth that he found in an Island of the Sea being distant from Ulbanda a thousand leagues, very great Mice. The hair of the Egyptian Mice is very hard, and for the most part like a Hedge-hogs: and there are also some which walk bolt upright upon two feet, for they have the hinder-legs longer, and their fore-legs shorter, their procreation is also manifold; and they do likewise sit upon their buttocks, and they use their fore-feet as hands. But Herodotus affirmeth these Mice to be of Africa, and not of Egypt; amongst the African or Carthaginian patures (faith he) in Africa towards the Orient, there are three kinds of Mice, of which some are called Bipodal or two-footed, some in the Carthaginian language Zetes, which is as much in our language as hills, some Hedge-hogs.

There are more kinds of Mice in the Cyrenaic region: some which have broad fore-heads, some sharp, some which have prickings hair in the manner of Hedge-hogs. It is reported that in Cyrene there are divers kinds of Mice both in colour and shape, and that some of them have as broad a countenance as a Cat; some have sharp bristles, and bear the form and countenance of a Viper, which the Inhabitants call Escherete, but improperly, as it appeareth by the words of Aristote in his book of Wonders.

O o 3

Herodotus
There are also some Mice in Egypt, which do violently rush upon pastures and corn: of which things Elianus speaketh, saying in this manner; When it beginneth first to rain in Egypt, the Mice are wont to be born in very small bubbles, which wandering far and near through all the fields, do affect the corn with great calamity, by gnawing and cutting afunder with their teeth the blades thereof, and waiting the heaps of that which is made in bundles, do bring great pains and losses unto the Egyptians: by which it comes to pass, that they endure all manner of ways to make snares for them, by setting of Mice-traps, and to repel them from their inclosures, and by ditches, and burning fires to drive them quite away: but the Mice as they will not come unto the traps, for as much as they are apt to leap, they both go over the hedges, and leap over the ditches. But the Egyptians being frustrated of all hope by their labours, all subtil inventions and policies, being left as it were of no efficacy, they betake themselves humbly to pray to their Gods to remove that calamity from them. Whereat the Mice by some fear of a divine anger, even as it were in battle array of observing a squadron order, do depart into a certain Mountain: The leaf of all these in age do stand in the first order, but the greatest and eldest do lead the last troops, compelling those which are weary to follow them.

But if in their journey the least or youngest do chance through travaile to wax weary, all those which follow (as the manner is in Wars) do likewise stand still, and when the first begin to go forward, the rest do continually follow them. It is also reported, that the Mice which inhabit the Sea, do observe the same order and custom.

The African Mice do usually die as soon as ever they take any drink: but thistis commonly proper unto all Mice, (as Ephesius affirmeth) where it is written above concerning the poisoning of Mice. Mice, (but especially those of Africa) having their skins pulled off, boiled with Oil and Salt, and then taken in meat, doth very effectually cure those which are troubled with any pains or diseases in the lungs or lights. The same doth also easily help those which are molested with corrupt and bloody spettings with retchings.

The kindes of African Mice are divers; some are too footed; some have hair like unto Hedgehogs: some faces of the breadth of a Weesil: but some call these Mice Cirematian: some Egyptian, as I have before declared. In Arabia there are certain Mice much bigger then Dorsmice, whose former legs are of the quantity of a hand breadth, and the hinder of the quantity of the joynct to the end of the finger: I do understand them to be so short, that nothing thereof may seem to appear without the body, except the space of the joints of the finger, as it is in Martines.

The Armenian Mice.

It is said, that the garments of the Armenians are usally woven with Mice which are bred in the same Countrey, or diversely decked with the shape of the same creature. The Author writeth, that Pliny maketh mention of the Armenian Moule, but I have read no such thing: therefore he doth per chance take the Armenian Moule for the Shrew. In Cappadocia there is a kind of Moule which some call a Squirrel. Elianus writing of the Caspian Moule, Amyntas (faith he) in his Book entituled De Meteorologius, which he doth so inscribe, faith that in Caspia, there do come an infinite multitude of Mice, which without any fear do swim in the floods, which have great and violent currents, and holding one another by their tails in their mouths, (as it is likewise reported of Wolves) have a sure and stable passage over the water.
Of the Musk-cat.

This Beasts name is derived from the Hebrew word Bofem, which signifies fweet odour: for the Germans call the same Bijem, and the Beast it self Bifembier. And the Graecians derive their Muskis of Meo and ozo, to seek, and to smell, and of Meo Muslhabis, to proceed out of their middle: because the true fligtor cometh out of the navel, as we shall shew: but I rather think they derive it from the Arabian words Meib, and Meib, and Almeib. The Italians, French, and Spaniards use Mus and Mufchi, which is derived from the later Latins; and beside the Italians call it Caprido del Musco; and the French, Chevreul du musclfe: the Musk is felf is called in Italy, Mufchi, of the Latins, Mufhum, and Mufcutum: the Thibrians, Palm; and the Germans, Bijem. The Arabians were the first that wrote any discovery of this Beast, and therefore it ought not to feeme strange, that all the Graecians and Latins derive the name from them. And although there be an unconceivable difference among Writers: about this matter; yet it is certain, that they are nece- ssarily to the truth, that make it a kind of Roe: for the figure, colour, nature, and horns, feem to admit no other similitude, except the teeth which are like a Dogs, whereas two are like a Boars teeth, very white and straight: And there be some (as Simeon Sethi, and Actius), which say he hath also one horn, but herein is a manifest er- or, because no man that ever saw one of these Beasts doth so much as make mention thereof; and therefore the original of this error came from the words of Avien, who writeth that his teeth bend inward like two horns. Cardan writeth, that he saw one of these dead at Millian, which in greatnefs, fmell, and hair reembled a Roe, except that the hair was more thick, and the colour more gray. Now the variety of the hair may arise from the Region wherein it was bred. It hath two teeth above, and two beneath, not differing absolutely from a Roe in any thing, except in the favour. It is called Musellz, they are leffer, thinner, and more elegant creatures than the Roes are. Paulus Venetus writeth thus of this Beast. The creature out of whom the Musk is gathered, is about the bignes of a Cat, (he should fay a Roe) having gros thick hair like a Hart, and hoofs upon his feet.
The History of Four-footed Beasts.

is found in the province of Cathay, and the Kingdom of Gurgeth, which is subject to the great King of Tartars.

Likewise there was a most odorous Musk-cat at Venice, which a Merchant there had to be seen, brought as he paid out of Cathay, and for proof whereof he shewed the way that he went, namely through the Euxine Sea, Cilicia, Iberia, and Albaniua, even to the entrance of Sicilia. For the Country Cathay is a part of Sicilia, beyond Iamus, neither ought this to seem wonderful, for in that place there was a Region, called by Prolemus, Randa marafia, wherein he placeth the eleventh Table of Asia. This Region is watered by the River Savr, and therein aboundeth Spikenard, and the Inhabitants call the Country wherein the bell Musk-cats are bred, Ergynul, and the greatest City of that Country Singu. The same Author writeth also, that Musk-cats are brought out of Egypt, and out of many places of Africa. In Tiberius also there are many Cities, and Beasts about those Cities called Gadery, which do bring forth the Musk, and the Inhabitants hunt them with Dogs. The Province of Cenciolue, doth also yield many of these Beasts, and likewise Syria. S. Jeron also writeth thus: Muscus & Oemanta, & pergerius muris pellicula, by which skin of the strange Mouse, he meaneth the little bag, or skin wherein the Musk of the Musk-cat is included. The Princes of Europe do nourish these tame, being brought out of the New-found World, and many other rich men especially in Italy, be delighted with the odorous favour which cometh from it. Bravissimus faith, that he saw a Merchant offer one of these to be sold unto Alphonse Duke of Ferrara, which had the Navel full of Musk. And Catherinibus Lenzus, an ancient Nobleman of Venice, had a Roe of this kinde, which he left after his death unto his heirs; and by this it doth plainly appear, that the Musk-cat is neither like a Cat, nor a Mouse, and that all those which have affirmed so much thereof, have been deceived of their own conjectural derivation of Musk or Muscus, or by the error of some Writer of the ancient Books, which instead of Magnificus Caprios a Roe, have inserted Catti, a Cat. And thus much shall suffice for the description of this Beast, and for the Regions where it is bred, except I may add the Relation of Ludovicus Romanus, who affirmeth, that the Musk-cats of Gallocat are brought out of the Country Pegus. These Bees of the New-foundland are wonderful nimble and quick, and so swift, that they are seldom taken alive; but after they are taken, by pulling out their longer teeth they wax tame. When they are prosecuted with the Hunters, and with Dogs, they defend themselves with their teeth. In some places they take them in snares, and in ditches, also kill them with darts; and so having killed them, they cut off the little bag wherein the Musk groweth, for that Musk doth exceed in sweetnefs of odor all things that were ever made by the art of man, and therefore the use of it is more plentiful then of any other thing, for they carry it about in Garments.

The place where the Musk groweth.

The natural expression of Musk.

The place where the Musk groweth, and the use thereof.

Bals of it, and include it in Gold or Silver, carrying it about, either to be seen, or because they are delicate and wanton; or to shew their riches and abundance; or to preserve themselves from putrid and flaming airs; or else against cold and moist diseases of the brain. With this the luxurious women perfume themselves, to entrap the love of their Wouers: For as the thing itself is a vice or flickness of the Beasts; so also by men it is used to vice and wickednefs; and the Venetian Matrons will never use it, and he that beareth it about him shall never perceive it himself.

Thus we have shewed already, that it groweth in the navel, or in a little bag near unto it; and it is true by Gymnula and Variorum, that when the Beasts beginneth to be lively, and prone to the rage of enery and carnal copulation, then the blood floweth to the navel, and there putteth the Beasts to pain, because it fwelleth above measure. The Beast then abateth from all meat and drink, and rowleth himfelf upon the ground, and so by the weight of his body presseth forth the humor that troubled him, which after a certain time doth coagulate and congeal together, and then rendereth such an acceptable favour, as you fee it hath. The relation whereof you shall hear out of the words of Serapion. The wilde Bees (f王先生 he) which wander to and fro in the Mountains freely, without the government of man, have in a little bag, certain putrid matter or blood, which of it self groweth to beripe, whereunto when it is come, the Beast itcheth, and is pained as it were with launcing, therefore he rubbeth himself upon thone, rocks, and trees, a great while together, for it delighteth him, whereby the thones grow white through his rubbing, and therefore in time he weareth the bag afunder, making issue unto it for the corruptible matter to come forth, which presently runneth out upon the fores, no otherwife then if it had been lanced. Then the wound groweth to be whole again, and the Beast departeth, until the like exccssne of blood come into the same place again. For every year this happeneth them.

The inhabitants of the Country know all the Hunters of these wilde Beasts, and therefore note them where they empty their bellies. For the humor so presseth out as before is declared, through the heat of the Sun congealeth and dryeth upon the thone, growing more commendable and pleasant through the Sun heat; Then come the Inhabitants, and in little bottles made of the skins of these Beasts, which before they have killed, and fo put the musk into them.

This they fell for a great price, because it is thought, (and that worthy) to be a gift fit for a King. But if this Musk be taken out of the creature by violence, then will he bring forth no more; yet expres it by his own natural art he beareth again and again. The greatest cause of this humor is the sweetnefs of his food, and the air wherein they are bred; therefore if one of them be brought into this part of the world, with Musk in his cod, it will grow to ripeness in a temperate climate.
Of the Musk-cat.

The best musk declared by thefe several Countries.

The prettiness of this thing deverveth a further treatife, for thy better direction and instruction of the knowledge hereof, both for the chofe of that which is bell, and for the avoiding and putting away of that which is adulterate. At Venice at this day it is fold in the cods, and the Indian Musk is better then the African. The brown is always better then the black, except it be of Catha; for that of Catha is black, and bell of all. There is fome that is yellowish, or betwixt red and yellow, after the very fame colour of Spikenard; this alfo is of the bell fort, because the Beauf that render it do feed upon Spikenard.

Therefore this is good to be choene, because it cannot be adulterated, and besides the tall of it is bitter, and affiaion as ever it is taile, it prefently ascendeth to the brain, where it remaineth very fragrant without refiulfance, and is not eafily diflolved. It is not bright within, but muddy, having broad grains, and equal throughout, like the wood of Builm. But according to the Regions, they chufe Musk in this fort.

Of the Indian Musk that of the Region of Sceni (called Antemnon.) they fet in the firft place, and next unto it, the Beaufs of the Sea live; The Musk of Cubit is known by the thin bladder of the Beauf wherein it is contain; but that of Gergeri, is lefs Aromatical, and more thick. The Musk of Capr is in the middle place between both, wherewithal they mingle powder of Gold and Silver, to encreafe the weight. The Musk of Salmundry is word of all, because it is taken out of his bladder or cod, and put into a glass. There are fome which prefer the Tumbafine Musk, and they fay, that the odor thereof comes from the sweet herbs whereupon the Beauf feedeth, and the like is laid of the Region of Sceni; but the odor is not equal to the other. And the Tumbafines do not gather the Musk after the fashions of others: for they draw not forth this matter out of the cod, nor yet gather it in calm weather. The Chymists, they pref forth the matter out of the ventercle, and when they have it forth, mingle it with other things, and that in cloudy and tempeftuous weather; afterwards they put them up in glaifes, and stop the mouth clofe, and fo they fend it to be fold unto the Sarizones, and to Amamau, and to Taffis, and to Habaray, as if he were a Tumbafine. When this Beauf goeth forth from the Sea, and feedeth toward the Defert, upon Spikenard, then is his Musk sweeter, but when they feed neer the Sea, it is not fo fragrant, because they feed upon Myrrh. Achilles faith, there is fome kinds of Musk like a Citron, but fuch hath not been feen in this part of the world, for our Musk is most commonly like the colour of Iron, and the favour of it like a Cyprine Apple, but stronger; and confifteth of little pieces, but it is better that hangeth together, and hath a favour of the Wildernefs: but if it be adulterated with Snakes or Birds-dung, then will it be lefer pleafant in the favour, and alfo pinch and offend the nofe.

The Hunters of Telyem, and Seni, as we have fhewed already, do kill their sweet Roe, and afterfe takes out from them their bladder of Musk, which Musk being exceped before it be ripe, ftelth strongly and unpleafantly. And then they hang it up a little while in the open and free air, wherein it ripeneth as it were by conceotion in the Sun, and thereby receiveth an admirable sweetnefs. And the like do divers Gardners use towards Apples, and fruits of trees which are gathered before they ripen. For by laying them up in a dry place, they wear away their sharpnes and become pleafant. But it is to be remembered, that Musk is the bell which doth ripen in its own cod, before it be taken out of the Beauf, for before it is ripe, it ftelth displeafantly.

There is not much perfect Musk brought into this part of the World, but the frengthen of it cometh from the vertue of the cod wherein it is put, and fo it is brought to us; but the bell is brought out of the Erit, where growh Spikenard and sweet herbs. Rodericus Luffitani faith, that our Musk is compounded of divers things, the ground whereof is the blood of a little Beauf like a Cony, which is brought out of Pegna Province of India. But the means whereby to try it may be this, after it is waigned, they put it into fome moift or wet powder, and after a little while they weigh it the fefcond time, and if it exceed the former waight, then do they take it for found, perfecft, and good, but if it do not exceed, then do they judge it adulterate.

Some Merchants when they do buy Musk flippit to their nofes, and holding their breath run Simien Parli, half a ftraw: call, afterdafts they pull it from their nofes, and if they perceive the favour of the Musk, Sylvain then do they buy it, and take it for good, but if not, they refufe it for corrupted. In fome Churches they make perfumes with Musk, and by mingling Stixas, Aloes, Amber, and juice of Roles, they make a perfume called Regia, which is the Kings perfume; likewise unto fweet waters, drawn out of the furnaces of Chymists, whereunto they add fimple Rose Water, and for this reaion certain fort of people Musk and Camphory.

Andreas Furtinarius, in his Ebrech Book of adorniing mans nature, teacheth a compofition to be made of certain Oyls, Sone, and Musk; and alfo Ointments and musked Oyls. He alfo teache how to make little round Balls of Musk, and other confecions, and, afterwards to draw a thread through the middle of them, and fo wear them about ones neck.

Some put it into Silken wool, through which they firft draw a thread, and fo diflolve it in Rose-water, afterward make it up in medicines, and ufe it as aforefaide. It may be preferved in a veffel of Lead.
The History of Four-footed Beasts.

Lead, close it stopped a long time, for the lead which is cold and moist, agree well with the nature of the Musk, and therefore it a leaden vessel being wanting, so as ye be forced to use glasses and Silver, then must you put two or three pieces of lead into it, for the better preservation, and covering the passage all over with Wax, and above all things you must avoid all kinds of Spices, taking heed that no grain thereof come into it. If while it is in the vessel it lose the favour and be dead, then it is to be recovered by opening the mouth of the Vial, and hanging it over a privy; for when the flink and evil favour cometh unto it, Contra faturam eluderit, & quasi ludendo reviviscit, it reviveth against the filthy flink, and as it were revived in that conception, faith Fidusius, Albuerus, and Petruatus.

But concerning the adulterating of Musk, I will say more in this place. First of all, the Mountebanks do corrupt it by mingling with it the liver of a Calf. Also by a root called Makir, and an herb called Saltex. Many times the dung of Mice is sold for Musk, and so great is the deceit herein, that a man may not truss the outward shape of an entire cod, for there be Impostors which can counterfeit them, and make them in all parts for the outward appearance, and fill them with certain stuffe, interposing some little true Musk among it until it have a reasonable favour, and therewithal deceive simple people.

It is also adulterated by mingling with it a little Goats blood dried, or brown Bread dried, so that three or four parts of these, will receive feaonable taint from one part of the Musk. It is also adulterated in the skin by putting pieces of the skin into it, and it may be known from the true Musk, because it will weigh twice as heavy. The Sarazen uses this shift above all others, and there is one principal way of making counterfeit Musk, which is this; they take Nutmegs, Mace, Cinnamon, Cloves, Gilly-flowers, and Spikenard, of every one a handful, all these being beat diligently together, and dried and sifted, they are mingled with the warm blood of a Dove, and afterwards dried in the Sun, then are they seven times sprinkled over, or moistened with the water of Musk-roes, and by twixt every sprinkling they are dried; at length they mingle therewithall a third or fourth part of true Musk, and then sprinkle it over again with Musk-rofe water, so divide it into three or four lumps, and take the white hairs from under the tail of a Roe or Kid, and do put it in a vessel of glasses.

Benyvine, white Wax taken out of a new Hive of Bees, the rotten part of Eve-tree, and a little Musk, are mingled all together to make a counterfeit Amber, for it will smell like Civet, or Musk, or else Strax, and the powder of Lignum aloes, with Civet, and Rose-water; but the fraud in one and other is easily depredated, for both the odor and the colour are different from the true Amber, and also it will sooner waxed in water, then that which is natural.

Some do corrupt their Musk with the feed of Angelica, or rather with the root of it, because the root fenneth sweeter like Musk, but the coenzyme may be easily discovered, by putting it into water: for the Angelica will sink, and the Musk will swim. The true Musk is fold for forty millions an ounce at the leaf. It is also observed by Arnoldus Villanovanus, that in the presence of Alfa fistida or Caffireum, the bell Musk will have a horrible and intolerable favour, although they touch not one another, which cannot be ascribed to any known reason, but to some secret in nature. The sweetnefs of the Arabian Musk is described by Alesius in this verce;

Et celebris sauci est unguine Muscum Arabum.

There be divers herbs which smell sweeter like Musk: as Angelica, Dorris, Musk-gilliflowers, Musk-grapes, the leaves of a Winter Cherry, and an herb growing near Basul without a name, like wilde Parley, the Damasfine-roe, and many other. Wilde Cats and Martins do also render an exceent much like Musk; and there are Hares called Mofchite, which leave fuch an intolerable smell in the impreffion of their foot-steps, that the Dogs by touching them grow mad, as we have flewed in the story of the Hare: And thus much for the description of this Beast; now followeth the medicines.

The Medicines of the Musk-cat.

A very little part or quantity of a Musk-cat is of great vertue and efficacity; wherefore it is very sparsely used in medicines or potions, neither is there any part thereof beaten or bruised, as it is of all other Beasts; but it is melted and dissolved in water which proceedeth from the sweeted Rofes. It is also a Beast which is very hot and dry, but rather more dry then hot, yet not withstanding the fame his heat is affwaged and allayed by no other thing but only the Gum called Campfire; and his drinfe is only moistened or mollified with Oyls, and very sweet, as Oyl of Viblet; and Oyl of Rofes. Amongst sweet finnes and favours, the principall and chiefest laud and commendation is attributed unto the smell which proceedeth from the Musk-cat: For he doth not only with his odorous and delightful favour pleaseth and contenteth the fcent of men, but also doth strengthen the spirits, and all the parts of mans body, yea and that in a moment, for the flendernefs of his parts, which although it doth forthwith penetrate or enter into the fcent of man, yet doth it endure longer, and is not so speedily or quickly dissolved as the feare or favour of any other sweet smell whatsoever.
A Musk-cat and the herb called Mercury's-fingers or Dog's bane, being given in purging medicines to drink, do greatly renew and refresh the decayed strength or force of those which have been before times weakened with divers and continual medicines in their members. The fame is also very profitable for those which are effeminate or defective, and eclipsed in their mind or courage, as also for those which are weak and feeble in their joyness, not by any hurt, or any other calamity being enfeebled, but being always so even from their childhood. A Musk-cat is an excellent remedy for those which are troubled with fear in their heart; and also for those which do commonly forget whether of any other thing throughout all the parts of their body. The fame is also very profitable and medicinal cure for those which are grievously vexed with any itch or pain in their head, or with any enormity or trouble in their liver, and also being given simply by itself, without any thing mixed in it, or compounded in Wine, very good and wholesome for the healing and curing of those who have any pain or grief in their stomach, which cometh by the occasion of any cold.

A Musk-cat being put unto the body of any man in the form or manner of a plaister, doth confirm and make strong both his heart and all the reit of his bowels, or interior parts; it doth moreover encreafe both strength and power in all his members, yea and in the very bones, the efficacy thereof is of such and power and vertue. The fame being laid or anointed upon the head is very effectual for the expelling or driving away of the rheume which falleth from the head into the nostrils, and by that means procureth heavines in the fame; and for the amending and curing of the swimming diszines or giddines in the head through the abundant humors which remain and stay therein, and also for the bridling and restraining of luft and venery.

The fame being used in the aforesaid manner doth temperate and confirm the brains of any man, besides it caufeth and helpeth those which have pain about their heart, by the which they suppose their very heart to ake. The smell of this Bealt is both profitable and hurtful; for unto those which are cold of constitution, the fcent is very pleafant in regard that it is hot of it fell, and is very delightful in their favours; but unto thofe which are hot of nature it is very noifome, in regard that the heat and strong fcent thereof overcometh their fenfes, and oftentimes caufeth their heads to ake, and be full of pain; and doth alfo fir up in them that peliferous disease called the Falling-ficknes: but unto women which are of a hot and fiery constitution it is more hurtful and noifome, for it breedeth in them a very peliferous disease, which choaketh their Matrice or Womb, and caufeth them oftentimes to fwoond, it is alfo called by fome the Mother. The freenings of a Musk-cat is an excellent remedy againft the refolution of the finews or the Palfe. A Musk-cat is very good and wholesome for the helping and curing of those which are troubled with any deafeines or aflorntment in any part of their bodies; as also for the driving away of melancholy and forrowful affiations out of mens minde, and for the inciting delightful mirth and pleafure in them.

A Musk-cat being mingled with dry plaisters which are used for the healing of the eyes, is an excellent remedie for the expelling and driving away of the white skin which doth ufually cover the fkin, and for the drying up of moist rhuines and humors, which in the night time do fall from the brain and the head, and by that means doth much hurt and damage the fight of the eyes, as alfo for the clarifying and healing up of any pain or diseafe therein.

A Musk-cat is an excellent remedy for thofe which have a defire to vomit and cannot, it doth alfo renew an appetit or rambach in thofe unto their virtuall which do loath and abtain from all futeinance, and doth loofen and diffolve all thick puffings or windines in the interior parts or members of any one.

A Musk-cat being mingled with a caufick medicine, is very profitable and wholesome for the bringing forth of thofe Womens menfes or fluxes which are stopped, and alfo for moving conception in thofe women which are hindered in it by the occa fion of some great cold. A medicine or suppository being made of Ambergreefe, and mingled with a gum comming out of Syria called Strax, and then mixed both together with a Musk-cat and fo beaten, until they come unto a certain falve, and laid unto the secret parts of a woman, is very good for the aforesaid disease. There is a certain juice or moifnes in a Musk-cat which being preffed forth or diffolved, and mixed with the Oyl called Palm Chrifti, and anointed upon the yard of any man, doth fir him up to luft and venery. If the leaft part of a Musk-cat be eaten by any one which is troubled with a finking breath, it will presently expel and take away the think thereof. And thus much shall fuffice concerning the cure and medicines of the Musk-cat.

Of the MULE.

The Mule is a Beaff, called by the Hebrews, Pered, from whence comes the feminine Pirdah of The fefedt.

King 1. and there be fome that fay that the rehnen of the Hebrew word is , from the separa tion and feriality of this Beaff, for it is Pered, quia non parsit. The Chriftian word is Cadama, the Arabi- an, Beaff; but Gen. 36. for the Hebrew word fium, many tranflate Mules. The Arabians, Kegi; but the Gracian Septuagints, Hemonus. The Gracian alfo call a Mule Aftrob, from the firmane of his body. The Latins call a Mule Mulus, and Semifius, that is, half an As, because on the one side he is an Horfe, and on the other side an As, and therefore in his conditions he more resembles

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an Ass then an Horse, whereupon lyeth this tale. A certain Lydian Mule seeing his Image in the water, grew to be afraid of the greatness thereof, and thereupon took his heels and ran away as fast as he could; neither could he be stayed by all the wit of his Keepers: At length the Mule remembering that he was the son of an Ass, he stayed his course and came back again neighing. The Italians call a Mule Mulo, and the female Mula, like the Latins, and the Spaniards. The French, Mule, and the female Mule, from whence cometh the English word Mule. The Germans, Mulehen, or Malehen. The Illyrians, Malek, and the Flemings, Male.

Divers kindes of Mules.

There is another kind of Mules in Syria, divers from those which are procreated by the copulation of a Mare and an Ass, and they receive their names from the similitude of their faces. For there is no other cause, why wilde Asses should be called Asses, but only their similitude of tame Asses. And as among wilde Asses some of them are singularly swift, so also among these Syrian Mules, there are some excellent speedy Courfers. These Mules procreate in their own kind, and admit no mixture, which Aristotle proved by nine of them which were brought into Phrygia, in the dayes of
Of the Mule.

Pharnaeus, the father of Pharnabazus. Theophrastus also reporteth, that in Cappadocia, the Mules engender among themselves, which A'rfula remembrith in his wonders, and he might well have spared it, for they are a kind of Cattell among themselves. There be flocks of Asfs and Mares in India, where the Mares do willingly admit the Asfs in copulation, and bring forth red Mules, the bift of all other for running.

But among the Indian Phlylians, their Asfs, Mules, Oxen, and Horses, are no bigger then Rams. As the Mule is begotten betwixt an As and a Mare, so the Burdon is begotten betwixt a Horfe, and a Shee-as, wherefore the Indians call him Mule Baffardo, that is, a Baffard Mule. For as the Mule more reclencheth the As then the Horfe, fo the Burdon more reclencheth the Horfe then the As; the reafon is, because all kindes follow the father. The Mule have some parts proper to the As, as long ears, a terrible voice, a crofs upon the shoulders, small feet, a lean body, and in all other things it reclencheth a Horfe. The length of their ears ferveth instead of their fore-top, their colour is somewhat brown, but it varieth; for the Romans Cardinals have Mules of an ash-colour, and those very great ones with long tails.

They change their teeth, and have in number fix and thirty, their neck is like the neck of an Asf, long, but not standing upright, their bellies simple and of one quantity, They want a gall like all four-footed Beasts; and there is a thing in their heart like a bone, as we have shewed before in the story of the As.

They eat fuch food as Horfes and Asfs do; but they grow fat by drinking, yet they drink not like a Horfe, by thrifling in their nofters into the water, but only touch it with their lips.

They love Cucumbers above all other meats, but the flowers and leaves of Rhododaphne are poftion to Mules and Asfs, and to many four-footed Beasts. Both a Mule and a Horfe grow from the birth coming forth of their teeth, (by which their age is discerned) and after all their teeth are come forth, it is hard to know their age. The females in this kind are greater, more lively, and live longer then the males. It hath been found that they have lived to four-score years of age. Such a one was presented at Athens, at what time Pericles builded the Temple of Minerva, where by reason of his age, he was dehifhed from all labour yet afterwards he would not forfake his companions, but went, exhorting them with neighing to undergo the labour cheerfully; whereupon there was a publick decree, that the said Mule should have an ordinary of provender appointed him in Pytium, and that no body should drive him away from their Corn when he eat it, although it were in the Market place.

We have shewed already that this Beast is engendered betwixt an As and a Mare, and therefore if a man would create unto himself a notable breed of Mules, he must look to the choice both of his male and female. First of all for the female, that the be of a great body, of sound bones, and of fingular good shape, wherein he must not so much expect her velocity or aptnes to run, as her strength to endure labour, and especially to bear in her womb a discordant foal, begotten by an As, and to confer upon it both the properties of his body, and the disposition. For when Mares do unwillingly receive the genital seed of the As, the foal doth not grow to perfection in the Mares belly, until the hath been thirteen months, whereby it reclencheth more the left and dull nature of his father, then the vigour of his mother. But for the helping of their copulation, they pull certain hairs out of the tail of the female, and afterwards binde them together therewith.

There is no lesser regard to be had of the Stallion, left the want of judgement in the choice of him do frustrate the experiment; seeing therefore they are engendered betwixt a Mare and an As, or betwixt a Mare and a wilde As, and the Mule, begotten betwixt the wilde As and the Mare, both excel all others, both for swifhnes of course, hardnes of foot, and generofity of stomack; yet is the same As better for this breed then the wilde As, for he will be more beautiful in outward form, and more tractable in disposition; and the Mules engendered by wilde Asfs may be compered to these; yet can they never be fo tamed, but they retain some qualities of their wilde father; and therefore a Mule begotten betwixt them (I mean betwixt a wilde male As and a tame female As) are fitter for Nepheus then for foons: that is, their foals may beget good Mules, and such as are tameable and tractable, becaufe decent breafteth the corruption of nature, but themselves do never prove profitable.

And therefore it is moft commodious and neccessary to get such a Stallion As to the procreation of Mules, whose kinde by experiment is excellent, and outward parts every way acceptable, such as these are: a long and great body, a strong neck, strong and broad ribs, a wide breath full of muscles, loins full of finews, strong compacted legs, of colour blackish or spotted, for the Moufe colour isjtoo vulgur, and is not fit in a Mule. For it is but folly in a man to allow and approve every colour he looketh upon, and therefore (Columnella writeth) when there are spots upon the tongue and palat of a Ram, fuch also are found in the Wool of the Lamb he begeth.

And to foal if an As have divers coloured hairs upon his eye-brows, or upon his ears, the foal he bringeth forth hath fuch colours in his skin; And hereunto agree both Palladius, and A'rfulus, saying; he that will have a good breed of Mules, must get an As of elegant form, a great stature, square members, a great head not like a Horfes, his face, cheeks, and lips not small, his eyes standing out of his head, and not little or hollow, broad noftils, great ears, not hanging down, but standing upright; a broad and a long neck, a broad breath, rough with the plaights of his muscles, 

and
and strong to endure the kickings of the Mare: great breasts, plates, and other parts under his shoulders, and so down to his legs, which ought to be strong, broad, and corpulent, and standing far forward, so as he may easily cover the Mare.

A great back, and broad back-bone, neither hollow, nor standing up with bunches, bearing a direct line upon the middle. His shoulders not low, but standing up, the hip-bone full and long; not bending too narrowly nor pinde buttocks, nor standing out sharp, and they are bent which have the shortest tails.

Furthermore let his bones be great, his knees great and round, standing both alike, his legs bony and without fleth, nothing appearing in them but nerves and skin; nor standing awry, nor yet of divers colours, his patterns not high, nor yet over low: his feet not low nor bending inward; his hoof thick and hollow within; the inward part of it being clear, according to the saying of Juvenal:

Namque mundus niter ungula Mule.

His voice clear and not hoarse, for so the Mare will be terrified from copulation. His colour ought to be likewise clear, as all black, having no white belly; or somewhat looking towards purpure, and having one black spot upon his mouth, or rather a black tongue, and such as hath been brought up with Horses.

It is the fashion of some to take wilde Asses to tame them, to make Stallions for generation, for they beget the beast Mules, if they be liberally fed and not inclofed, and never wax wilde again if they be put among tame Asses. And the young one so gotten by him, will be like the sire: and if any have a desire to make the Mules of strange colours, they must cover the female with a cloth of that colour, wherewithal they desire the young one to be foaled, as we have shewed already in the discourse of Horses, whereby there are raised many excellent kinds and races; or else they bring in their presence at the time of their copulation some great Male Horse or Afs, by the flight whereof they are made more fruitful, or again, some base and despifable Beast being offered to their view, doth make them to conceive more noble Mules.

If the wilde Asses be at any time heavy, and not willing to cover the Mare, then let there be another female Afs brought into the presence, by the flight whereof his lust doth burneth, that he rages almost to madness for copulation: And therefore being denied, the Afs doth more willingly leap upon the Mare, whom before he loathed. Again, it must be regarded, that the Stallion be tyed and bound fast, so that he may not cover the Mare after the is with foal, nor yet have access unto her, lest by kicking and biting he cause abortion, for many times they break their bonds alinl, and greatly trouble the females with young, therefore they are accustomed to some labour, which taketh down the heat of their lust: yet at the time that they are to cover the Mares, you must use all diligence to awaken the drouifie nature of the Beitl, so that with greater spirit the seed of the male and female may meet together.

The Asses of Lybia will not cover Mares that have manes until they be shorn off, for it seemeth they diddian that their females should have more ornaments then themselves, which are their husbands.

We have shewed already in the discourse of the Afs, that Mares do not willingly admit any Stallion Afs to cover them, except it be such a one as did fuck a Mare, which we called a Horfe-fucking, or Equinomy. For this cause men that propound unto themselves to nourish races of Mules, take the Colt of an Afs so soon as it is foaled, and put it to a Mare, giving milk in some dark place, wherein the Mare not doubting any fraud, is deceived, and willingly yeeldeth her udders to the Afs foal; whereunto being accustomed for ten days together, at last the taketh it for her own; and such a Stallion Afs loveth Mares exceedingly: and on the other side, the Mare refuseth not him. And some fay, that although they fuck their mothers milk, yet if from the time of their weaning they be brought up among Horfe-cots, it is as good as if they had sucked Mares.

If the Afs be small which is a Stallion, he will quickly wax old, and his issue be the worse, therefore they must provide the largest and strongest Asses, and nourish them with the best Hay and Barly, that so his strength may abound before his copulation. He ought not to be under three years old, nor yet brought unto a Mare which never knew Male, for such a one will beat him away with her heels and mouth, and bring him into perpetual hatred with that kind; wherefore they use to bring some vile and vulgar Afs into the presence of the Mare, as it were to woo her, and provoke her to copulation, that so if she beat him away, it may be no hindrance to the Stallion; but if she seem to admit him, and desirous of copulation, then they take him away, and bring the appointed Stallion into his room, and so the Mule is engendered.

For the effecting of their copulation, there must be a place appointed for the purpose, betwixt two walls, having a narrow passagge, that so the Mare may not have liberty to fight with the Afs, and the Mares head must be tyed down to a Manger or Rack, the ground being so fashioned, that her fore-feet may stand much lower than her hinder, and so affend backward, to the intent that the Afs may more easily leap upon her back, and she receive the feed more deeply. When the Mare hath brought forth the Mule, the giveth it fuck half a year, and then driveth it away, which ought to be brought up in some Mountains, or hard places, that so the hooys may grow hard and indurable. Having
Of the Mule.

Having thus discoursed of the generation of Mules, it now followeth, that we should enquire, whether Mules thus engendered betwixt an Ass and a Mare, do likewise bring forth in their own kind. Observationem eff (Faith Pryn) & duobus diversis generebus tertius generebus, & neutri parentum effe similis, caus; idque esse nata juxta, non gignere, in omnino animalium genere, idicris Mula non parere. That is to say; It hath been observed, that out of two divers kinds, a third hath been engendered, and yet like to neither of the parents, and thofe so engendered did not procreate others in the universal kinde of Beasts, or among all creatures; and therefore Mules conceived betwixt Asses and Mares, do not bring forth young. Whereupon Camerarius made this pretty riddle of a Mule:

Diuersia patri, matri diversa figura
Confusi generis, generi non apta propaga,
Ex aliis nascere, nec quiquam nascitur ex me.

Democritus is of opinion also, that Mules cannot conceive, and that their secret places are not like other Beasts, and the issue of confufed kindes can never engender, but especially in a Mule, because it is made of divers sex, (I mean divers in quantity, and almost contrary) for the seed of the Ass is cold, and the seed of the Mare is hot.

Aristotle disputing of this matter concerning thofe kindes that are procreated of divers parents, writeth in this fort: thofe Beasts joyn in copulation, whole kindes although they are divers, yet are not their natures very disagreeable. If the quantity and if nature be alike, and the times of going with be young equal, yet they remain barren that are fo begotten, of which cause Empedocles and Democritus yeeld reason: Empedocles obfcurely, and Democritus more plainly, but neither of them both well; for they alleadge the fame demonstration about all Beasts out of their kinde. Democritus faith, that the paffages of the Mules are corrupted in their wombs, because their beginning doth not consist of one and the fame kinde; but this is no reason, for that it happeneth also to other Beasts that do engender.

Empedocles he yeelds a reason out of Plutarch, about the joynynge together of the seeds, and therefore compareth it to a commixtion of Tin and Brafs together, but he faith he doth not understand their meaning, and therefore procedeth to express his own opinion in these words. Firt (faith he) every one of the Mules do beget one of their own kinde, but the females cannot conceive, and this is no great wonder; because that Horfes are not alwayes fit for generation, nor Mares to bring forth Colts being covered: and therefore when Asses and Mares do couple together, their issue may be more barren, because they receive the greater hinderance in the diversitie of kinde; for besides the coldnes of the Asses seed which may be one great caufe of his barrenness, they have another property, if they do not breed and engender before the caufing of their Colts-teeth, they remain sterile and barren all their life long: for so doth the generative power of the Asses body rest upon a tickle and nice point, apt to rife, or easie to fall away to nothing.

And in like fort, is a Horse prone to barrenness, for it wanteth nothing but cold subftance to be mingled with his seed, which cometh then to pafs when the seed of the Ass is mixed with it, for there wanteth but very little, but that the Asses seed waxeth barren in his own kinde, and therefore much more when it meeteth with that which is befitting his nature and kinde.

This also hapnyeth to Mules, that their bodies grow exceeding great, especially because they have no menilurous purgation, and therefore where there is an annual breeding or procreation,by the help and refreshing of thefe flowers, they both conceive and nourish; now these being wanting unto Mules, they are the more unfit to procreation.

The extremities of their body in this kinde they purge with their urine, which appeareth because the male Mules never smell to the secrets of the female, but to their urine, and the residue which is not voided in the urine, turneth to encrease the quantity and greatness of the body, whereby it cometh to pafs, that if the female Mule do conceive with foal, yet is the not able to bring it forth to perfection, because those things are dispersed to the nourishment of her own body, which should be employed about the nourishment of the foal: and for this caufe, when the Egyptian describe a barren woman, they picture a Mule.

Alexander abridgeth writeth thus also of the ferility of Mules. Mules (faith he) seeme to be barren, because they confift of Beasts divers in kinde, for the commixtion of seeds, which differ both in habitt and nature, do evermore work something contrary to nature, for the abolishing of generation; for as the mingling together of black and white colours doth deftroy both the black and white, and produce a swart and brown, and neither of both appear in the brown; so is it in the generation of the Mules, whereby the habittual and generative power of nature is utterly destroyed in the created compound, which befor was eminent in both kinde, simple and several. These things faith he.

Alamanus, as he is related by Plutarch, faith, that the male Mules are barren by reason of the thinness and coldnes of their feed, and the females because their wombs are shut up, and the veins that should carry in the feed, and expel out the menilurous purgation, are utterly Roff. And Empedocles and Dioscorides say, that the womb is low, narrow, and the passages crooked that lead into it, and that therefore they cannot receive feed, or conceive with young. Whereunto I do alfo willingly yield.
yield, because it hath been often found that women have been barren for the same cause. To conclude therefore, Mules bear very seldom, and in some particular Nations if it be natural, or else their Colts are prodigious, and accounted monsters.

Concerning their natural birth, in hot regions where the exterior heat doth temper the coldness of the Affes feed, there they may bring forth. And therefore Columella and Varro say, that in many parts of Africk, the Colts of Mules are as familiar and common, as the Colts of Mares are in any part of Europe.

So then by this reason it is probable unto me, that Mules may engender in all hot Countries, as there was a Mule did engender often at Rome; or else there is some other cause why they do engender in Africk, and it may be that the African Mules are like to the Syrian Mules before spoken of, that is, they are a special kind by themselves, and are called Mules for resemblance, and not for nature. It hath been seen that a Mule hath brought forth twins, but it was held a prodigy. Herodotus in his fourth Book recorded these two stories of a Mules procreation; When Darius (faith he) besieged Babylon, the Babylonians scorned his Army, and getting up to the top of their Towers, did pipe and dance in the presence of the Persians, and also utter very violent & opprobrious speeches against Darius and the whole Army, amongst whom one of the Babylonians said thus: Quid quis deinde astro, quantasque abscidit, tunc expugnaturis nos cum perevertint Mule. Oye Persians, why do you fit here? wisdom would teach you to depart away; for when Mules bring forth young ones, then may you overcome the Babylonians. Thus spake the Babylonian, believing that the Persians should never overcome them, because of the common proverb, opem emissioni tequit, when a Mule beareth young ones. But the poor man spake truer then he was aware of, for this followed after a yeer and seven months: While the siege yet lasted, it hapned that certain Mules belonging to Zopirus, the son of Megabizus brought forth young ones, whereat their Master was much moved, while he remembered the aforefaid song of the Babylonian, and that therefore he might be made the Author of that fact, communicated the matter with Darius, who pretently entertained the device; therefore Zopirus cut off his own nose and ears, and so ran away to the Babylonians; telling them that Darius had thus used him, because he perfwaded him to depart with his whole Army from Babylon, which (he said) was in expugnable and invincible. The Babylonians seeing his wounds, and trusting to their own strength, did easily give credence unto him; for such is the nature of men, that the belt way to beguile them is, to tell them of those things they most desire, for so are their hopes perfwaded, before they receive any assuredness. But to proceed, Zopirus insinuated himself further into the favour of the Babylonians, and did many valiant acts against the Persian, whereby he got so much credit, that at last he was made the General of the whole Army, and so betrayed the City unto the hands of Dar-ius: Thus was Babylon taken when Mules brought forth.

Another Mule brought forth a young one, at what time Xerxes passed over Hellespont, to go against Græcia, with his innumerable Troops of Souldiers, and the said Mule so brought forth, had the genitals both of the male and female.

Unto this may adde another story out of Suetonius, in the life of Galba Caesar. As his father was procuring Augurins or Divinations, an Eagle came and took the bowels out of his hand, and carried them into a fruit-bearing-§ock, thenquiring what the meaning of that should be, received answer, that his posterity should be Emperours, but it would be very long first: whereunto he merrily replied: Saepe cum Mula perepetis: I fir, when a Mule brings forth young ones: which thing afterwards happened unto Galba; for by the birth of a Mule, he was confirmed in his enterprises when he attempted the Empire; so that, that thing which was a prodigy and cause of sorrow, and a wonder to all other people, was unto him an ominous confirmation of joy and gladness, when he remembered his Grand-fathers Sacrifice and saying. Therefore it was not ill said of Demetrius: Mule non natura opus, sed humana machinatione, adulterinum inventum, & satrum esse videntur. Mules are not the proper work of nature, but an adulterious invention of humane policy, robbing nature: for (faith he) when a certain Median found his Afe covering of his Mare, upone whereafter he fel to be with foal, and seeing the young one to communicate with both natures, they drew it into a custum to cover the Mares with their Affes, for the engendering of such a breed.

Some are of opinion that Mules first began among the Paphlogonian, which before the Trojan war were called Enei, and afterwards Veneti: but in Gen. 36. we finde that Aahub the son of Zibeon, keeping his fathers Affes, did invent Gemim, that is, Mules, as some interpret. But rather I believe, that while Affes and Horfes ran wilde in the Wildernefs among themselves, the wilde Affes first began this race. The male at seven years old may engender, because he is of a hotter nature than the female, and also doth not in his generation confuer any part of his bodily growth to the young one; and sometimes he engendereth when he hath lost his foremoft teeth, and after the first copulati- on, he never engendereth more. The young one so generated, is called Gimmus and Pamilus, for it is a very dawr, according to the observation of Martial:

His ubi de Mula non est meandrum vivus,
Affus in terris non sedere solus.

Such as these were kept in the Court of the Duke of Ferraria, and although in all things they resemble the mother, yet are named after the father, and such also are the Bardem before spoken of.
They are nourished with the same meat that Horfes and Affes are, annoyed with the same fickneses, and cured with the same means; generally blood-letting is good for them, and for their diet Bullimung. In Sythia they can abide no cold, and therefore the Horfes are there fed in bed of Mules. In some Countries the Horfes can abide no cold, but the Affes and Mules bear out (as Herodotus writeth,) and as we have thewed before in the Ritory of the Affes: when the Graecians were at Troy, and were destroyed by a confuming pestilence, the fift of all their company that dyed were their Dogs and their Mules, and the reafon of it was, because the pestilence arifing out of the earth, they by the fene of ftimming, which is very quick in both kindes, did dift of all draw in that poiy from them.

Columella faith, that the medicines for the Oxen do alfo cure Mules, yet there are special medici
cites not to be neglected, which we will express in this place. For a Mule that hath a Fever, give
her raw Cabbage; and for one that is short-winded hee blood-letting, and for a drink give it a pinte
of Wine and Oyl mixed with half an ounce of Frankincense, and half a pinte of the juice of Horeb
hound. For the scratches or difeafe in the hoofs, lay to it Barley meal, then make suppuration with
a knife, and cure it by laying two linen clothes, or by a pinte of the bift Garum, and a pound of Oyl
infud into the left nothus of the Mule, whereunto you may add, the whites of three or four Eggs
seperated from the yolks.

The female Mule may be burned in the feec, or let blood after the manner of Horfes, and some
Countrymen give in their food the herb Veretrum, or else the feed of Hyoscamus or Hen-bine taken
to powder and drunk in Wine. For the languishing of the chine or leannees, they make this drink;
have an ounce of beaten Brimfomé, a raw Ee, a penny weight of the powder of Myrrh; mingle
led all three together in Wine, and so poured down the Mules throat, is a preffent remedy to cure it.
As also for the pain in the belly and all manner of coughs, the herb Medicus is special good for
the said languishing difeafe. So alfo to fatt the Mule if it be given green, and not dryed like Hay,
a little at a time for the Beatt be fufficent with overmuch blood. When a Mule is tired or heated,
et the load be taken off, and turn her forth to wallow in fome convenient place. If that suffice not, take fome fat, and put it into her chaps; that fio the may fufficent down, and pour Wine
after it.

For to keep the necks of Mules from wringing and loofening their skin, use this medicine, take
two pound of Hoggs-grafe for three days, or unto the third part two pinte of Vinegar, and there
withal anoint the Mules neck. As we have thewed that the pains of a Horfes belly and guts are hee
of all cured by the fight of a Mallard, swimming in the water, whereby they are speedily delivered
from all manner of torment, to the fame hath as great or greater operation to cure the pains of the
Mules belly. It is reported by Avicen, that Mules fell into madness, and in that madness bite their ma
fer mortally. They are likewise fubjet to the Gout, and especially to swellings about the Crown
of their patterns, but they are cured as Horfes and Oxen.

The Mules live long, ordinarily to fifty years, and sometimes to fourtie and foure; the reafon thereof is given by Columella: Animelae qui frequenter consumbunt braciam fumvit vine, inde fit, ut Mules ejus superent, videndi quarumq
naturat, that is to fay, Thoie Beatts and creatures which oftentimes joyn in copulation have but fhort
lives, and from thence it cometh, that Mules live longer then Horfes.

The Epiftills of a Mule are thefe; pack-bearer, dirty, Spanifh, rough, and bi-formed. There is
an Adage or proverb called Mules Maritimus, and by it is figurative a man which is apt both for to obey
and to rule; it was taken from Marcus the great Roman Souldier and Commander, whose fashion
was, when he had commanded any of his Souldiers to fetch a burden, or do anyvide service, he
himfelf would put his hand unto it. It fignifieth properly a back, or Colt-Haffe, as we fay in English, whereupon poor men carry their burdens, and from thence it was tranflated into
to a proverb, to fignifie all that do obey commands. There be fome which give another reafon of
this proverb, for they fay, that when Scipio did besiege Numantia, he did not only determin to
look into the weapons of his Souldiers, but alfo to his Horfes, Mules, and Cartiers. Then Marcus
brought forth an Horfe, nourished by himself very delicately: Besides the Horfe a Mule of very
comely body, far excelling all other Mules both in gentlenenes and in strength. Therefore feeing the
Emperor was delighted with the Beatts of Marcus, and would now and then make mention of
the Mule, at length it came to a common jeft, to call a double diligent fervant Marcus Marnitu.
The Italians do commonly call thofe men Mules which are bafe born, and not by lawful
marriage.

Concerning the difposition of Mules, it is well obferved by Arifotle, that Mules are always
tame; and if at any time they be more wilde, they abate their untameable nature by drinking of
Wine, because by the operation of the Wine, their heels and hard parts do resolve and grow fof; by
the fame reafon that Apes by drinking of Wine loofe their nails, and men acclimatized to drunken
nels fall into paffives: for there is fuch a difpersing and difculping nature in Wine, that it diflofeth
all nerves and hard things in the bodies of Beatts, even as water diflofeth hard fruits and
Peafe, and Vinegar maketh lead as fof as an Egg; that it may be drawn through a Ring: and fuch is
the nature of Mules, that after they have drunk Wine, they feel themselves difarmed, and there
fore give over to refit, because by kicking backwards, they receive more harm then they give,
The History of Four-footed Beasts.

Mules were wont to be used for plowing, and for carrying both of men and burthens; but now in most parts of Europe, Judges and great Princes ride upon them until they be old, and then they sell them to the poor men, who turn them into the Mountains where they suffer them to run wild, till their hoofs be hardened for long travels, and then they take them up again. They have been also accustomed to ploughing, according to these verses;

Quantum mularum fulcos precedit in arvo,
Tantum in praecurrit.—

For the Mules did plough more speedily, and come to the lands end more quickly then either the Ox or Horse. And Martial, that they were used in Carts to draw Timber, according to these verses;

Visq; datur longos Mulorum vincere mandras,
Queq; trabi multa marmora vide  vide.

They were also used in race at the games of Olympus, as we have already shewed in the story of the Horse, but that custom dyed quickly, because that the Arcadian could not endure Mules. The price of Mules was great, for Crispus (faith Juvenal) gave six thousand pieces of mony for a Mule, and yet he faith it was not well worth fix pound; the verses of Juvenal are these:

—-Crispinus Mulam sax millibus emit
Equam fame paribus feftertia libris,
Ut perhibent qui de magis horie majoquarius.

The Cappadocians payed to the Persians every year besides Silver and Gold, fifteen hundred Horses, two thousand Mules, and fifty thousand Sheep, but the Medians payed twice so much. The dwarfh Mules called Gani were also much let by, not for use, but only for delight, as dwarfs are kept in Noblemen's houses. When Pylustratus the son of Hippocrates first of all affected Tyranny at Athens, and laboured to get the government to himself, as he came out of his Country, being drawn with a Chariot by Mules, he wounded himself and his Mules very grievously, and so drave them into the Market place, shewing his wounded body and Beasts unto the Athenians, telling them that fo he was wounded by his enemies, and that he escaped death very narrowly, but if it pleased them to grant him a guard of Souldiers to defend his body, he would take revenge upon their and his enemies whereunto they yeelded, and he having gotten a Band of Souldiers under that pretence, presently took upon him the government and Soveraignty.

To conclude this Story of Mules, I do read in Plutarch, that Serpents do love to feed on the flesh of dead Mules; and two things are very eminent in the nature of Mules, one of their understanding, and the other of their friendship. Concerning the first, Plutarch relateth this story of a Mule that was accustomed to carry Salt, who upon a season going through a water, fell down underneath his burden, so that the Salt took wet afterwards; the Beast perceived how by that means, his extream load melted away, and so became lighter and lighter; afterward the Mule grew to this custom, that whensoever he came loaded with Salt over that water, he fell down in it for the easing of his carriage; his Master perceiving his craft, on a day he loaded him with Wool, and Spunges, and so the Beast coming over the water, fell down as he was wont to do with his Salt, and coming out of the water, he felt his load to grow heavier then it was wont to do, in stead of lesening, whereas the Beast much mused, and therefore never afterward durft lie down in the water, for fear of the like increase of his load. The other observation of their love and friendship, ariseth from the Proverbe, Multi mulis faciunt, that is, Mules scratch one another, and help one another in their extremity; from whence cometh our proverb, One good turn asketh another; and the Latine proverb, Senes mutum faciant, old men rub one another; which did arise upon this occasion: as Adrian the Emperour so passeth a long on a day by a bath, he saw an old Souldier in the bath rubbing himself upon a Marblestone for want of a man to help him, whereupon in pity of his case he gave him maintenance for himself and a man; afterwards other old Souldiers seeing how well their fellow had sped, went likewise into the bath before the Emperours eyes, and rubbed themselves upon the Marble, thinking to get as much favour and liberty as their fellow had gotten, but the Emperor seeing them, and perceiving their fetches, bid them rub one another, and thereupon came that proverb. And thus much for the natural discourse of Mules, now followeth the medicinal.

The Medicines of the Mule.

The dust wherein a Mule shall turn or rowl himself, being gathered up and spread or sprinkled upon the body of any one who is ardently and fervently in love, will presently affwage and quench his
his inflaming desire. A man or woman being poiyioned, and put into the belly of a Mule or Camel which is new killed, will presently expel away the force of the venom or poiyion, and will confirm and make strong their decayed spirits, and all the rest of their members: For as much as the very heat of those Beasts is an Antidote or preservative against poiyion.

The skin or hide of a Mule being put unto places in any ones body which are burned with fire, doth presently heal and cure the same: it doth also heal sores and grievous ulcers which are not come unto Impotencies.

The fame is an excellent remedy for those whose feet are worn or wrung together through the pinching of their shoes, to help themselves withall, and for which are lame, and those which are troubled with those grievous sores called Fistulas. If any man shall take either in meat or drink the marrow of a Mule, to the weight or quantity of three golden crowns, he shall presently become blockish and altogether unexpert of wisdom and understanding, and shall be void of all good nutriment, and manners. The ears-laps or ear-lages of a Mule, and the stones of a Mule being born and carried by any woman, are of such great force and efficacy, that they will make her not to conceive. The heart of a Mule being dryed and mingled with Wine, and so given to a woman to drink after that she is purged or cleansed thirty times, hath the same power and that the aforesaid medicine hath for the making of a woman barren. The same effect against conception hath the bark of a white poplar tree, being beaten together with the reins of a Mule, then mingled in Wine, and afterwards drunk up. If the herb called Harts-tongue, be tied upon any part of a woman, with the spleen of a Mule, but as some have affirmed by it fell only, and that in the day which hath a dark night, or without any Moonshine at all, it will make her altogether barren and not able to conceive. If the two stones of a Mule be bound in a piece of the skin of the same Beast and hunged upon any woman, they will make that the shall not conceive to long as they shall be bound unto her. The left stone of a Weefil being bound in the skin or hide of a Mule, and steeped or sked for a certain space or time in Wine, or in any other drink, and the drink in which they are steoped given to a woman to drink, doth surely make that the shall not conceive. The stones of a Mule being put upon a barren and unfruitful tree, and put out, or quenchd with the fiale or urine of either Man or Beast which is gelded, being bound and tyed in the skin of a Mule, and hunged upon the arm of any woman after her menstural fluxes, will altogether refitit and hinder her conception. The righ stone of a Mule being burned and fatted unto the arm of a woman which is in great pain and travail, will make that the shall never be delivered until the same be loofened and taken away, but if it shall happen that a Maid or young Virgin shall take this in drink after her first purgation or menes, the shall never be able to conceive, but shall be always barren and unfruitful.

The matrix or womb of a female Mule taken and boiled with the fleth of an Afs or any other fleth whatsoever, and so eaten by a woman which doth not know what it is, will cause her never to conceive after the same. The worm which is called a Glowworm, or a Globird, being taken out of the womb or matrix of a female Mule, and bound unto any part of a womans body, will make that the shall never be able to conceive.

The duft or powder which proceedeth from the hoofs of a male or female Mule, being mixed or mingled with Oyl which cometh from Myrtleberries, doth very much help those which are troubled with the Gout in their legs or feet. The duft of the hoofs of a Mule being mixed or burned, and the Oyl of Myrtle-berries being mingled with Vinegar, and moisd or liquid Pitch, and wrought or tempered in the form or fashion of a plaitter, and opposed or put unto the head of any one whose hairs are too fluent and abundant, doth very speedily and effectually expel the same.

The liver of a Mule being burned or dryed unto duft, and mixed with the fame Oyl of Myrtle-berries, and so anointed or spread upon the head, is an excellent and profitable remedy for the curing of the aforesaid enamority.

The duft or powder of the hoofs of a female Mule is very wholesome and medicinable for the healing and curing of all grieves and pains which do happen or come unto a mans yard, being sprinkled thereupon. The hoof of a Mule being born by a woman which is with childe, doth hinder her conception. The filth or uncleanness which is in the ears of a Mule, being bound in the skin or hide of a little or young Hart, and bound or hanged upon the arm of a woman after her purgation, doth cause that she may not conceive. The same being in like manner mingled or mixed with Oyl which is made of Beavers stones, doth make any woman to whom it is given to drink, altogether barren. The dirt or dunge of a Mule being mixed with a flyrup made of Honey, Vinegar, and Water, and given to any one to drink that is troubled with the heart-swelling, will very speedily and effectually cure the pain thereof.

The dung of a Mule being burned or dryed and beaten small, and afterwards sifted, or seired and washed or steeped in Wine, and given to any woman to drink, whose menstural fluxes come forth before their times, will in very short space cause the same to stop. The flale or urine of a male or female Mule being mingled with their dirt or dung, is very good and medicinable for those to use which are troubled with corns and hard bunches of fleth which grow in their feet. As the same being mingled with the urine of a Mule to the quantity of a bean, and drunk, will altogether be an impediment and hinderance to the conception of any woman. The urine or urine of a Mule being taken to the quantity of eight pounds, with two pounds of the scum or refuge of silver, and a pound of old and moft clear Oyl; all these being beaten or pounded together until they come to the thick-
The History of Four-footed Beasts.

**Agusta.**

In the fat or sweat which falleth from mens bodies and boiled until they come unto to liquor and thin a juice, that they will speedily and effectually cure and help those which are troubleth with the Gout or swelling in the joints.

If a woman shall take the sweat which proceedeth from a Horse, and anoint it upon a Woolen cloth, and so apply it as a plaster or suppository unto her secret parts, it will make her altogether barren. There is an excellent remedy for those which are purifie or short winded, which is cometh as so by the Mule: which is this; To take or gather the froath or some of a Mule, and to put it into a cup or goblet, and give it in warm water, for a certain space or time to be drunk, either to the man or woman which is troubled with this enormity, and the party which do so use it, shall in short space have remedy; but the Mule will without any lingering of time, or confuming of time in pain andorrow die.

The milk of a male or female Mule, being drunk in a potion or juice made of Hony, Water, and Vinegars, to the value or quantity of three crozes or cups full, is commended for an excellent cure and medicine, for those which are troubled and grieved with that pellieverous and deadly disease called the Falling-ficknes, otherwise Saint Jobus Evil. There is an excellent remedy for those which are troubled in the voiding of their water, which is this; To take the Ring-wors or Terters which do grow upon both the legs of a Mule above their knees, and which do threke thercupon in the manner of a dried thick skin, and to burn or parch them, and afterwards to put or place them upon him which is troubled with the Strangury, or cannot void his water but by drops-meal, so that there be great care had to cover clofe with eleven or clefted cloths, or garments, the suffuration therc- of, left that the smell or fume do fade, and void away; and this being so used will be very effectual for the curing and driving away of the aforefaid disease.

The hairs of a Mule and an Ass being mingled together and dried, and put into some certain perfume, and so given to any one to drink which is troubled with the Falling-ficknes, will presently expel and drive it quite away. In the place or part of mans body wherein a male or female Mule shall bite, Pasteur affirneth, there will presently arise, and grow small pushies, or little blisters which are always full of red and pale humors, and filthy corruption, which can almost be healed and cured by no false, poison, or medicine, by any means applied therunto. There are some also which do suppose the biting of Mules to be poysion, for truly there doth not only follow the aforefaid pushies and blises, but also an extreme and almost indurabe inflammation and burning, through all the parts of the body, which doth greatly disempeasure and vex the same.

But it is affirmed by others, that the biting of Mules is to be curst after the same manner as the biting of a Cat, which is thus: First, to wash and clarify the wound or bitings where the corruption is with Vinegar mingled with Oyl of Rifes, and then to take Peny-royal, or the herb called Neppe, and boil it, and stroke or rub the wound very softly with it, and it will in time wholly cure it. And thus much shall suffice at this time concerning the cures and medicines of Mules.

**Of the Neades, Neides, or Naides.**

Hecules, Colus, Valateranrus, and Euphorion, do all-write that once the Isle of Santis was a Defert place, and that there were in it certain Beasts called Neader, whose voice was so terrible that they shook the earth therewith, and from thofe strange and great voices came the vulgar Greek proverbs, Melion mia toon Neaoram, matius un Neaoram. That is, One of the Neades was a great wonder, for it was used in ointmentation, to shew that there was nothing in the whole world comparable to their vaft and huge quantity. Of the parts of these Beasts there is no memory but only in Suidus and Aelianus, who affirm, that their bones were to be seen in their days. And this title I thought good to infect into this History, leaving the Reader to consider, whether he will take them for Elephants, or for any other greater Beast; for my opinion it if be defined, I think them rather (if there ever were any fuch) that they were Elephants of greater stature then ever fince were seen, and not any generation of Beasts now left and utterly perished.

Of the O U N C E, the description whereof was taken by Doctor Cay in England.

The names of this Beast.

The description of D. Cay.

Here is in Italy a Beast called Alphes, which many in Italy, France, and Germany, call Levand, and some Unzia, from whence Albertus, and Histio make the Latin word Unzia, and I take it to be the fame Beast which is called Lanasum, and for the description of it, I can follow no better Author then Doctor Cay, who describeth it in this fashion: The Ounce (faith he) is a most cruel Beast, of the quantity of a village or mastiff Dog; having his face and ears like to a Lions, his body, tail, feet, and nails like a Cats, of a very terrible Aspect, his teeth so strong and sharp, that he can even cut Wood in sunder with them: he hath also in his nails so great strength, that he only fighteth with them, and useth them for his greatest defence: The colour of the upper parts of his body being like white Oak, the lower being of the colour...
of ashes, being every where mixed with a black and frequent spot, but the tail more black then the rest of his body, and as it were obscured with a greater spot then the residue. His ears within are pale without any blacknes, without black, without any palenels, if you do but take away one dark and yellow spot in the midit thereof, which is made of a double skin rising, meeting in the top of the ear, that is to say, that which ariseth from the outward part of the jaw on the one side, and cometh from the upper part of the head on the other side, and the same may be easily seen and separated in the head being dried.

The rest of the head is spottet all over with a most frequent and black spot (as the rest of the body) except in that part which is betwixt the nose and the eyes, wherein there are none, unless only two, and they very small: even as all the rest are lefser then the rest, in the extream and lowest parts: the spots which are in the upper parts of the thighs, and in the tail, are blacker and more singular, but framed in the sides with such an order, as if all the spots should seem to be made of four. There is no order in the spots, except in the upper lip, where there are five rows or orders.

In the first and uppermost two which are severed; in the second, fix, being joyned in that manner, as if they should seem to be in one line: These two orders are free, and not mingled amongst themselves. In the the third order there are eight joyned together, but with the fourth where it endeth, they are mixed together. The fourth and fifth in their beginning (which they have to the nofe) being separated with a very little difference, do forthwith joyn themselves, and run together through all the upper lip, and do not make a spot through all the fame, but a broad line. In the Beafit being dead the spots do fo stand, (as I suppose for the contraction of the skin. In the Beafit being alive, those spots do feem separated every one in their own orders. In the very middle between the lower lip, although they do keep the quantity, do not obferve the order. The nofe is blackish, a line being softly led through the length, and only through the top of the outside thereof. The eyes are gray, the former teeth are only fix, not very unlike to men's teeth, except those which are placed in the middle are leffer, and they in the uttermost part are greater, as also higher then those which are low.

In this Beafit the teeth are both great, sharp, and long, being joyned to the rest in the lower jaw, and in the upper fåvered with fo great space, that the lower teeth may be received therein. Thêse when the Beafit liveth are covered with his lips, but when he is dead they are otherwise, his lips being through drines shrunk together. His fore-teeth are very big, and as long as two Roman fingers, for at the very root thereof it cannot be comprehended in less then two Roman fingers and a half compafs. In his tooth there is a certain small hollownes through all the length thereof, which notwithstanding doth not appear except the tooth be broken. The lower jaw is very hard and ifte having three teeth unequal in quantity, as the upper four. Between the great tooth and the first cheek tooth of the under jaw, there is a void space to the quantity of one finger, from which the first is pretently placed, lefser then the other two; to this there is another greater close adjoining: and after this there is also a third greater then the second. In the upper jaw in that middle space (which I said was of one Roman finger) between the great tooth and the first cheek-tooth, there is a very little tooth, and without any form, coming fo finally out of the jaw, that there is no lower tooth which may answer to the same. After that, in the space of half a finger there is a second, to which there is joyn'd a third, and after this a fourth, between themselves the upper and the lower cheek-teeth, and so are joyned together as they agree in the manner of a comb; the two first teeth in the lower jaw, and the second and third in the upper jaw are of the same figure, as the compafs of the tops of the Crowns of the Kings of England and France. The third is of the same figure in the lower jaw, and the fourth of the upper jaw, except that the interior side of both the
guns which is nearer to the throat, by nature is taken away. There was no other teeth joined to these in both the jaws. But I do not know whether there be any more teeth in the gum beyond the reach of one fingers, in the farthest row or behind the teeth. But this I know, that to all appearance there was none remaining, and it may be that his lips were cut or slit down beyond nature to swell his teeth. It liveth of flesh, and the female is more cruel than the male, though lefser, and one of either sex was brought out of Mauritania into England in a Ship, for they are bred in Libya. If they have any appointed time of copulation, it is near the month of June, for in that month the male coveteth the female. We have heard already that Lions may be tamed, and that also hath been manifest in London, both in the Tower and in the City, for there the Lions did play with their Keepers, and kis them without harm, (as Doctor Cay faith he saw them do) but thefe Beasts were fo fierce and wide as they could never be tamed, for when ever their Keeper should change or remove them from place to place, he was constrained firth of all to strike them hard with a club upon the head, that they should lie half dead, and so put them in a fack or wooden chett made of purpose with holes in it for respiration and expiration, to carry them to and fro from one lodging to another: after an hour they revived again like a Cat, but when they were to be taken out of the hut or chett, he was constrained likewise to allineth them again with his club: but afterwards they grew to invent an Engine to put the Beaff in, and take him out of the hut with a rope or cord, and fo do remove them from place to place. The Keepers affirmed, that they did feem much to disdain the Lions, and offtentimes endeavored to fight with them, but they were kept afunder with grates: they would not hurt a little Dog when he was put to them but when they were hungry; but if a great Dog were put unto them, they tore him in pieces, although their bellies were never fo full. When they are angry, they utter a voyce like an angry Dog, but they double the (Art) twice, and also bigger then any Dogs, proceeding out of a large breath and wide arteries, much like to the howling of a great Maliff, that is shut up in a clofe room alone against his will. Some fay it is longer then a Dog, but it did not fo appear in England, for we had many Maliffe Dogs as long as it, but yet was it every way greater then any other kinde of Dogs. It is but a vain report, that some have faid, when a Man or Beaffe is bitten with an Ounce, presently Mice flock unto him, and poyfon him with their urine.

For it was seen in England, that two of the Keepers were wounded and threethirdly bitten by one of the Ounces, and there followed them no other harm then that which followeth the biting of an ordinary Dog, or like a small incifion with a knife. He never fighteth but at the head, and that treacherously, if he perceive his adversary to be too strong or too great for him, and that by counterfeit- ing quietness, benevolence and peace, as if he meant no harm: for so he served a great Maliff Dog in England, at the firit fight he seemed to applaud his comming, looking cheerfully upon him, and wagging his tail, presently he fell down on his belly, as it were to invite the Dog to come near him by his submiffion; lastly, he got close unto him, creeping as though he would play with him, putting out one of his feet, as Cats do when they play, wherewithal the great Dog grew secure, and began nothing to misfruft the Beaffe, at length when the Ounce faw his opportunity, he suddenly leaped upon his neck, and took him by the throat, and pulled it out, after he had killed him, with his nails he opened the Dogs breath, and taking out his heart, did eat it before all the people in most cruel manner; thus far Doctor Cay fpeaketh of the Ounce, and befide him no other Author that I know.

The gall of this Beaffe is deadly poyfon, it hateth all creatures, and destroyeth them, especially men; and therefore it may well be faid to be poffeffed with some evil spirit. It loveth none but his own kinde. And thus much for the Ounce.

Of the ORYX.

His Beaffe in Pliny and Oppianus is called Oryx and Orjx, and my conjecture is, that his name is derived from Oryxen which signifieth to dig. Saint Jerom and the Septuagints for Theo, Deut. 14. and Isa. 51. tranflate Oryx: but David Kimbi, and the better learned men interpret it a wilde Ox. But the Hebrew Difbon may in my opinion be fo tranflated, yet herein I refer it to the learned Reader.

It is certain, that it is of the kinde of wilde Goats by the defcription of it, differing in nothing but this, that the hair groweth averte, not like other Beaffs, falling backward to his hinder parts, but forward toward his head, and so also it is affirmed of the Ethipbian Bull, which fome fay is the Rhinocerot. They are bred both in Libya and Egypt, and either of both Countries yeeldeth testimony of their rare and proper qualities. In quantity it refembles a Roe, having a beard under his chin. His colour white or pale like milk, his beards black, and some spots upon his cheeks; his back-bone reaching to his head, being double, broad, and fat; his horns flanding upright, black, and fo sharp, that they cannot be blunted against brafs or iron, but pierce through it readily.

Ariftotle and Pliny were of opinion, that this Beaffe was Eiflusius and Unicinis, that is, cloven-footed, and with one horn: The original of their opinion, came from the wilde-one-horned-goat, whereof Scenbergerus a late Writer writeth thus: Certain est minimus dubium in Carpatho monte; versus Roman Transaluminum, reperiri feras familias omnino supellex, except quod unicum cornu ex media fronte endofat, nigrum, dorso inflexum, simile omnino supellexprimorum cornulii, that is to fay: It is with-
out all controversy, that there are wilde Beasts in the Mountain Carpathus, towards Kufia and Trans-Carpathia, very like to wilde Goats, except that they have but one horn growing out of the middle of their heads, which is black and bending backward like the horns of wilde Goats. But the true Oryx is defcribed before out of Oppium, and it differeth from that of Pint, both in stature and horns. Ebianus faith, that the Oryx hath four horns, but he speakeoth of the Indian Oryx, whereof there are some yearly prentented to their King, and it may be both there and elsewhere, diversity of regions do breed diversitie of stature, colour, hair, and horns. Simeon Sethi affirmeth of the Musk-cat, that it hath one horn, and it is not unlikely that he hath seen such an one, and that the Oryx may be of that kinde.

But concerning their horns, it is related by Heraclitus, Pella, and Paur. Velia, that there were made instruments of musick out of them, such as are Citherns or Lutes, upon whose bellies the Musicians played their Mufick, by striking them with their hands; and that those Beasts were as great as Oxen; and all this may be true, notwithstanding we have shewed already, that they are as big as Roes, for Pint speaking that by relation, or by light, it is likeley that he had seen a young one.

There be also Sea-beasts called Oryxes, and Oric; and there is in Egypt an Oryx, which at the rising of Canis Syrinx, or the little Dog is perpetually sorrowfull; and this caufe the Libyans to mock the Egyptians for that they fable, the fame day that the little Dog-star rifeth, their Oryx speakeoth. But on the contrary selves acknowledge, that as often as the faid Star arifeth with the Sun, all their Goats turn to the East, and look upon it; and this observation of the Goats, is as certain as any rule of the Astronomers. The Libyans affirm more, that they do prefage great flore of rain, and change of weather.

The Egyptians also fay, that when the Moon cometh near to the East, they look very intentively upon her, as upon their overaigne Goddes, and make a great noise, and yet they fay they do it not for her love, but for her hate, which appeareth by knocking their legs against the ground, and fatenning their eyes upon the earth, like them which are angry at the Moons appearance: And the felf fame thing they do at the rising of the Sun.

For which caufe the ancient Kings had an observer, or one to tell them the time of the day, fitting upon one of these Beasts, whereby very accurately they perceived the Sun rising; and this they did by turning their tail against it, and emptying their bellies; for which caufe by an Oryx the Egyptians decipher an impure or godlesse wretch: for seeing that all creatures are nourished by the Sun and Moon, and therefore ought to rejoice at their appearing, only this wilty wretched diddinate and scorneth them.

The reason why they rejoice at the little Dog-star, is, because their bodies do perceive an evident alteration of the time of the year, that cold weather and rain are over-paffed, and that the vapors of the warm Sun are now depending on the earth, to clothe it with all manner of green and pleafant herbs and flowers.

There is another kinde of Oryx which according to Columella, was wont to be impaled among Deer and Harts, the flesh whereof was eaten, and used for the commodity of his Mafter: This was impatient of cold. It grew till it was four years old, and afterwards through age decreased, and loit all natural vigor.

But to return to the Oryx intended, from which we have digressed; their horns whereof we late spake, are not only strong and sharp like the horn of the Unicorn, and the Rhinocerot, but also solid, and not hollow like the horns of Harts. The courage and inward disposition of this Bealt, is both fearful, cruel, and valiant; I mean fearful to Men and Beasts, but fearless in it self: For faith my Author; Neg: omn Canis lupaturum tem, nec: apri effevoceptem feritatem, nec: tauri mugitum refugit, nec: Pantherarum trism venem, nec: ihsu Leonis vehementem mugitum perret, nec: item bominum robore movetur, ac foelo rubrum venatorem occidit: That is to fay; He feareth not the barking of the Dog, nor the roaring wrath of the wilde Boar; he flyeth not the terrible voyce of the Bull, nor yet the mounear cry of the Panthers; no, nor the vehement roaring of the Lion himfelf; and to conclude, he is not moved for all the strenge of man, but many times killeth the valiantest hunter that pursueth him.

When he feeth a Boar, a Lion, or a Bear, preently he bendeth his horns down to the earth, whereby he conformeth and eababiliseth his head to receive the brunt, flanding in that manner until the affault be made: at which time he eafily killeth his adversary, for by bending down his head, and letting his horns to receive the Bealt, he beheweth himfelf as skillfully as the Hunter, that receiveth a Lion upon his fpear. For his horns do eafily run into the breads of any wilde Bealt, and fo piercing them, caufeth the blood to issue, whereas the Bealt being moved, forgetteth his combate and falleth to licking up his own blood, and fo he is eafily overthrown. When the fight is once begun, there is none of both that may run away, but flangeth it out until one or both of them be flain to the ground, and fo their dead bodies are found by wilde and favage men. They fight with all, and kill one another, also they are annoyed with Linces, I mean the greater Linces: of the cruelty of this Bealt Martiall made this difcifhon:

Matutinarum non ultima præda ferarum
Saurus Oryx, confat qui mibi morte canum.
It is reported of this Beast, that it liveth in perpetual thirst, never drinking by reason that there is no water in those places where it is bred, and that there is in it a certain bladder of liquor, whereof who soever taphet, shall never need to drink. This Beast liveth in the Wilderness, and notwithstanding his magnanimous and unfittable strength, wrath, and cruelty, yet is he easily taken by fnares and devices of men; for God which hath armed them to take Elephants and tame Lions, hath likewise induced them with knowledge from above, to tame and destroy all other noisome Beasts.

Concerning the picture of this Beast, and the lively visage of his exterior or outward parts, I cannot express it, because neither my own sight, nor the writings of any credible Author, doth give me sufficient direction to deliver the shapre thereof unto the world, and succeeding Ages upon my credit; and therefore the Reader must pardon me herein. I do not allege the use of the flesh, or any other parts of this Beast, but only of the horns, as is already expressed, whereunto I may add the relation of Strabo, who affirmeth the Ethipian Sibyl, do use the horns of these Beasts in wars instead of swords and spears: for incredible is the hardness and sharpness of them, which causeth Xenodoch to write thus:

Ex Getulius Oryx bebetis lanitissima farto
Cediter.

For although of the own length they are not able to match a pike, yet are they fit to be put upon the tops of pikes, as well as any other artificial thing made of steel or iron; and thus I will conclude the story of this Beast.

The SCITHIAN WOLF.

Of the OTTER.

T

Here is no doubt but this Beast is of the kinde of Beavers, because it liveth both upon the water and upon the land, and the outward forme of the parts beareth a similitude of that Beast. The Italians do vulgarly call this Beast Lodra, and the Latines besides Lutra, Fluvialitis Cantucae, a Dog of the Waters; and some call them Cats of the Waters; the Latins besides Lutra, call it also Latria, and Lutra; the French, Une Loutre, or Ung Lautre; the Savoyans, Une Lautre; the Spaniards, Nutria; and the Ithians, Sidia; the Grecians, Lutra, because it theareth another of the roots of the trees in the banks of the Rivers. Some of the Grecians call it Enhydris, although properly that is a Snake living in the waters, called by Theophrastus, and Hermolaus, Lutria. Albeiro calleth it Later, and Andriz for Enhydris. Also Beazer by Sibatius; and the Grecians call filthy and thick waters Lutrai; for which cause, when their Noble ancient Women went to bathe themselves in water, they were bound about with skins called Oan Lodrida, that is, a Sheeps skin used to the water. The French men call the dung of an Otter, Esfranite de loutter; the fleps of an Otter, Lafe Marches; the whelps of an Otter, Chevas, by which word they call also the whelps of Wolves, Foxes, and Badgers.

Although they be a kinde of Beaver, as we have said already, yet they never go into the Sea, and they abound almost in all Nations, where there are Rivers or Fish-pools, as namely in Italy, France, Germany, Helvetia, England, and Scandinavia. Likewise in all Sarmatia, in the Bay of Bosphorus. They are most plentiful in Italy, where the River Padus is Joyned to the Sea. Also they abound in Naples. Their outward forme is most like unto a Beaver, faving in their tail, for the tail of a Beaver is fift, but the tail of an Otter is fith. They are lefs then Beavers, some compare them unto a Cat, and some unto a Fox; but I cannot confess unto the Fox. They are bigger then a Cat and longer, but leffer then a Fox, and therefore in my opinion they are well called Dogs of the water. They exceed in length, for in Switzia, and all the Northern Rivers they are three times so long as a Beaver. They have a rough skin; and the hair of it very soft and neat, like the hair of a Beaver, but different in this, that it is shorter and unequal, also of colour like a Chief-nut, or brownish, but the Bea

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Of the names and the reallions thereof.

Stephanus.

The places of their abode.

Hermolaus.

Oleus.

The several parts.
vers is white or ash-colour. It hath very sharp teeth, and is a very biting Beast, likewise short legs, and his feet and tail like a Dog, which caused Bellonius to write, that if his tail were off, he were in all parts like a Beaver, differing in nothing but his habitation. For the Beaver goeth both to the Salt waters, and to the fresh, but the Otter never to the salt.

Although it live in the waters, yet it doth not suck in water, but air; that is, it doth not breath like fishes through the benefit of water, and therefore it maketh his dens near the water, wherein also they are wont to bring forth their young ones: They make their dens so artificially, even as the Beaver, with bows, and spires, or licks, couching together in excellent order, wherein he fitteth to keep him from wetness. It hunteth fishes, and although it breatheth like another four-footed Beast, yet it will remain a great while under the water without respiration; for the greediness of fishes it runneth many times into nets, which are set by men in waters to take fish, whereinto being entered, it is suffocated for want of breath, before it can thereafunder the nets and make way for himself to come out.

For in the hunting of fish it must often put his nose above the water to take breath; it is of a wonderful swiftness and nimbleness, in taking his prey, and filleth his den so full of fishes, that he corrupteth the air, or men that take him in his den: and likewise infecteth himself with a recalling and noisome savour, whereupon as the Latins say of a flinking fellow, He smells like a Goat, so the Germans say of the same, He smells like an Otter. In the Winter time he comes out of the caves and waters to hunt upon the land, where finding no other food, he eateth fruits, and the bark of trees. Bellonius writeth thus of him, he keepeth in pools and quiet waters, terrifying the flocks of fish, and driving them to the bank-sides in great number, to the holes and creeks of the earth, where he taketh them more copiously, and more efficaciously; but if he want prey in the waters, then doth he leap upon the land, and eat upon green herbs, he will swim two miles together against the stream, putting himself to great labour in his hunger, that so when his belly is full, the current of the stream may carry him down again to his defigned lodging.

The females nourish many whelps together at their udders, until they be almost as big as themselves, for whom the hunters search, as for the dams among the leaves and boughs, which the over-growings of waters in the Winter time, have gathered together, and laid on heaps. It is a sharp biting Beast, hurtful both to men and dogs, never ceasing or loosing hold after he hath laid his mouth upon them, until he make the bones to crack between his teeth, whereupon it was well said by Olavo Magus, Latina mortal alia quadrato are. Otters are most accomplished biers.

It is a very crafty and subtle Beast, yet it is sometimes tamed, and used in the North to drive the fishes into the Fisher-men's nets.
The History of Four-footed Beasts.

for so great is the fragacity and fenfe of smelling in this Beast, that he can directly winde the fishes in the waters a mile or two off, and therefore the Fishers make great advantage of them, ye do they forbear his ule because he devoureth more then needeth, for he is never fo ramed, that he forgetteh his old ravening; being ramed, on the land he is very full of sport and game. I marvail how it came into the Writers heads to affirm, that the Beaver contraineth the Otter in the Winter time, to trouble the water about her tail. the intent it may not freeze, which opinion we have confurred already in the difcourfe of the Beaver; for herein I agree with Albertus. *Figer fauror es la tua, et eodijmenis dentibus, qua- proper eam vel expellis, vel occidit.* The Beaver is much stronger then the Otter, having also molt sharp teeth, and therefore either expelleth her out of the waters, because they live both upon one kinde of food, or else destroys her: wherefore it is unreasonable to believe that he preferveth her to keep his tail from freezing. The flesh of this Beast is both cold and filthy, because it feedeth upon flinking fishe, and therefore not fit to be eaten. Trogus writeth, that this notwithstanding is dresse to be eaten in many places of Germany, and I hear that the Carthusian Fryers or Monks (whether you will) which are forbidden to touch all manner of fishe, of other four-footed Beasts, yet they are not prohibited the eating of Otters. These Otters are hunted with special Dogs, called Otter-hounds, and also with special instruments called Otter-speares, having exceeding sharp points: for they are hardly taken, and Beasts do not willingly set upon them, specially in the waters: when they feel themselves to be wounded with the speare, then they come to land, where they fight with the Dogs very irrefullly, and except they be first wounded, they forfake not the waters: for they are not ignorant how safe a refuge the waters are unto them, and how unequal a combate they have with Men and Dogs upon the land, yet because the cold water annoyeth their green wounds, therefore they spin out their lives to the length of the thread, chufing rather to die in torments among Dogs, then to die in the waters. There is a kinde of *Afa* called *Benion*; a strong herb which being hung in a linen cloth near fishe-ponds, driveth away all Otters and Bevers. The hair of the skin is most soft, neither doth it leefe his beauty by age; for which caufe as alfo for that no rain can hurt it, when it is well dresse it is of great price and elimation, and is fold for vein or eight shillings: thereof also they make fringes in hems of garments, and face about the collars of men and womens garments, and the skin of the Otter is far more precious then the skin of the Beaver; and for this caufe the Swetian Merchants do transport many into Muscovia and Tartaria for cloves and other garments.

Thereof also in Germany they make caps, or else line other caps with them, and also make flocking-soles; affirming that they be good and wholesome against the Palfie, the Megrim, and other pains of the head. The bloud of an Otter is prescribed against the swelling of the Nerves. The Liver dried in an Oven against the Bouldy-flix, and against the Colick being drunk in Wine. The flones are also prescribed to be given against the Falling-ticknes, and all pains in the belly. And thus much for the Otter.

There be certain Beasts which are kynedes of Otters, which beece they live in the waters, and yet being unknown to us in England, I have thought good to express them in this place by their Greek, and Latin names. In the first place that which the Grecians call Latax, broader and thicker then an Otter, and yet liveth in the waters, or else goeth to the waters for his food, yet breatheth air and not water like Otters. The hair of this Beast is very harth, betwixt the fimilitude of a Sea-calf and a Hart, and it hath also strong and sharp teeth, wherewithall in the night feaon they shear under small boughs and twigs: It is called also tafios, Lamakyc, and Noerza.

There is another called Satyrium, and Fafluros, and Chrabalus, whose skin is black, and very pretious, and very much used for the edging of the best garments: these live also in ponds, lakes, and sill waters.

There is a third kinde called Satherium, Koeboben, and Kochymen, and Martaurus, having a white throat, and being as big as a Cat; and finally unto these may be added Porus, a four-footed beast living in the waters in the River Iflber: And Mezalos another four-footed beast living in some Rivers of India, being as big as a Calf.
Of the Panther.

Of the Panther, commonly called a Pardal, a Leopard, and a Libbard.

Here have been so many names devised for this one beast, that it is grown a difficult thing, either to make a good reconciliation of the Authors which are wed to their several opinions, or else to define it perfectly, and make of him a good methodical History; yet seeing the greatest variance hath arisen from words, and that which was devised at the first for the better explication and description of it hath turned to the obfuscation and shadowing of the truth, I trust it shall be a good labour to collect out of every Writer that which is most probable concerning this Beast, and in the end to express the bell definition thereof we can learn out of all.

First of all therefore for as much as all the question hath arisen from the Greek and Latin names, it is most requisite to express them, and shew how the different construction began. The Graecians do indifferently call Pardalos, Pardalis, and Panther the Latin, Panthera. Pardalis, Pardos, and Leopards, and these names are thus distinguished by the learned. Pardalis they say signifies the male, and Pardalis the female, and also Panthera among the Latins for the female, and Pardus for the male, and there are understood of a fimple kind without commixture of generation. Leopards the Leopard or Libbard, is a word devised by the later writers, compounded of Leo and Pardus, upon opinion that this Beast is generated betwixt a Pardal and a Lion, and so indeed it ought properly to be taken, if there be any such. Pliny is of opinion, that Pardus differeth from Panthera in nothing but in sex, and other way, that betwixt the Lions and the Pardals there is such a confused mixed generation as is betwixt Asses and Mares, or Stallions and Asses: as for example, when the Lion covereth the Pardal, then is the Whelp called Leopards, a Leopard or Libbard, but when the Pardal covereth the Lion, then it is called Panthera a Panther.

In this controversy the Hebrew and Arabian names which are generally indifferently translated Panthers or Libbards, do take up the strife and almost end the controversy, for Namen in Hebrew, and ALib or Alihed in Arabic, are so translated both in holy Scripture, and also in Avicen, as may appear by these places following, Eza. 11. Habitabit Lupus cum agno, &c. (Namen) Pardos cum hacta ac- cubabit. That is to say, The Wolf shall dwell with the Lamb, and the Pardal, Libbard, and Panther shall lie with the Kid. So in the vision of Daniel, chap. 7. among the four beasts coming out of the Sea, the Prophet feeth Namen a Leopard. In the 13. Revel. of S. John, he feeth another Beast rising out of the Sea, having ten horns, and he feith it was like Pardal, which Erasmus translateth Pardo, a Leopard. Jer. 5. Pardus (Namen) vigilat super civitatem eorum, ut omnem inde egrediem discepat. That is, a Panther or Pardal watcheth at the gates of the City, that he may tear in pieces every one that cometh forth. Falsus sun est ficut Leo, & ficut Pardus (ficut Namen) directus ad viam suam. For Namen in that place the Graecians translate Pardalis, a Pardal. In the 13. Jer. Si miserum postit Aschips pilum suam, aut Pardus malleas aetcri, &c. aut potestis beue facere, cum diueritatis malum. If the Blackmoore can change his skin, or the Leopard his spots, then may you do as which have learned to do. Cant. 4. Convertens de verrute Siner, & Hermou, de cubilibus Leorum de manibus Partherum. That is, Thou shalt be crowned from the top of Siner and Hermou, from the dens of the Lions, and the Mountains of the Leopards. Now according to Boecadus, the Mountain of the Leopards is distant from Tripolis, in the holy land two leagues.
A more exact definition of Pardals and Leopards.

leagues, <i>Lejis</i> and <i>Aurici</i>, two <i>Arabian</i>, do call the Panther and Leopard by one name, <i>Aigeb</i>, or <i>Albip</i>, so that by comparing all these together, the Panther, Pardal, Libbard, and Leopard, are but one Beast, called by divers names. For the farther manifesting hereof, it is good to examine what is said of the Pardal and Leopard in particular, that so having expressed that, it may be clear by the discourse proceeding, that there is no difference betwixt them and the Panther, or very small. First of all therefore it is said of the <i>Pardus</i>, that it differeth not from the Panther, but only in sex, and that the skin hath received a natural tincture of divers spots. <i>Aigeb</i> writeth thus of it, <i>Cumi Chamaelionis diffidium</i> &c. at <i>Pardus</i>. The skin of the Chamaelion is spotted like a Pardal, and in relation of <i>Lampridus</i>, where he sweareth how <i>Hellogale</i> was wont to shut up his drunken friends, <i>sum Lenibas</i>, <i>Pardus</i>, & cts, <i>in ut capergetudini in cubiculo edem Leones</i>, <i>ex</i> <i>Pardos cum luere</i>, <i>vel quod est</i> graus, <i>ut</i> herbavent, <i>ex</i> <i>quo</i> <i>pleni</i>, <i>examini sunt</i>, and fo forth.

By which words it is apparent, that those which in the first place he calleth Leopards, in the last place he calleth Pardals, and the only difference betwixt the Leopard, Pardal, and Lion, is that the Leopard or Pardal have no names: and therefore they are calleth <i>Lygosides Leones</i>. <i>Idibus</i> and <i>Salam</i> write in this manner: <i>Pardus secundum</i> <i>ex</i> <i>Pantheram</i> <i>ex</i> <i>genus</i> <i>varum</i> <i>ac</i> <i>velocissimium</i>, & <i>ex</i> <i>praecipu ad</i> <i>fugium</i>, <i>salu</i> <i>ad</i> <i>morim</i> <i>ruit</i>, <i>ex</i> <i>ad</i> <i>ulteria Pardi & Leone</i>, <i>Leopards</i> <i>nasifur</i>, & <i>tortiam originem</i> <i>effect</i>. That is to say, the Pardal is the next kinde to a Panther, being divers coloured and very swift, greedy after blood, and catcheth his prey by leaping: the Leopard is bred betwixt the Pardal and the Liones, and so maketh a third kinde: by which testimonie it appeareth that these names make three severall kindes of Beasts, not distinct in nature, but in quantity, through commixture of generation.

The greater therefore they call Panthers, as <i>Bellus</i> <i>uni</i> <i>atur</i> writeth. The second they call Pardals, and the third, leaft of all, they call Leopards, which for the same cause in <i>England</i> is called a Cat of the Mountain. And truly in my opinion, until some other can shew me better reason I will subscribe hereunto, namely that they are all one kinde of Beast, and differ in quantity only through adulterine generation. For in <i>Africa</i> there is great want of waters, and therefore the Lions, Panthers, and other Beasts do assemble themselves in great numbers together at the running Rivers, where the Pardals and the Lions do engender one with another: I mean the greater Panthers with the Liones, and the greater Pardals with the Panthers; and fo likewise the smaller with the smaller, and thereby it cometh to pass that some of them are spotted, and some of them without spots.

The Pardal is a fierce and cruel Beast, very violent, having a body and mind like ravening birds, and some lay they are ingendered now and then between Dogs and Panthers, or betwixt Leopards and Dogs, even as the <i>Leporckens</i> are ingendered betwixt Wolves and Panthers. It is the nature of these Pardals in <i>Africa</i>, to get up into the rough and thick trees, where they hide themselves amongst the boughs and leaves, and do not only take birds, but also from thence leap down upon Beasts and Men when they pity their advantage; and all these things do belong unto the Panthers.

Concerning the Leopard, the word it self is new and lately invented, for it is never found among any of the ancients, before <i>Julius Capitium</i> or <i>Spartianus</i>. <i>Sylvatikus</i> maketh no difference betwixt <i>Pardalum</i> and <i>Leopardum</i>, and the <i>Italians</i> generally call a Pardal Leopards, and never <i>Pardo</i>, except some of the Poets, for brevity sake in a verse. The Leopard is like to a Lion in the head and form of his members, but yet he is softer and nothing so strong: by the sight of a Leopard's skin <i>Geiger</i> made this description of the Beast:

The length (saith he) from the head to the tail, was as much as a mans stature, and half a cubit. The tail of it felt three spans and a half, the breadth in the middle three spans, the colour a bright yellow distinguishe into divers spots, the hair short and mouife.

The price of the skin was about five nobles, or forty shillings, for they differ in price, according to the Regions out of which they are brought, they which come farthest are sold dearest, and they which come leas way are sold cheapest. It is a wrathful and an angty Beast, and whensoever it is sick, it thistleth after the blood of a wide Cat, and recovereth by sucking that blood, or else by eating the dung of a man. Above all other things it delighteth in the Camphory tree, and therefore lyeth underneath it, to keep it from spoil, and in like fort the Panther delighteth in sweet gums and spices, and therefore no marvel if they cannot abide Garlick, because it annoyeth their sense of smelling; and it is reported by <i>S. Ambrose</i>, that if the walls of ones house or sheep-coat be anointed with the juice of Garlick, both Panthers and Leopards will run away from it, but of this matter we shall lay more afterwards.

The Leopard is sometimes tamed, and used in head of a Dog for hunting both among the Tartarians, and other Princes, for they carry them behind them on Horse-back, and when they see a Deer or Hart, or convenient prey, they turn them down upon them sodainly, who take them and destroy them; yet such is the nature of this Beast, as also of the Pardal, that if he doe not take his prey at the fourth or fifth jump, he falleth so angry and fierce, that he destroyeth whomsoever he meeteth, yea many times his Hunter. Therefore the Hunters have always a regard to carry with them a Lamb or a Kid, or some such live thing, wherewithal they pacifie him after he hath made his game, for without blood he will never be appeased; and thus much shall suffice to have spoken of the difference betwixt Panthers, Pardals, and Leopards, and their several names in <i>Greek</i> and <i>Latin</i>, from whom almost all Nations do derive their denomi-
Of the Panther.

denomination, for the last ius call it Leopardo; the French, Leopard, and Luipard; and German, Lip-.
vard, and Lemberg and Pantherstier; the Spaniards, Leoparal, and Leopardo; the Illyrians, Leohados.
the Chaldeans, Nimrod, and some make no difference betwixt this and the Arabian Wolf: The reason of
the Greek word Pardalis, or Pardalis, (for they signify both one) seems to me in most proba-
ality to be derived from the Hebrew word Par, signifying a Garden, because as colours in a Gir-
den make it spotted, and render a fragrant smell, so the Panther is divers coloured like a gar
d WN flowers, and also it is said to carry with him a most sweet favour whither forever he goeth,
and in ancient time they made their Ivory tables standing upon pictures of Panthers,
whereof Jowett wrote thus in one of his Satyres:

Omnex quaevi aboro mensa ficta,
At nunc virilium carmen nulla voluptus
—nisi jumilium artes

Grande eur, & magna sublimis Parus statu,
Dentibus ex illis quos mitit porta Syrens
Jam nimis capitis gravis, Etc.

For the same cause Pardalis was the name of a notable Harlot, for as the Panthers by their sweet
smells draw the Beasts unto them and then destroy them, so also do Harlots deck and adorn them-
theselves with alluring provocations, as it were with enchanted odours, to draw men unto them, of
whom they make spoil and rape: There is a precious stone also called Lapis Pantherus, brought out
of India, whereupon if a man look before the Sun-rising he shall see divers colours, namely, black,
red, green, rufes, purple, and Roa colour, and they say it hath as many virtues as it hath colours,
but I will not to follow the name any further.

The Countries breeding Panthers are Arabia in the Kingdom of Melarca, in the Ile of Sumatra.
Likewise in Africa, especially Syria, for there are none in Europe, all Africa over they are plentiful, as
in Libya and Mauritania, where about all Iore of wilde Beasts: Likewise beyond Cadirus; for Ap-
pli and his companions saw there many Lions and Panthers. In Arabia the furthest part, namely
the Promontory of Dyra towards the South, are the strongest Pards of the world, (as faith Strabo;)
Likewise in the Mediterranean Region beyond Barareza toward the South, unto Doctinabades, and to-
wards the East are all sorts of wilde Beasts, both Tygers and Panthers; and Dideron write that
in that part of Arabia, joining upon Syria, there Lions and Pards are both more in number and
greater in quantity then in Libya.

Also it is said by Valatarsus and Gallus, that the Panther of Lycaon and Caria are very long, but yet
weak and without carriage, being not able to leap far, yet is their skin so hard as no Iron can pierce.
Between the River Ganges and his bofis, Apollonius saw many Panthers. The Indians also breed many
and make them tame, and Leopards do live in the Woods of Barbadoes.

It is apparent by that which is already said, that the Panther isthe name of the greater Pardal,
and the Leopard of the lesser, which the Arabians call Alohen, and Al fine, Alohen is bigger then
a Lynx, but like a Leopard, having greater and sharper nails and feet, black and terrible eyes, and
then stronger, fiercer, and bolder then the Leopard, for it seeketh upon men, and destroyeth them.

Opiusus describeth both kinds in this manner; There are( faith he) two kinds of Par-
dalis, a greater and a lesser, the greater are broader back, and bigger in quantity, the lesser being,
less in quantity, but not inferior in strength; both of them have the same shape and colour of
body, except in their tail: for the greater Pardal hath the lesser tail, and the lesser either:
 either of them have solid and found thigs, a very long body, bright red eyes, the apples where-
of do glister under their eye-lids, which are gray and red within like to burning coals, their teeth
pale and venemous, their skin of divers colours, yet bright and pleasant, the spots standing like
many black eyes upon it: thus far Opiusus. Such skins are sometimes fold in the Marts of Europe,
which are brought in bundles twenty or thirty together, and it is not to be forgotten, which Pola-
teron cuteth out of Elium, that there is in this kind of Pardal a Beast called Eule, not unlike to
the vulgar Leopards in all parts, except that it wanteth a tail; and they say that if this Beast be seen
by a woman, it will infamously make her to be sick; but to proceed to the residue of the parts of these
Beasts, we must remember that which Aristotle wretteth in his Phisicognomy: it is recorded by Ada-
manus: Leoperdalis maner idean pro se fort, Pardalis vero feminam formam exprimit, crubbi-
tum excepit, quibus ad inroculendum softire illitur, that is to say: Among all Beasts the Lion doth
most resemble the male, and the Pardal the female, except in the legs where the male to take her
prey,

As it hath a little face, a little mouth, little eyes, somewhat white, plain, and not much hollow, a long
forhead, ears rather round then smooth or broad, a neck very long and slender, the breast not
well set out with ribs, because they are small; the back long, the buttocks and thighs very fleshy, the
parts about the small of the belly or loins are more smooth, less hollow and bouncy; the colour dis-
cours, and the whole body inarticulate, and not well compounded the outward firk: ( for it is to
be remembered faith Carus) that all ravening Beasts are like a Cat, as Lions, Panthers, Lynxes,
and Pards, for they have in common the length and strength of their claws, beautiful party col-
loured skins; a little head and round face, a long tail, nimbleness of body, and widnes of nature,
living upon the near the they get in hunting.

The Persians call a Pardal Barbert, and Scaliger describeth it thus: In his red or yellow hair he is
like a Lions, but feth with divers black spots both in length and breadth, as if they were painted.
In hath a browne face, asperated with black and white, and it is to be remembered, that as other

Le Afrc.

The several parts of Pan-
ther...

Beasts.
The History of Four-footed Beasts.

Beasts are either all black, or all red, or all white, or all of one colour by nature, so also it is natural to Pea-cocks and Panthers, to have divers colours in them, for there are in Hircania Panthers with little round spots like eyes, both black, white, blew, and green, as both Solinus and Claudius tell, which caused Martial to write thus; Pito quod juvenescit, color juvenescit. There is a land called Terraramborum, inhabited by the Troglodytes and Sarazen in Libya, where the upper face of the earth is compared unto the Panthers skin, because through the heat of the Sun it is burned, and died as it were into divers colours; so that ye shall fee divers spots of white, black, and green earth, as if it were done of purpose by the hand of man. The teeth of the Panther are like faws as are also Dogs and a Lions; their tongue of such incredible sharpnesses, that in licking it graeth like a file.

The males have four udders in the midit of their belly, the heart is great in proportion, because he is a violent Beast, terrifying man. There are many figures in their feet. Their former feet have five distinct claws or fingers, and their hinder-feet but four, for little ones among four-footed beasts, have five fingers upon their hinder-feet: when they go, they hide their nails within the skin of their feet, as it were in sheaths, never bringing them forth but when they are in their prey, to the intent they should never be broken nor dulled. Their tails have no long hairs at the end like a Lions or Oxes, and the Leopard hath a wider mouth then the Pardal.

The female is oftener times taken then the male, the reason is given by Velateran; because she is inford to seek abroad for her own meat and her young ones. The place of their abode is among the Mountains and Woods, and especially they delight in the tree Camphory. They raven upon flesh both Birds and Beasts: for which cause they hide themselves in trees, especially in Maurikos, where they are not very swift of foot, and therefore they give themselves to take Apes, which they attain by this policy: when they see the Apes, they make after them, who at their first approaching chime up into the tops of trees, and there fit to avoid the Panthers teeth, for he is not able to follow them so high, but yet they can cut the Apes, and therefore make with more fight then to take them, that where nature hath denied her bodily power, there she might supply that want by the gifts of the minde. Forth therefore the goeth, and under the tree where the Apes are lodged, she lyeth down as though she were dead, stretching out her limbs, and restraining her breath, flushing her eyes, and shewing all other tokens of expiration. The Ape that fit on the tops of the tree behold from on high the behaviour of their adversary, and because all of them with her dead, they more easily believe that which so much they desire, and yet dare not defend to make tryst. Then to end their doubts, they chuse out one from among them all, whom they think to be of the best courage, and him they send down as it were for an eyry, to certify all the residue: forth then he goeth with a thousand fears in his minde, and leapteth from bough to bough with no great halt; (for dread of an ill bargain:) yet being come down, darest not approach nigh, but having taken view of the counterfeit, and repressed his own fear, returneth back again: After a little space he defendeth the second time, and cometh nearer the Panther then before, yet returneth without touching him. Then he defendeth the third time, looking into his eyes, and maketh trial whether he draweth breath or no, but the Panther keepeth both breath and limbs immovable, by that means imboldning the Ape to their own destruction; for the Spie-ape fitteth down beside the Panther, and fitteth not: now when those which are above in the tree, see how their intelligence abideth constantly beside their adversary without harm, they gather their spirits together, and descend down in great multitudes, running about the Panther, first of all going upon him, and afterwards leapin with great joy and exultation, mocking this their adversary with all their apith toys, and reffifying their joy for her supposd death: and in this fort the Panther fuffereth them to continue a great seafon, till he perceieth they are thoroughly wearied, and then upon a sudden he leapeth up alive again, taking some of them in his claws, destroyin and killing them with teeth and nails, till he have prepared for himself a rich dinner out of his adversaries flesh. And like as Ulysses endured all the consuemes and reproaches both of his masts and Wives fisters, until he had a just occasion given him of revenge, so doth the Panther the disdainful dealing of the Ape: whereupon came the proverb, Eadi mortem dissipamin, Tumam Pardales hypemnimus, against a cunning difsembling fellow, such a one as Brum was, who counterfeited madness that he might get the Empire.

So great is the love of this Beast to all Spices and Aromatical trees, that they come over all the Mountain Taurus through Armenia and Sylia, when the windes bring the favour of the sweet gum unto them, out of Pamphulia from the tree Storax: whereupon lyeth this Rory; There was a certain Panther which was taken by King Ariaces, and a golden collar put upon his neck, with this inscription: Rex Ariaces Deo Nifae, that is, King Ariaces to the God Bacbus: for Bacbus was called Nifae, of a City Nifae in India. This Beast grew very tame, and would suffer himself to be handled and broked by the hands of men, until the Spring time that he winded the favour of the Aromatical trees, and then he would run away from all his acquaintance, according to his kind, and so at last was taken in the neather part of the Mountain Taurus, which was many hundred miles diant from the Kings Court of Armenia.

We have shewed already how they love the gum of Camphory, watching that tree, to the end to preserve it for their owne, and indeed as Aelius faith: Admirabilem quanam odoris suavissimam ... Pardalos, quam bene edendi prescribant divini munere donantes, cum fidi praecriam plane tene, tum vero cetera animalia ejus banc vicem praclare fientium: that is to say, The Panther or Pardal smelleth most sweetly.
sweetly, which favour he hath receives from a divine gift, and doth only feel the benefit of it himself, but also bewray unto other Beasts: for when he feeth himself to be hungry and stand in need of meat, then doth he get up some rough tree, and by his favour or sweet smell, draweth unto him an innumerable company of wilde Goats, Harts, Hoes, and Henders, and such other Beasts, and so upon a sudden leapeth down upon them, when he epyeth his convenient time.

And Salmoius faith, that the sweetnefs of his favour worketh the same effect upon them in the open fields, for they are so mightily delighted with his sported skin and fragrant smell, that they will always come running unto him from all parts, thriving who shall come nearest him to be satisfied with the fight, but when once they look upon his fierce and grim face, they all are terrified and turn away: for which cause the subtle Bealt, turneth away his head, and keepeth that from their sight, offering the more beautiful parts of his body, as an alluring bait to a Moufe, and destroyeth: and from hence there are some which are of opinion, that he receiveth his name Panthera, of congregating together all kinde of Beasts to look on him, for Pan signifies all, and Theseis signifieth Beasts. Albertus is of opinion, that the report of the Panthers favour or sweet smell is but a fable. because (he faith) it is written as a Maxim among Philosophers, that Cetera animula praeter hominem rea, sauvatori neque, molestia adhibunt usque, that is: That no creatures (man excepted) can be fained either sweetly or sourly: and Theophrastus writeth, Animal nulhum panter adhaim est nisi quum discerit Paradisum, bellumum cenjui bene ole, that is: There is no creature that can be fain to be so odorous, except the Pardal foom to smell well to the incents of other Beasts: for it is certain, that there are some favours and incents which Beasts do follow and refuse, being led thereunto only for the choice of their meat; for by their noses they chose that which is the convenient and agreeable to their natures, but that they should be drawn by any favours or merits merely, and for no other cause but the pleasure of the incents, as it is a reasonable part in man, so it is unreasonable, to attribute the very fame unto a Bealt.

Yet herein by the favour of Albertus I differ from him, for it being granted, which all men yeeld unto, that either the spots of his skin, which feem to be as many eyes as colours, or else the sweet favour which cometh from him is the occasion of the Beasts assembling about him: then followeth, that when he is from the earth, and lodged in a tree, and so not visible to the eyes of the bealls, if then I say they assemble about the tree wherein he is lodged, there is no cause to draw the Bealts unto him, but the attractive power of his sweet favour: and what want of reason can it be justly deemed, to say that Beasts love sweet favours, seeing both Albertus, and all other learned men that I know, do confidently affirm, that many wilde Beals do forfaie their meat to hear musick: and also the Badger doth forfaie his own den when he perceiveth the Fox hath emptied his belly therein.

Therefore I will conclude this point with admiration of the work of the Creator, to consider how wisely he hath disposed his goodnes, and how powerfully he communicateth the affections of his divinity even unto brute Bealls, who doth not diftinguish them more otherwise by their outsides and exterior parts, nor yet by their insides and qualities of their mindes, but also by the air they draw in, and the favour they send forth.

Among all kinde of Beals the male is most courageous and fierce, except in Bears and Panthera, for the female Panther is more generous then the male. At the time of their lust, they have very peculiar voices, which caused the Poet to write thus:

Panther caruit amans, Pardus blandz felit.

At the found of those voices other Beasts come about them, as both Lions, Lionesses, Wolves, and Thoes. They never bear above once, because when the young ones begin to fhir in the dam's belly, and gather strength for birth, they cannot tarry the just time of their delivery, but tear out the womb or bag wherein they lie with the sharpnes of their nails, and therefore their dam is forced for the avoiding of pain to call them forth of the womb both blinde and deformed, which yet the nouriheth tenderly, but afterwards can never conceive again, by reason that her womb is so torn with the claws of her first whelps, that it is not able to remain to perfection the received seed of the male.

Panthers live together in flocks or herdes, and greatly delight in their own kinde, but in no other that I know, and therefore I wonder from what Author Iseuros writeth. Panther omnis animium amicos el excepto Dragon. That the Panther is friendly to all Beasts except the Dragon. It was not in vain, that the Poets feigned the Nurse of Beroeus to be turned into Panthers, and that they devoured him, because he said upon Beowulfe: for as a Lion doth in mult things imitate and resemble the very nature of Man, so after the very self same manner doth the Panther of a Woman, for it is a fraudulent, though a beautiful Bealt, or (as Adamantius writeth) panthera ingenium mollc ell, efamfratam, fracoam, insidijcum, & fraudulentam, timidum fimul & audax, his musculus corporis titam forma respondit: that is: The disposition of the Panther is wanoen, effeminate, outrageous, treacherous, deceitful, false, and yet bold: and for this occasion, in holy Scriptures it is joined with the Lion and the Wolf, to make up the triplicity of ravening Beals: and therefore also we read, that the wise of the Egyptians, when they will signifie a cunning man covering the secret corruption and evil disposition of his minde, pretending good, and yet intending evil, they picture
a Panther; for we have chanced already, how he doth cover both his head and his body to take
his prey.

This Beast is never so tame but that he falleth into his wilds fits again. Their love to their young
ones is exceeding great, for if at any time while they are abroad to forage, they meet with Hunters
that would take them away, they fight for them unto death, and save them from blows. Interpose
their own bodies, receiving mortal wounds, but if they finde their young ones taken out of their den
in their absence, they bewail their los with loud and miserable howling.

Demetrius, the Philosopher, relateth this story of a Panther, that lay in the high way to meet
with a man to help her young ones out of a ditch or deep pot wherein they were fallen, at length
there appeared in her sight the father of Philippus a Philosopher, who prefently began to run away
as soon as he saw the Beast, but the poor disreased Panther rowled after him in humble manner, as
though she had some fate unto him, and took him lightly by the skirt of his garment with one of
her claws: the man perceiving that the gave suck by the greatness of her Udders hanging under her
belly, began to take pity upon her, and layed away fear, thinking that indeed which happened, that
her young ones were taken from her by one means or other; therefore he followed her, the drawing
him with one of her feet unto the cave whereunto her young ones were fallen, out of which he delivered
them to the mother as ranfome for his own life, and then both the and the young ones did
follow him rejoicing, out of the danger of all Beasts, and out of the Wildernefs, dismilling him
without all manner of harm, which is a rare thing in a man to be so thankful, and much more in a
Beast: and unto this story of their love and kindnecfs to their young ones, I may add another, wort-
ythy to be remembered out, of Philippus:

There was (faith he) a man which brought up a tame Panther from a whelp, and had made it fo
gentle, that it refused no society of men, and he himself loved it as it had been his wife. There
was also a little Kid in the Houfe brought up tame, of purpose to be given unto the Panther when
it was grown to some stature or quantity, yet in the mean while the Panther played with it every
day: at last it being ripe, the Master killed it, and laid it before the Panther to be eaten, but she
would not touch it, whereupon he failed till the next day, and then it was brought unto him again, but
he refused it as before; at last he faid the third day, and making great moan for meat, according
to his usual manner, had the Kid laid before him the third time; the poor Beast seeing that nothing
would serve the turn, but that he must either eat up his chamber-fellow, or else his Master would
make him continually fail, he ran and killed another Kid, disdaining to meddle with that which was
his former acquaintance, yea though it were dead: herein excelling many wicked men, who do not
pare those that have lived with them in the greatest familiarity and friendship, to undo and over-
throw them alive for the advancement of themselves.

The harms of

Panthers.

West have said already, that they most of all resemble Women, and indeed they are enemies to all
creatures. The Leopards of Barbary do little harm to men that they meet, except they meet them in
some path way where the man cannot decline the Beast, nor the Beast the Man, there they leap most
forcibly into his face, and pull away as much fether as they can lay hold upon, and many of them with
their nails do pierce the brains of a man.

They use not to invade or force upon flocks of Sheep or Goats, yet wherefoever they see a Dog,
they insatiably kill and devour him. The great Panther is a terror to the Dragon, and so soon as the
Dragon feeth it, he flyeth to his cave. The leffer Panthers or Leopards do overcome Wolves being
ingle, and hand to hand as we say, but by multitude they over-matter and destroy him, for if he
endeavour to run away, yet they are swifter and easily overcome it.

There is alfo great hatred and enmity between the Hyena and the Panther, for in the preface of
the Hyena, the Pardal dare not reft; and that which is more admirable, if there be a piece of an
Hyenas skin, about either man or beast, the Panther will never touch it, and if their skins after they
be dead be hung up in the presence of one another, the hair will fall off from the Panther; and
therefore when the Egyptians would dignifie how a Superiour was overcome by a Inferiour, they
picture those two skins. If any thing be anointed with broath wherein a Cock hath been foddern,
neither Panthers nor Lions will ever touch it, especially if there be mixed with it the joyce of
Garlick.

Leopards are afraid of a certain tree called Leopards-arbor, Leopards-tree. Panthers are also
afraid of the skull of a dead man, and run from the sight thereof: yet it is reported, that two
year after the death of Francc King of France, two Leopards, a male and a female were left unknoc-
ked in France into the Woods, either by the negligence or the malice of their Keepers, that is, a male
and a female, and about Oreianre tore in pieces many men and women; at last they came and killed
a Bride, which was that day to have been married, and afterward there were found many carcufes
of Woman destroyed by them, of which they had eaten nothing but only their breasts: Such like
tings taught express many in this place, whereby the vengeance of Almighty God against man
kind for many sins, might seem to be executed by the raging miniftrey of wildlife, savage, and un-
genteel Beasts.

For this cause we read in ancient time how the Senators of Rome gave laws of punishment against
them that should bring any Panthers into Italy, especially any Africain Beasts: and the first that
gave dispensation against those laws was Cneius Ascidius the peoples Tribune, who permitted them
for the sake of the Circenian games: and then Senecam in the office of his rudiility brought afio in an
hundred and fifty: After him Pompey the great, four hundred and ten, and laftly Angulius that ever
remem-
Of the Panter.

remembered and renowned Emperor, four hundred and twenty. Thus laws which were first made by great men and good Senators, for the safety of the common-wealth, became of no great value, because as great or greater then the Law-makers, had a purpose to advance themselves by the practise of those things which law had juttly forbidden: for if those decrees had stood effectual, as the victorious Champions had lost that part of their vain triumphs, so many people had afterward been preserved alive, who by the cruelty of these Beasts were either torn in pieces, or else received mortal wounds.

It was not in vain that the blessed Martyr of Jesus Christ Ignatius, who was afterwards torn in pieces by wilde Beasts at Rome, did write thus in his Epistle to the Roman Christians concerning his handling by the Roman Souldiers, as he was brought prisoner out of Syria to Rome. *A Syria Romana, cuius spiritus de morte terminatur, die tolle quibus cum domum Leopards, etc., etc.*

The nature of tame Panthers. The taking of Panthers.

The taking of Panthers. Disconsolates.

There is a kind of Henbane which is called Fardelankscher or Libbard-bane, which the Inhabitants of Syria are wont to use in the Mountains for the destroying of Leopards, Pards, and Panthers. This herb is not much known at this day, yet I take it to be the same which grew in many places of France, and Spain, and it is called Tara, by the root thereof beaten to powder, and stopped up in fith, north of the Alps, but also Wolves and Swine, as wilde Boars are destroyed, if they talk thereof: when the Beast perceiveth himself poysoned, presently he seeketh for mans dund, for without that he cannot be delivered; wherefore the Hunters do also place near unto it some veffel of it hanging in a tree, with the mouth or way open that leadeth into it, whereinto the greedy Beast leapeth, and being in, cannot get forth again but rather dyeth with hunger, or else is taken and killed; or else the veffel is hanged up so high, that the Beast by straining himself to leap into it, and get his desired medicine, (but all in vain) doth spend out the time of his recovery till the poyson hath thoroughly corrupted his body, and every part and member, for otherwise he doth not live to his adversary, although his guts and intrails hang about his legs out of his belly.

Therefore the Panthers of Syria do more often perish by poyson then by other violence of Swords, Spears, or Dogs: for by this poyson the Beast many times falleth to such a loozeness of his belly, and withal such a weakness thereby, that he is taken alive. Likewise in Armenia there are certain Fishes which are poyson to Lions, Beasts, Wolves, Lynxes, and Panthers, the power of this fish the Inhabitants put into the sides and feth of their Sheep, Goats, and Xydes, without all harm to these Beasts; but if the Panthers or any ravening Beast come and devour any of those Sheeps so dreeded, presently they die by poyson.

When they are hunted and forced in the presence of the Hunters, then they leap directly unto their heads, and therefore the Hunter taketh great care both of his standing and also of holding his spear, for if he receive not the Panther in his leap, and gore him to the heart, or else otherwise wound him mortally, he is gone, and his life is at an end. *Oppidum also sheweth, that he is taken as Lions are, especially by these means following:* for when the Hunters perceive the way or path which he useth to his water, therein they make a deep ditch (but not so great as they make for a Lion) whereon they erect a wooden pillar or great post, unto that they tie certain engins, and withall
withall a male little Dog, whose stones or tender cords they binde with some string or cord, so as the young beast may whine and cry for pain, by which voyce he inviteth and calleth the Panther to his destrucion: For the greedy beast wending the voice of the Dog, belittreth himself to meet with his defined prey or booty; at last finding the ditch, and seeing the Dog down, he leapt, where the engins take pretent hold upon him and destroy him: and so he describeth the same means to take great fishes by the fight of little fishes swimming in a Net.

In hunting of wilde beastes the wary Wood-man must make good choice of his Horfe, not only for the metal and agility which are very necessarie, but also for the colour, as we have already expreffed in the story of the Horfe: for the gray Horfe is fitteth for the Beare; and moft terrible to him; the yellow or fire colour against the Bore; but the brown and reddith colour against the Panther.

The Mores also use other devizes to take Panthers and all such noifome beastes, they enclofe in a little house certain rotten flefh, which by the favour thereof when it thinketh, draweth the wilde beastes unto it: For they make a dore, or a gate of reeds unto the fad house, through which the filthy smell breaketh out and differeth it fell into the wide air; prefently the wilde beastes take it up, and follow it with all speed they can,for there is not any Musk or other sweet thing wherewithal men are so much delighted, as ravening beastes are with the favour of carnion: therefore like an amorous cup it draweth them to the snare of perdicion: for beside the rotten flefh, they erect many engins and unavoidable traps to snare in the beaft when he cometh to raven.

The Christians of Africa, did institute a general hunting of Leopards, inclosing the ends of the ways through which the beastes were to pafs: The Leopard when he was flitted ran to and fro distracted, because in all his paffages he found Horfe-men ready to refift him, neither left they any way for him to escape: at length wearied with many windings, turnings, and provocations, the Horfemen might easily come unto him and pierce him with their spears: but if it fortunate that the Leopard escaped, and brake away from the Hunters; then he at whose corner he brake forth, was bound by ancient custome to make the residue a dinner or banquet.

Among the Chalmoni, there was a certain young Nobleman which loved a Virgin called Antippe, the which two lovers were walking together a good feanon in a Wood: It happened while they were there, that Cibyra the Kings Son profecuted a Pardal in hunting: which was fled into that Wood, and seeing him, bent his arm against him and call'd his Dart: the which Dart miffed the mark and killed the Virgin Antippe, the young Prince thought that he had flain the beaft, and therefore drew neer on Horfe-back to rejoice over the fall of the game, according to the manner of Hunters; but at his approach he found it far otherwise, for in heed of the effufion of the blood of a beaft (that which was more lamentable) his right hand had flied the blood of a Virgin: For when he came to them he faw her dying and drawing her laft breath, and the young man held his hand in the wound to flanch the bldou: for sorrow whereof he prefently fell distracted in his minde, and ran his Horfe to the top of a fharp Rock, from whence he call'd down himself headlong and fou perifhed.

The Christian after they underſtood this fearful accident, and the reaſon of it, compaſsed in the place where he felle with a wall, and for the honour of their dead Prince built a City where he loft his life, and called it Cibyra after his own name.

Leopards and Panthers do also love Wine above all other drink, and for this caufe both Bacchus was refembled to them, and they dedicated to him: Bacchum sacro affimilant & Pardalis, quod homines ebrietatis etuiam ingenia referant, & omnino violenter agant, quidem enim tunc simul frumentum inflatus, & pugnetur fieri: ut Pardales, quin Plato in his fecond Book of laws, they refemble and compare Bacchus to a Bull, or Pardal, becaufc drunken men in all their actions do imitate the difpoſition of thofe wilde beastes, both in their folly and violence: For fome of them are wrathfull like Bulls, and fome of them wilde apt to fight, like Pardals: Bacchus was also called Nebris, becaufe he wore the skin of a Hinde-calf, which is spotted almoft like a Panther: and therefore a fearful man, or a drunken, variable and inconstant man, is faid to wear a skin of divers colours, but the chief caufe why Panthers were dedicated to Bacchus, was for their love of Wine; for all Writers do conſtant and with one conſent affirm, that they drink Wine unto drunkennes: the manner and end thereof is elegantly described by Oppianus in this fort: When the Inhabitants of Libya do obſerve fome little fountain arifing out of the land, and falling down again, (as in the manner of small Springs which cannot encreafe into great Rivers) whereat the Panthers and Pardals ufe to drink early in a morning, before it be light; after they have been at their prey in the night time, the Hunters come and pour twenty or thirty pitchers of old sweet Wine into the faid Fountain, then a little way from it they lie down and cover themselves with clothes, or with straw, for there is no shelter either of tree or bulthes in that Countrie.

In the morning the Panthers ardently thirfting, and being almoft dead for want of drink, come unto the fame fountain, and taking of the Wine drink thereof great abundance, which prefently falleth to work upon their brains, for they begin firft of all to leap and sport themfelves, until they be well wearyed, and then they lie down and sleep moft soundly, at which time the Hunters that lye in wait for them, come and take them without all fear or peril: Thus far Oppianus.

Concerning the ufe of their ferveral parts, I finde little among the ancients, except of their skins, for the foot-men and ancient Souldiers of the Mores did not only wear them for garments, but also slept
Of the Poephagus.

If the skin or hide of a Leopard being taken and dyed, be covered or laid upon the ground, there is such force and vertue in the same that any venemous or poyllonome Serpents dare not approach into the same place where it is so laid. The fleth of a Panther being roufled or boiled at the fire, and smelled by any one which is troubled with the Palfie, or shaking in the joynets, as also by them which are troubled with the beating and continual moving or turning of the heart, is a very profitable and excellent remedy for the same.

The same fat or fewer of a Leopard being mixed or mingled with the Oyl which proceedeth from the Bay-tree, and then mollified both together, and so anointed upon any one which is troubled with the scurfe or mangy, the feabs whereof doth cut or pierce the skin, doth presently and without any grief or pain cure the same. The twigs of a Vine-tree being dyed and beaten into small dull or powder, and mingled together with the fat or grease of a Leopard, and so anointed upon the face of any one who is grieved with aking and dwelling thereon, will not only cure and heal the same without any pain or follow, but also preserve the same free from blemishes in the time of healing. The grease also of a Leopard by it self, being anointed upon the head of any one who doth fde or call his hair, or is troubled with the Foxes evill, doth immediately help and cure the same. The blynd of a Panther being anointed upon the veins or finews of either man or woman who is grieved with any swelling or aking therein, is very profitable and curable to expel the same away. The brains of a Leopard being mingled with a little quantity of the water which is called a Canker, and with a little Jasmine, and so mixed together and then drunk, doth mitigate the pain or ach of the belly. The brains of the same beast being mixed with the juice of a Canker, and anointed upon the genital of any man, doth incitate and hur him up to lechery, but the marrow which cometh from this beast, being drunk in Wine doth eafe the pain or wringing of the guts and the belly. The gall of a Panther being received into the body either in meat or drink, doth inflantely and out of hand kill or poyfon him which doth fo receive it. The right stone of a Leopard being taken of a woman of a far spent age, doth restore unto her, her menstrual purgation being ceasid, and doth make her to purge, if the doth heartily receive her meat more often.

Of the Ponephagus.

There is a beast in India called Poephagus, because he feedeth upon herbs and grafs like a Horfe, whose quantity he doth exceed double, for he is twice fo big, his tail is molt thick and black, the hairs whereof are thinner then the hairs of a mans head: and therefore Indian women make great account of them, for with them they binde up their own hair, plaiting it, and folding it in curious manner, every hair is two cubits in length, and upon one root twenty or thirty of them grow together: this great beast is one of the fearfuleft creatures in the world: for if he perceiveth himfelf to be but looked at of any body, he taketh him to his heels as faft as he can go, and yet although his heart be light, his heales be heavy, for faith my Author, Maga fludiofe quam celenter fugam peragi. That is, He hath a good will to run apace, but cannot perform it: but if he be followed upon good ftwift Horfes, or with nimble Dogs, fo as he perceiveth they are near to take him, and he by no means can avoid them, then doth he turn himfelf, hiding his tale, and looketh upon the face of the Hunter with some confidence, gathering his wits together, yet in fearful manner, as it were to face out his purfuer or hunter, that he had no tale, and that the re-idue of his body were not worth looking after: but while he flaneth flaring on his Hunter, another cometh behind him and killeth him with a Spear, fo they take off the skin and tail, and throw away the fleeth as unprofitable, for the other recoumbe their labour for their pains. Volaterranus relateth this a little otherwife, and faith that the beait biteth off his own tale, and so delivereth himfelf from the Hunter, knowing that he is not defeed for any other caufe.

Nicolaus Venetus an Earl, writing of the farthest part or Province of Arj, which he calleth Mec- tum, and I think he meaneth Serica, because he faith it lyeth betwixt the Mountains of India and Cathay, there are a generation of white and black Oxen which have Horfes tails, but reaching down to their heels, and much rougher. The hairs whereof are as thin as the feathers of flying birds, thefe he faith are in great estimation; for the Knights and Horfemen of that Countrey do wear them upon the top of their lances and spears for a badge or cognizance of honour, the which I thought fit to be remembered in this place, because I take them to be either the fame with thefe Indian beafts, or very like unto them.
The History of Four-footed Beasts.

The Porcupine or Porcupine.
I cannot learn any name for this Beast among the Hebrews, and therefore by probability it was the several unknown to them: The Grecians call it Acanthoceras and Hispries, that is, fætus foæta, a hairy, or bristly, or thorny Hog, for their quils which they bear upon their back, are called both Pili, fæta, villi, pinna, awesli, and pinse, that is, both hairs, bristles, rough hair, pins, prickles, and thorns. The Arabians call it Adalbub, and Adaluib, Adulb, Adulabi, and some Aherba, which by Ausen and his Glossographer, is defined to be Mountain Ericius babens jimis sagitalis, an Hedgehog of the Mountain, having quills upon his back which he shoots off at his pleasure. The Gre- Glolographer, is derived or rather corrupted of Acanthoceras. The Italians call him Prorinumo and Hisprius or Istrius, without an Aspiration; the Spaniards, Parescopis; the French, Porcsopic; the Lycians, Porcofoimo, and Marskofiusindius implanting therein the German, which call a Sea-hog, Ein Meerschweyn: The German in some places call it Taran, and in other places Dornkonw, that is a Thoray-hog, by a feigned name in imitation of other Nations, and also Parotick, following the Italian, Spaniards, French, English, and Ljpians: I will not fland to confuse them, who write that this Beast is a Sea-beast, and not a Beast of the land, nor yet those that make question whether it be a kinde of Hedge-hog or not, for without all controversy, as the Arabians, Pliny, Albertus, Bellanurus, and other do affirm, the vulgar Hedge-hog, is Ericius Systhstrus, and the Porcupine Ericius Montanus.

There are bred in India and Africk, and brought up and down in Europe to be seen for mony: Likewise about the City Caffern in Tartary, by the flight of one of thefe it appeared, that it was three foot long, the mouth not unlike to a Hare's, but with a longer slit or opening: so also the head of the fame fimilitude, the ears like to the ears of a man; the fore-feet were like the feet of a Badger, and the hinder-feet like the feet of a Bear: it hath a mane standing up in the upper part right or direct, but hollow or bending before: Upon the bunches of his lips on either side of his mouth, there grew forth long black bristles. The general proportion of his body is like a Swine, and they never escaped the nature of a Swine of half a year old.

The four formof teeth hang over his lips, and that which is most admirable in him, the Quils or Thorn, growing upon his back in head of hair, he ufeth for hands, arms, and weapons.

They first grow out of the back and sides, which are of two colours', that is, partly black, and partly white, whensoever he pleafeth, he moveth to and fro like as a Peacock doth his tail: they grow in length two, three, or four hands breadth: they fand not in any confused form of colours, but in well formed diftinguifhed ranks, being sharp at the points like a knife: When they are hunted the Beast fretcheth his skin, and caffeth them oft, one or two at a time, according to the neceffity upon the mouths of Dogs, or legs of the Hunters that follow her, with fuch violence, that many times they stick into trees and Wood, wherefore Selinus writeth thus, and Afo Paulus Verus: Cum captinant, fipnas sues fepe homine, & canes ladunt: nam canes in eum provocati, adeo irritant feras illos, ut simul concurrenter terga fua quibus fipnae inimicat, vel baseman contra movemant, atq. in viciniores homines, & canes vibris. That is to fay, When they are taken many times hurt both Dogs and men, for when the Dogs being provoked by them, run upon the backs which bear the quils, they are fo far firued, that they cafl them off upon all that fland near them, and therefore they fight fying.

The Hunters to fave their Dogs do devise engins and traps wherein to take them: besides the quils that grow upon their backs, they have alfo some upon their heads and necks, which they never cafl off, but keep them on as a Horfe doth his mane. The pilgrims that come yearly from Saint James of Compostella in Spain, do bring back generally one of their quils in their Caps, but for what caufe I know not. The pace of this Beast is very flow and troublesome unto it, and therefore it is hardly drawn out of his den, which it diggeth like a Badger, from which it never goeth far, but feedeth upon thofe things which are near unto it: It is a filthy Beast, f melling rank because it liveth fo much in the earth, being wild it never drieth, and I think it eateth Apples, Roots, and rinfes of trees, and pereventures Snail, and fuch reptile creatures, but being tainted, it eateth alfo many kindes of fruit, likewise bread, Pe-cruit, and fuch things broken small. It drinketh alfo water, but above all other, Wine or brine agle with water: In the day time it sleepeareth, and in the night time it wakeith, by which we gather, that being wild it feareth the light, and therefore travelleth in the night time for his meat and living. It is a general live creature, and begetteth other in his own kind: the female bearing the young ones in her belly, as long time as a Bear, that is, thirty dayes; and alfo it hideth it felf four moneths in the Winter time, like a Bear, but whether for cold or any other caufe the Authors do not exprefs.

In my opinion for cold rather then for any other reafon, although there be fome that affirm it lyeth hid in the Summer time, and cometh abroad in the Winter time, contrary to the course of all other Beasts, and therefore fuch a Paradox doth want the teftimony of fome credible Writers, which I should affirm it upon their own experience, or else it were requisite to bring sufficient reafons to lead their Readers to believe it, but neither of which is difcharged by them, and therefore it is fafer for us to follow Aritifate and Pliny, who hold the fift opinion, then Albertus and Agricola who encline to the later. In all other things, both of their lying hid, of their procreation, of the coming out of their cave and nourishing their young ones, they imitate the manners and conditions of Bears.
Concerning the use of their parts, I finde none but only of their quils, for with them it is said, if men scrape their teeth they will never be loofe, likewise women were wont in ancient time to use them for parting afunder their hair in the top of their crowns.

The flesh of this Beast is like a Hedge-hogs, neither very natural for meat and nourishment, nor yet very medicinable: yet it is said to help a weak and over-burthened stomach, to procure looseness of the belly, and to diminish all Leprosies and scabbed Exulcerations and pustules: Being salted it is good against the Dropkie, and also very profitable, as Pliny writeth, to be eaten by them that cannot contain urine in their beds: yet the Gracians attribute no such quality unto this, but to help the stomach and loosen the belly, they attribute to the Sea-hog; and against the leprosie, scabs, and incontinency of urine to the Hedge-hog; but peradventure the saying of Pliny, (Qua de Herinacea dictatur omnia tanta magis valent in Hispania) leadeth them to attribute these things to the Porcupine. The powder of their quils burnt, drunk or eaten in meats or broth, doth promote and help conception: Thus faith Avicen, and herewithal I conclude this short discourse of the Hedge-hog.

Of the Reiner, or Rainiger.

His Beast is called by the Latines, Rangifer; by the Germans, Rein, Reiner, Rainiger, Reinsifer; by the French, Rangier, and Ranglier; and the later Latines call it Reingue. It is a Beast altogether unknown to the ancient Gracians and Latines, except the Macros; that Pliny speakeoth of be it; But we have shewed already in the story of the Elk, that Alcey and Mboi are all one. This Beast was first of all discovered by Olam Magnus, in this Nor-
Northern part of the world, towards the pole Artique, as in Norway, Sweden, Scandinavia, at the first sight whereof he called it Raingifer, quafi Ramifer, because he heareth horns on his head like the boughs of a tree. The similitude of this Beall is much like to a Hart, but it is much bigger, stronger, and swifter. It beareth three orders or rows of horns on the head, as by the direction of Valerius Grævius, and Benediclus Martinus are here expressed.

This Beall changeth his colour according to the time of the year, and also according to the quality of the place wherein he feedeth, which appeareth by this, because some of them are found several parts, to be of the colour of Aes, and shortly after to be like Harts. Their breast is full of long bristles, being rough and rigid through the same. The legs hairy, and the hoofs hollow, cloven, and movable, which in his course he spedeth whereupon the deepest snows, without preffing his footsteps far into them: and by his admirable cruelty he avoideth all the wide Bealls which in the Valles he in wait to destroy him. He beareth very high and lofty horns, which presently from the root branch forth into two items or pikes, I mean both the horns severally into two, which again at the top disperse themselves into pikes like the fingers of ones hand; in the middle of the horns there is a little branch flandeth out like a knob, or as a huckle in the hinder-part of a Beall's leg, from thence again they ascend upwards a great height, and do grow abroad at the top, where they are divided like the palm of a hand.

The horns are white, distinguished with long apparent veins, differing both from the horns of Elks, and the horns of Harts, from Elks in height, and from Harts in breadth, and from them both in colour and multitude of branches: When he runneth he layeth them on his back, for when he stands still, the lowest branches coming forth of the roots of the horns, do almost cover his face with their lower branches.

In the Winter time when he is a-chief, and cometh to the frozen waters he breaketh these: being wide he liveth upon such fruits as he findeth in the Woods, especially the gum that cometh out of the Trees, and with the mosses that groweth upon them, making himself shadowed dens and retiring places in the Mountains: but in the deep cold weather he cometh into the Mountains of Norway, towards Mosberg, and other hills. He is taken by the Countrie people for private uses, for he is profitable after he is tamed, both for the plough and travails in journeys. The people called Lappi, or Lappones, do use them in stead of Horses and Oxen, for they have a kind of Cart made in form and fashion of a fishers boat whereunto they join the Bealls to draw them, and the Carter hath a convenient seat fitted for him on the fore-part thereof, wherein he sitteth with his legs fastened to the Cart, to the intent he be not call off when the Beall runs speedily: he carrythe the reins whereby he governeth them in his left hand, and in his right hand a flaffe, wherewith he sustainth the Cart when it is in danger of falling, and in this course they will continue indeatagibly twenty German miles a day which is more than three score English miles. At night when the Bealls are unyoaked, of their own accord, without guide or leader they will go to their feeding places, or accustomed stables. It is a very sociable creature, for they do live together in herds above a thousand in a flock, whereunto it may be the Lord alluded in the 50. Psalm, when he said by the mouth of Apsb, All the Bealls of the field are mine, and the flocks of thousand which ran wilde on the hills. The females want horns, and their milk is the greatest part of food to those Northern people: they have been seen at Auffurge in Germany faddled and bridled, for in their travails they need not have any provender carried with them, for if ye turn them out in the midit of the Winter, they finde certain roots and moss under the snow whereof they eat, and consume themselves. Their best food is grass. They are used both in Mosfonia, Polonia, Bohemia, Scandinavia, and Muscovia, yet they can endure no heat, for being brought into Bohemia they die.

Their Carts which they draw must be made with a sharp edge at the bottom like a boat or flup as we have said already, for they are not drawn upon wheels, but like drays and sleds upon the earth. There was a Lapponian which brought one of these into Germany in December, & he professeth he never felt so much heat of the Sun in all his life, as he did at that time, which is our coldest time in the year, and therefore how great is the cold which both men and Bealls endure in that Countrie?

The horns of these Bealls are to be seen both in Berne and at Auffurge in Germany; the feet are somewhat white, being rounder than a Harts feet, and more cloven or divided, wherefore at some times one part of his hoof may be seen upon a stone, while the other part reflecth upon the earth, and in the upper part of the hoof where it beginneth to be cloven near the leg, there is a certain thick skin or membrane, by vertue whereof the foot may be iutretched in the diuision without harm or pain to the Beall.
The King of Swedia had ten of them nourished at Lappo, which he caused every day to be driven unto the Mountains into the cold air, for they were not able to endure the heat. The mouth of this Beast is like the mouth of a Cow, they many times come out of Lapponia into Swedia, where they are wonderfully annoyed with Wolves, but they gather themselves together in a ring, and loose against their enemies with their horns. They are also in their own natural Country annoyed with Gulions, and generally all Beasts that live upon the soil of Beth, are enemies unto them, and desire to destroy and eat them. In their pace, both slow and speedy, the articles of their legs make a noise like the cracking of Nuts. There was one of these Beasts given unto the Duke of Saxony, in the year of our Lord 1561. In Scandinavia they use them for the carriage of metals, drawing of Chariots and riding, and the nerves of them when they are dead make bows, and for want of nails, they do fallen planks and boards together.

Of the RHINOCEROS.

We are now to discourse of the second wonder in nature, namely of a Beasts every way admirable, both for the outward shape, quantity and greatness, and also for the inward courage, disposition and mildness. For as the Elephant was the first wonder, of whom we have already discoursed; so this Beasts next unto the Elephant filleth up the number, being every way admirable, as he, if he do not exceed him, except in quantity or height of stature. And being now come to the story of this Beasts, I am heartily sorry, that I find not any outside, as by figure you may perceive, yielding no doubt through the Omnipotent power of the Creator, an answerable inside, and infinite testimonies of worthy and memorable vertues comprised in it. Should through the ignorance of men, be unfolded and obscured before the Reader's eyes: for he that shall but see our stories of the Apes, of the Dogs, of the Mice, and of other small Beasts, and consider how large a treatise we have collected together out of many Writers, for the illustration of their natures and vulgar conditions, he cannot chuse but expect some rare and strange matter, as much unknown to his minde about the story of this Rhinoceros, as the outward shape and picture of him, appeareth rare and admirable to his eyes: differing in every part from all other Beasts, from the top of his nose to the tip of his tail, the ears and eyes excepted, which are like Bears. But gentle Reader, as thou art a man, so thou must consider since Adam went out of Paradise, there was never any that was able perfectly to describe the universal conditions of all sorts of Beasts; and it hath been the counsel of the Almighty himself, for the instruction of man, concerning his fall and natural weakness, to keep him from the knowledge of many divine things, and also humane, which is of Birds and Beasts, Fishes and Fowl, that so he might learn the difference between his generation, and his degeneration, and consider how great a loss unto him was his fall in Paradise; who before that time knew both God himself and all creatures; but since that time neither knoweth God as he should know him, nor himself as he shall know it, nor the creatures as he did know them.
The History of Four-footed Beasts.

But for my part which write the English story, I acknowledge that no man must look for that at my hands, which I have not received from some other: for I would be unwilling to write any thing untrue, or uncertain out of mine own invention; and truth on every part is so dear unto me, that I will not lie to bring any man in love and admiration with God and his works, for God needeth not the lies of men. To conclude therefore this Preface, as the Beast is strange and never seen in our Country, so my eye-sight cannot add any thing to the description: therefore hearken unto that which I have observed out of other writers.

First of all that there is such a beast in the world, both Pliny, Salinus, Dioscorus, Aelianus, Lampridius, and others, do yeeld irrefragable testimony. Heliodorus had one of them at Rome. Pompey the great, in his publick spectacles did likewise produce a Rhinoceros (as Seneca writeth.) When Augustus rode triumphing for Cleopatra, he brought forth to the people a Sea-horfe and a Rhinoceros, which was the first time that ever a Rhinoceros was seen at Rome (as Callius writeth.) Antonius Pius the Emperor, did give many gifts unto a Bull into the air with his horn, as if he had been a Tennyce ball, the Epigram is this;

O quadrupites exorsit prandias in iras,
Quintus erat cornu, cui pila Taurus erat!

Lastly to put it out of all question, that there is such a Beast as this Rhinoceros, the picture and figure here expressed, was taken by Gisner from the Beast alive at Lyons in Fontagale, before many witnesse, both Merchants and others; so that we have the Testimony both of antiquity and of the present age, for the Testimony of the form and fashion of this Beast, and that it is not the invention of Man, but a work of God in nature, first created in the beginning of the world, and ever since continued to this present day.

Concerning the name of this Beast, the Greeks because of the horn in his Nose, call him Rhino-
ceros, that is, a Nose-horned Beast, and the Latins also have not altered that invention, for although there be many Beasts that have but one horn, yet is there none that have that one horn growing out of their Nose but this alone: All the residue have the horn growing out at their foreheads.

There be some that have taken this Rhinoceros for the Monoceros, because of this one horn, but they are deceived, taking the general for the special, which is a note of ignorance in them, and occasion of error unto others; yet it is better to take the Rhinoceros for the Monoceros, because there is nothing in the special which is not contained in the general, according to the maxime in Logick, Nihil est in specie, quod non prius fuit ingenere: And yet that is also absurd, considering that Monoceros is not only a word of generality for all one-horned Beasts, but of particularity a name for the Unicorn, whereby is meant the Indian Afe, as we shall shew in the story of the Unicorn.

This Beast in the Hebrew is thought to be called Reem, or Karas, and therefore Munfher so tranla-
teth it, Deut. 33. Tauri decor ejus, cornua Rhinoceris cornua ejus, in eius ventilatis nationes ad summum usq; terrae. His beauty is like the beauty of a Bull, and his horns like the horns of a Rhinoceros, with the which he shall winnow the Nations to the tops of the Hills.

And Terrillian writing against the Heretique Praxices, doth so tranliterate it. If a man compare togethcr the Greek word Rhimuceros, and Reem, and Karas, or Rimna and Karas, he will easily think that either the Greeks have joyned together the two Hebrew words, as Rhinoceros quasa Reem Karas, or Rimna Karas; or else the Hebrew have parted under the Greek word, for Reem and Rimna may very wel come of Rhin, and Karas of Karos, yet here I leave the Readers to their own judgement. The Indians call this Beast in their tongue, Scandabenames, as Fefius writeth, but we will leave the name and come to the description of it.

In quantity it is not much bigger then an Ox: Pliny maketh it equal in length to an Elephant, and some make it longer then an Elephant, but withall they say it is lower, and hath shorter legs. Strabo in his 16. book speaking of the Ethiopian Region, near India, calleth these Rhinocerotes, Ethiopia-
pian Bulls, and faith that they are bred only in that Countrey, and by the relation of Artemidorus he writeth thus; Outul de microrn apoleiptontur eti eletontos ati rimocerotes, after Artemidorus phorsip, epis fraro,

That is to say, The Rhinocerotes are exceeded by the Elephants in length, but in height they almoost equal them (as Artemidorus saith) he saw by one that was at Alexandria, and the colour thereof was not of like a Box-tree, but rather like an Elephants, his quantity greater then a Bull, or as the greatest Bull, but his outward form and proportion like a wilde Boar, especially in his mouth, except that out of his Nose groweth a horn, harder then any bones, which he uteth in the stead of arms, even as a Boar doth his teeth; he hath also two girdles upon his body like the wings of a Dragon, coming from his back down to his belly, one toward his neck or mane, and the other to-
ward his loins and hinder parts. This far Strabo.

Wherunto we may add the description of other parts out of Oppianus, Pliny, and Salinus. His colour like rinde or bark of a Box-tree (which doth not differ much from an Elephant) and on his forehead there grow haires which seem a little red, and his back is distingishted with certain purple spots upon a yellow ground. The skin is so firme and hard, that no Dart is able to pierce it: and
Of the Rhinoceros.

and upon it appear many divisions, like the thills of a Tortoise set over the scales, having no hair upon the back. In like manner, the legs are scaled down to the hooves, which are parted into four distinct claws; upon his nose there groweth a hard and sharp horn, crooking a little towards the crown of his head, but not so high: flat and not round, to sharp and strong, Ut quid impetris, aut mensibus, aut perficiis, & forum etiam & fusa transfigat, faith Oppianus and Alcimus, that is, whatsoever it is set to, either it calleth it up into the air, or else boreth it through though it be iron or stones.

Eucherius faith, that the Rhinoceros hath two horns in his nose, but that is utterly false, as you may see in the picture: Although Martial seem to express so much in these Verses:

Namque gravem cornu geminos sic extulit usum,  
Faciat ut impetris Taurus in effus pilas.

The Rhinoceros cast up a Bear into the air, even as a Bull would do a ball which were laid upon his two horns: we shall not need to apply Geminos cornu to the Bull, as Politianus doth, but rather take it figuratively for a strong horn; and if it must needs be literal, it is apparent by the Picture that there is another little horn, not upon the nose, but upon the wither of the Beast, I mean the top of his shoulder next to his neck, so that the error of Eucherius lyeth not in the number, but in the place; and that it may appear that this horn is not a fagged thing, Paulianus above two thousand years ago writeth thus. Rhinocerotis in summò naso cornu singulare eft, & aliquis supra ipsum non magnum, in capite nullum.

I do marvel how it came to passe that men which can mock and deride others cunningly should be called proverbially Nātuli homines, except the proverb were taken from the Rhinoceros, who by reason of his crooked horn is said to have a crooked nose; for indeed a deformed nose is more subject to derision then any other part or member of the body, which causeth Martial to write thus:

Majores nunquam rhodobii: juvenesq; senesq;  
Et fecund nasum Rhinoceròs habent.

And thereupon Horace also faith thus:

— Nāsō suspendis aduncō.

Oppianus faith, that there was never yet any distinction of sexes in these Rhinocerotes: for all that ever were found were males and not females: but from hence let no body gather that there are no females, for it were impossible that the breed should continue without females: and therefore Pliny and Solinus say, that they engender or admit copulation like Elephants, Camels, and Lions.

When they are to fight they whet their horn upon a stone, and there is not only a discord betwixt these beasts and Elephants for their food, but a natural description and eminency: for it is confidently affirmed, that when the Rhinoceros which was at Lissborne, was brought into the presence of an Elephant, the Elephant ran away from him. How and in what place he overcometh the Elephant, we have thewed already in his story, namely how he fasteneth this horn in the soft part of the Elephants belly. He is taken by the same means that the Unicorns is taken, for it is said by Albertus, Isidorus, and Alcimus, that above all other creatures they love Virgins, and that unto them they will come be they never so wilde, and fall asleep before them, so being asleep, they are easily taken and carried away.

All the later Physitians do attribute the virtue of the Unicorns horn to the Rhinoceros horn, but they are deceived by imitation of Isidorus and Albertus: for there is none of the antient Greeks that have ever observed any medicines in the Rhinoceros. The Indians make bottes of their skins, wherein they put their Lycius, or succum medicatum, and therefore I will conclude this story, with the riddle of Franciscus Niger made upon the excellency of the horn that groweth upon the nose.

Dic mihi que superis sint acceptissima dona.

Whereunto the answer is made in the next Verse:

Principium noli Rhinoceròs amant.
The Hebrews have divers names, whereby they signify a Sheep, and all that kind, as Zim, and Zebeth, for which the Septuagint do always render Prebata, Sheep or little Cattell. The Arabians, Cabaris. The Chaldeans, Anu. The Persians, Goopand, also Bacell in Hebrew, the plural whereof is Rebelem, which signifyeth Sheep; Kefeb, and Kafba, or Kifba, l. a. 53. Tabell. Nebulam, that is, a dumb Sheep, where the Hebrews have Rebeel, there the Cabalis translate Bacellak. The Aramains, Akelek. The Persians, Comeftban tus. Kibbs and Kifba signify a Sheep, male and female under a year old, and Alil, and Cel, for a Sheep above a year old, male and female. In Levit. 22, the Chalde tranlately for Kebis, Imar. The Arabains, Ezel. The Persians, Bara, and Kefeb in Hebrew is the same that Kefeb, Seb also signifyeth a Sheep, although it be sometime taken for a Lamb or Kid. Likewise Takelb and Tebleb Elai. 40. signifyeth a Lambe that fheep. And Fipbaniam writeth, that by the same word the Hebrew Altronomers signify the sign Arietis in the Zodiac. The Saracens at this day call a Sheep Guneme, and Cattle Garien, and the dung of Cattle Harad Garien. The Grecians call a Sheep Ovis, and Probon: the Latins Ovis, and by excellency Pecus; the Italians, Pero, the French, Brebi: the Spaniards, Ovies: the Germans, Schaff; the Iriams, Owce, or Skop. These and such like I might add more concerning the names of this Beast, and the abundance of the names thereof in the Hebrew tongue, is a notable testimony of the singular account which God himself made of this beast. The Lattins have so honored it that after it they have named many of their children, and stories make mention of moft noble and gallant men, so called. Such was Osuvinus Camillus, Severus Osuvinus, Iabus Maximus Osuvelus, Oileus, Oileus Ajax, Ois, the wife of Channipsus, and many such other, if it were necessary to this story to relate them, but I will not trouble the Reader with any such unnecessary circumstances. I will therefore first of all begin with a relation of the Sheep of other Countries, and so in the end make a more particular discovery of our own at home. For the difference of Regions do very much enlighten the description or history of Sheep. It is reported that about Erythrose, one of the Islands of the Gades, there is such abundance of good pasture and Hears of so grateful a Sheep, that if they be not let bloud once in thirty days, they perish by suffocation, and that the milk of those Sheep yeeldeth no whey, wherewithall they make abundance of Cheefe, although they powre water into it. The herbage of that Island is dry, yet profitable to Cattle and milch Beasts, and from thence came the original of the fat Cattell of Geryon. The Sheep of Greece are leffer then the Sheep of Egypt, and the Oves Pyrhyca, were like Boys Pyrhyca, namely, of exceeding stature, which name was derived from Pyrhyca their master and owner. Among the Phibians in India, their Rams are greater then our Lambs, and Aecchelades in his books of husbandry affirmeth, that the Sheep of the Ile Chius, are very small, and yet their Milk maketh very laudable Cheefe. In Spain their bell Sheep have black fheeces: at Polenia near the Alps, they are gray or hony-woolded: in Afia and Batia, called Erythros, they are red like Foxes, and from thence came the term of Erythros Oves. As Caunsium the Sheep are yellow, or Lion-tauny, and so also at Tarmentum. Ifsea and Libania yeeld Sheep having woolle which is so curious and rough, that it may rather seem to be hair then wool, and therefore never fit for fine garments, nor for any other use, except by the singular art of spinning in Portugal. And the like to this is the wool of the Sheep of Pijeme, and in Egypt, of which latter it is said, that if it be dyed again after it is thread-bare, it will endure almoft for ever. For the antients (as Homer writeth) had the use thereof (although the thread were rough) in their works of Tapeltry, and this was dresed divers ways, for the French in Europe dresse it one way, and the Partisans in Afia another way.

The Sheep of Apulia gave the name to Lania Italic, for excellent wool, and yet was it short and courfe, good for nothing but for clokes to ride in, and wear in rainy weather: unto these I may add the Calabrians, Milisians, and Arentian Sheep, yet in the days of Vartto they covered their Sheep with other skins to keep the Wool both from loose, and other infection, so that it might be the better washed, dyed, and prepared, for these were nourished most of all in houes.

The French Sheep about Alim, and also those that are saddled are flabled in the plain and barren fields of Parma and Matina. The Sheep of Helvetia feed in the tops of the Mountains, whereas the Goats keep beneath the trees and gather fruits on the sides of the hills. The Flemish Sheep have a soft and curled hair.

There be in general two kinds of Sheep, one called Telsum, the other Colonicum, as if you would fay house-sheep, and field-sheep, for the Grecian Sheep which before we have called Tarentina, and weare also called Taritina, because of their soft wool, lived in houes, and they were also called Peltite, but the field Sheep having by nature a greater, courfer, and rougher hair, are suffered to lodge abroad in the fields.

Likewise the Sheep of Mileto and Attica, and the region Gadilonea, reaching to Arminia, have very soft and gentle Wool, which thing feldom cometh to passe in Pontus, or Cappodocia. In Scotland also in a place thereof, called by Helgi Feltibus Bathingubans, are great store of Sheep, bearing good wool, from whence almost all that Countrie fetch their breed. The Sheep of Euxibia bear no wool at all, but in stead thereof their hair is rough like Cames hair. Amongst the Albuines, and the Bradians, both Eltimus and Nicomachus the Son of Arhisile do tellifie, that all their Sheep are black, and that there was never white Sheep bred in those Countries. In Gortyn their Sheep are red and have four horns: In the fortunate Islands of the red-fea all their Sheep are white, and none
Of the Sheep.

of them have crooked horns. In Bestia there are four Rivers which work strange effects upon Sheep after they drink of them; namely, Molus, Cepbifus, Penius, and Xanthis. The Sheep drinking of Molus and Penius grow black, of Cepbifus white, and yet Pliny, faith, that this River cometh forth from the same fountain that Molus doth. They which drink of Xanthis grow red. I might add hereunto another special observation of difference between the Sheep of Penius and Naxus, for in Penius they have no gau, and in Naxus they have two gauls.

In some parts of India their Sheep and Goats are as big as Affes, and bring four or four Lambs at a time, but never less then three, both Sheep and Goats. The length of their tails reacheth down to their hinder-legs, and therefore the Shepherds cut them off by the secret; to the intent that they may better suffer copulation, and out of them being cut off, they express certain Oyl; also their tails, the ends whereof do afterward close fo nearly and naturally together, that there appeareth not any fear or note of the fiction. In Syria and India the tails of their Sheep are a cubit broad.

There are two kinds of Sheep in Arabia, which are distinguished by the length and breadth of their tails: the one sort have tails three cubits long, by reason whereof they are not suffered to draw them on the ground for fear of wounding; and therefore the Shepherds devise certain engines of wood to support them: the other kind of Sheep have tails like the Syrian Sheep. All Sheep that live in hot and dry Regions have larger tails, and barther wool, but those that live in the most Regions and salt places, have softer wool and shorter tails. There were two of the Arabian Sheep brought into England, about the year 1560. whose pictures were taken by Draper Cey, and therefore I have expressed them here with their description.

The Arabian Sheep with a broad tail.

The Arabian Sheep with a long tail.

The Arabian Sheep (that be) is a little bigger then our vulgar Sheep in England, but of the same wool, figure of body, and colour, only the thin, and fore-parts of their face, are a little red: the broad tail in the top was one cubit, but lower it was narrower, and like the end of a vulgar Sheep's tail. They being brought on ship-board into England, were taught through famine and hunger to eat not only grass and hay, but flesh, fish, bread, cheese, and butter.
Flocks of
wilde sheep.

Oppianus.

The several
parts of sheep.

Herodotus faith, that such kinde of Sheepe are no where found but in Arabia: the long tailed Sheepe he calleth Macreros, and the broad tailed Sheepe Planakens: yet Leo Afer faith, that these are of the African Sheepe, for thus he writeth: His arriebus nullum ab aliis disserem eft, praterquam in icauda quam laitfermam circumcitant, quae cuicui: quae opinion est, carear obligat, adeo aumanus libris decern, aut vigilis pendantes, omnes suone impinguntur. There is no difference betwixt these Rams and other, except in their broad tail, which whereas it grows in fairest growth in breadth, for if they fatten of their own accord, it hath been found that the tail of one of these Sheepe have weighten ten or twenty pound, and not only there, but also in Egypt, where they cram and feed their Sheepe with Barly, Corn, and Bran: by which means they grow so fat, that they are not able to fir themselves, for that their Keepers are forced to devife little engins like childrens Cartes, whereupon they lay their tails when they remove their Beafe: and the fame Leo Afer affirmeth, that he faw in Egypt in a Town called Aipta, flanding upon Nilus, a hundred and fifty mile from Alcoit, a tale of one of these Sheepe that weighed fourescore pound, and while he wondred at it, scarcely believe that which his eyes faw, there were some present, that affirmed it to be an ordinary thing, for they faiid according as he writeth: Seuidiffi que femi ducentis libros expendunt: That is, they had seen some of them weigh a hundred pounds: and except in the Kingdom of Tunis in Africk, and Egypt, there are none fuch to be found in all the world, and by it, it appearreth, that all the fat of their bodies goeth into their tails. Among the Garments their Sheepe eat fleth and milk, and it is not to be forgotten which Aristotle, Dionysius, Afer, and Varro do write, namely, that all Sheepe were once wilde, and that the tame Sheepe which now we have, are derived from those wilde Sheepe, as our tame Goats, from wilde Goats: and therefore Varro faith, that in his days in Eboria there were flocks of wilde Sheepe, whereof as out of Africk, and the Region of the Goates, there were annually brought to Rome both males and females, of strange and admirable colours, and that his great Uncle bought divers of them and made them tame: But it appearreth that these wilde Sheepe or Rams were Muimons, of which we shall discourse afterwards: For wilde Sheepe are greater then the tame Sheepe, being fitter to run, stronger to fight, having more crooked and piked horns, and therefore many times fight with wilde Beares and kill them.

The Subu doth also appear to be a kinde of wilde Sheepe, for after that Oppianus had discoursed of the Sheep of Crete, he falleth to make mention of the Salbus, which he faith is of a very bright yellow colour like the Sheep of Crete, but the wooll thereof is not fo rough, it hath two large horns upon the fore-head, living both on the water and on the land, eating fith, which in admiration of it in the water gather about it, and are devoured, as we thall shew afterwards in his due place. The Colus also spoken of before, and called Snake, femeth to be of this kinde, for it is in quantity betwixt a Sheepe and a Hart. It hath no wooll, and when it is hunted, the Hunters use neither Dogs nor other Beasts to take it, but terrifie it with ringing of little bells, at the found whereof it runneth to and fro distracted, and fo is taken: And thus much I thought good to express before the general nature of Sheepe, of the divers and strange kinds in other Nations, that so the judicious Reader may admire the wonderful works of God, as in all Beasts, fo in this, to whom in holy Scripture he hath compared both his Son and his Saints: and as much as their glory to be mingled with the other, would have been exorbitant and far different from the common nature of vulgar Sheepe, and fo to have been mixed amongst them, might have confounded the Reader: It was much better in my opinion to express them at together, and fo to proceed to the particular nature of vulgar Sheepe.

And first of all the description of their outward parts: the Sheepe ought to be of a large body, that fo their wooll may be the more, which ought to be soft, deep, and rough, especially about the neck, shoulders, and belly, and those that were not so fo the ancient Grecians called Apokis, the Latiners, Apicis, that is, peild Sheepe, for want of wooll, which they did reject as unprofitable for their flocks: for there is no better signe, as Pliny faith, of an acceptable breed of Sheep, quam crarium brevitas, et ventris subitus. The thornets of the legs, and a belly well clothed with Wooll.

The female are admitted to the male after two years old. Till they are five year old they are accounted young, and after seven unprofitable for breed. In your choice of Sheepe evermore take those which are rough with wooll even to their eyes, without any bald place upon them, and those females which bear not at two year old utterly refuse, avoid likewise partly coloured or spotted Sheep, but choose them that have great eyes, large tails, and strong legs: let them be young also, and of breed, Namceter eft efta ete, quam sequitur pes, quam et quam sequitur mort, & probabilis progenies, si aegus solent procreare formosos (faith Peterus Crefer,) that is, that age better which hope followeth, then that which death followeth: and it is a good breed of Sheepe which bringeth forth beautiful Lambs. And concerning their Woolle, it is to be observed, that the soft woolle is not always the best, except it be thick withall, for Hares have soft but thin woolle, and in Sheepe it ought to be contrary, and therefore the most useful have the finest hair, the Sheepe of Scythia in the cold Countries have soft woolle, but in Sarumstia they have hard woolle. Florentinus prefereth, that the fine woolle of a Sheepe is not curled, but flaneth upright, for he faith, that curled woolle is easily corrupted or falsified.

The head of the Sheepe is very weak: and his brain not fat: the horns of the female are weak if they have any at all, for in many places they have none, like Hindes, and in England there are both males and females that want horns: And again the Rams of England have greater horns then any other Rams in the world, and sometimes they have four or fix horns on their head,
 hath been often seen. In Africa their male-sheep or Rams are yeaned with horns, and also their females: and in Pontus neither males nor females have ever any horns.

Their eyes ought to be great, and of a waterish colour, and all Beasts that want hands have their eyes standing far distant on their heads, especially Sheep, because they had need to look on both sides, and because they are of a simple and harmless disposition, as we shall shew afterwards: for the little eye, such as is in Lions and Panthers, betoken craft and cruelty; but the great eye, simplicity and innocencü. Their teeth stand in one continued row or bone, as in a Horse, but in the upper cham there are no fore-teeth: the male having more teeth then the female.

There be some that write, that Virgil calleth Sheep Bidentes, because they have but two teeth, but they do it ignorantly, for we may read in Servius, Nigidium and Nepos, that Boars are called Bidentes, and all Beasts of two years old, for they were first of all called Bidentes queis Biennis, by interpolation of the letter D. according to the other words, as we do not say reire, but dure; nor reamare, but redamare; nor reargua, but redargua; and fo Biennis, for Biennia; because sacrifices were wont to be made of Sheep when they were two years old. If ever it happen that a Sheep have but two teeth, it is held for a moniter, and therefore a Sheep is called Ambidentis, and Bidentes, because he hath teeth both above and beneath. The belly of a Sheep is like the belly of a Bealt that chews the cud. The milk proceedeth from the ventricile or maw. The stones hang down to the hinder-legs. The females have their udders bew!zie their thighs, like to Goats and Cows: some of them have galls, according to the ordinary custom of nature, and some of them have none at all, for in Pontus where by reason they eat Wormwood they have no galls. Likewise in Calcis: some we have shewed have two galls, and the Scythian Sheep have galls at one time, and not at another, as Eolius writeth, for he laith in the very cold Countries, when snow and winter covereth the earth, there Sheep have no galls, because they keep within doores, and use no change of meat, but in the Summer when they go abroad again to feed in the fields, they are replenished with galls.

There is a Region in Asia called Scopis, wherein they say their Sheep have little or no milts. The reins of a Sheep are equal, and there is no Bealt that hath them covered with fat like unto it. Sheep are also apt to grow exceeding fat, for in the year 1547, there was a fat Sheep given to the King of France in Pickardy, whereof the inward hoofs or cloves of his fore-feet were grown to be as long as eight fingers are broad: the tops whereof were recurred backward like the horns of a wilde Goat. Concerning their tails we have spoken already, for the vulgar Sheep have hairy tails like Foxes and Wolves. And thus much shall suffice to have spoken of their several parts.

In the next place we are to consider the food and diet of Sheep—and then their inclination, and the utility that ariseth by them, and lastly the several diseases with their medicines and cures. It is therefore to be remembered, that the Ancients appointed shepheards to attend their flocks, and there was none of great account, but they were called Shepheards, or Neathards, or Goathwards, that is busists, Opliones, and Apoll, as we have shewed already in the story of Goats: and the Gentiles do report, that the knowledge of feeding Oxen and Sheep came first of all from the Nymphs, who taught Asia in the land of Co. The Greeks therefore call a shepheard Poivies, that is a feeder, or Panmarin to feed: and the Poetics also use Pismar for a shepheard, and the shepheard Dogs, that keep the flock from the Wolf, Pominias kunas, for the Sheep being not kept well, be overcome by the Woolfs, according to the saying of Virgil:

Nam lupus insidias explorat ovilia circum,

And Ovid likewise faith:—

Incublitium caprat ovile Lupus.

The whole care therefore of the Shepheard must be, first for their food; secondly, for their fold; and thirdly, for their health, that so he may raise a profitable gaine, either to himself or to him that oweth the Sheep. To begin with the food, Their diet doth not much differ from Goats, and yet they have some things peculiar which must now be expressed. It is good therefore, that their pastures and feeding places look towards the sun-setting, and that they be not driven over far, or put to too much labour: for this cause the good shepheard may safely feed his Sheep late in the evening, but not suffer them to go early abroad in the morning. They eat all manner of herbs and plants, and sometimes kill them with their bittes, so as they never grow more. The beft is to give them always green meat, and to feed them upon land fallowed or ploughed to be sown with corn: and although by feeding them in fall pastures they come to have a softer wool or hair, according to the nature of their food, yet because they are of a moift temperament, it is better to feed them upon the salt and short pasture: for by such a diet, they both better live in health, and also bear more precious wool.

In dry pastures they are more healthy then in the fenny, and this is the cause why it is most wholesome for them to keep in ploughed ground, wherein they meet with many sweet and pleasant herbs, or else in upland medows, because all moisture breedeth in them rottenness: he must avoid the Woods and shadowy places, even as he doth the fens, for if the Sun come not upon the Sheeps food, it is as hurtfull unto him as if he picked it out of the waters: and the shepheard must not think that

there
there is any meat to grateful unto this cattle, but that uie and continuance will make them to loath it, wherefore he must provide this remedy, namely to give them falt oftentimes in the Summer when they return from feeding, and if he do but lay it in certain troughs in the folds, of their own accord they will lick thereof, and it will encrease in them great appetite.

In the Winter time when they are kept within doores, they must be fed with the foallest hay, such as is cut down in the Autumn, for that which is fiper is lefs nourifhable to them: in some Countries they lay up for themselves especially green Ewe leaves, or Elm, three-leaved-grafs, fowed-vines, and gaffe or peace, when other things fail: where there are flore of Vines, they gather their leaves for Sheep to eat thereof without all danger, and very greedily, and I may fay as much of the Olive, both wide and planted, and divers fuch other plants, all which have more vertue in them to fat and raife your beaft if they be alperfed with any falt humor: and for this caufe the Sea-wormwood excel-leth all other herbs or food to make fat Sheep. And Mythus writeth, that in Pomus the Sheep grow exceeding fat by the moft bitter and vulgar Wormwood. Beans encreafe their milk, and allo Three-leaved-grafs, for that is moft nourifhable to the Ews with young. And it is obferved for the fault which in Latine is called Luxuria fegatum, and in English rancknels of corn, there is no better remedy then to turn in your Sheep in May when the ground is hard, if not before, for the Sheep love well to crop fuch italks, and alo the corn will thrive never the worse, for in fome places they eat it down twice, and in the Country about Babylon thrice, by reafon of the great fertility thereabouts, and if they fhould not do fo, it would turn or run all into italk and idle and unprofitable leaves. The fame exatfe is reported to follow Sheep when they have eaten Cirine, that we have expreffed alo in the History of Goats, namely, that they all fland flill, and have no power to go out of their patures, till their Keeper come and take it out of their mouths. It is reported that they are much delighted with the herb called Luperipitum, which first purgeth them, and then doe fat them exceedingly: It is therefore reported that in Cyrene, there hath been none of this found for many years, because the Publicans that hire the patures are enemies to Sheep. For at the first eating thereof the Sheep will {teep, and the Goat will fall a neezing. In Indis, and especially in the Region of the Persians, it raineth many times a dew like liquid Honey falling upon the herbs and grafs of the earth: wherefore the shepheards lead their flockes unto tho fuch places, wherewithal their cattle are much delighted, and fuch as is the food they eat, fuch alo is the tale of the milk they render; neither need they to mingle Honey with their Milk, as the Gracians are contrained to do, for the sweetness of that liquor favel them of that charge. Such a kinde of dew the Hebrews call Mannu; the Gracians, Aeromelos, and Drofomelos; the Germans, Himmelburg; and in English Honey-dew; but if this be eaten upon the herbs in the month of May, it is very hurtful unto them. We have shewed already, that in fome parts of Aftrick and Ethiopia, their Sheep eat fhef, and drink milk; and it is apparent by Poliphrat that when Apollonium travelled towards India, in the Region Pegadia, inhab-ited by the Orfe, they fed their Sheep with fiftles, and alo they do among the Carmenians Indians, which do inhabit the Sea-coasts: and this is as ordinary with them, as in Caria, to feed their Sheep with fiftles, because they want grafs in that Country: and therefore the fiftles of the Sheep doth taft of fift when it is eaten, even as the fiftles of Sea-fouls. The people of that Country are called Isbybopybagi, that is fift-eaters: Likewise the Sheep of Lydia and Macedonia, their Sheep grow fat with eating of fiftles. Anius also writeth of certain fiftles about the bignefs of Frogs which are given unto Sheep to be eaten. In Arabia in the Province of Aedan, their Oxen, Camels, and Sheep, eat fiftles after they are dried, for they care not for them when they be green: the like I might fay of many other places, generally it must be the care of the shepheard to avoid all thorny and fliny places for the feeding of his Sheep, according to the precept of Virgil:

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\text{Si tibi lanicium cura, primum aspera Silva}
\]

Lappes; tribulis; abint.

Because the fame thing, as he writeth, maketh them bald, and oftentimes scratcheth their fkin, under, his words are thefe;

\[
\text{Turpis oves tenetat foibles—}
\]

Vulpis; corum tenuis ad hujus Sudor, & bursati bomatum corpora egress.

Although a Sheepe be never fo found, and not much subject to the Peftilence, yet muff the shep-heard regard to feed it in choice places: for the fat fields breed ftrait and tall Sheep, the hills and fhort patures broad and square Sheep: the Woods and Mountain places, small and slender Sheep: but the belt places of all are the plowed grounds. Although Virgil prefcribeth his shep-heard to feed his flock in the morning, according to the manner of the Country wherein he lived, for the middle part of the day was over hot, and not fit for cattel to eat in: yet other Na- tions, (especialiy Germany and England and thefe Northern parts of the world) may not do fo. The whole cunning of the shepheards is excellently defcribed, for the ordering of their Sheep in thefe verities following:
When they return from their feeding, the shepheard must regard that he put them not into the folds hot, and if the time of the year be over hot, let them not be driven to pastures a far off, but feed them in those which are near and adjacent to their folds: that so they may easily have recourse unto the shade: they ought not also to be turned out clustering all together, but dispersed abroad by little and little, neither mull they be milked while they are hot, until they be cold a little, fo likewise in the morning, let them be milked fo soon as day appeareth, and the little Lambs be turned out unto them which were from them. But if there appear upon the grass Spiders webs, or Cobwebs which bear up little drops of water, then they must not be suffered to feed in those places for fear of poyfoning: and in times of heat and rain, drive them to the heightest hills or pastures, which do most of all be open to the winds, for there shall the cattle feed most temperately: They must avoid all sandy places, and in the month of April, May, June, and July, they must not be suffered to feed overmuch, but in October, September, and November, let them have their full, that so they may grow the stronger against the Winter time. The Romans had a special regard to chuse some places for the Summering of their Sheep, and some place for their Wintering, for if they summered them in April, they wintered them in Summer; and therefore (Varro saith) the rocks of Apulia betimes in the morning in the Summer season are led forth to feeding, because the dewy grasses of the morning is much better then that which is dry in the middle of the day, and about noon when the season groweth hot, they lead them to shadowy trees and rocks, until the cool air of the evening begin to return, at which time they drive them to their pasture again, and cause them to feed towards the Sun-rising: for this is a general rule among the shepherds: Quod manu ad folis occasum, & vereere ad solis ortum pasturatur ever. That is, in that the morning they feed their Sheep towards the Sun-setting, and in the evening towards the Sun-rising, and the reason of it is: Quia inimicitismmum pecor caput, aeris sole, paece cogenendum. Because the head of Sheep is moist weak, therefore it ought to be fed turned from the Sun. In the hot Countries a little before the Sun-setting they water their Sheep, and then lead them to their pasture again, for at that time the sweetness feemeth to be renewed in the grases, and this they do after the Autumnal Equinocial. It is good to feed them in corn fields after harvest, and that for two causes: Firl, because they are exceedingly filled with such hearbs as they finde after the plough, and also they tread down the chubble, and dung the land, whereby it becometh more fruitful against the next year. There is nothing that maketh a Sheep grow more fat then drink; and therefore we read in holy Scripture how Jacob watered the Sheep, and the Daughters of Jeabs their Sheep, at what time Moses came unto them, therefore it is best oftentimes to mingle their water with Salt, according to these verses;

Of the Sheep.

At cui laetius amor, oitissum laticis, frequentes,
Te manu fatisq. fervas preepibus herbis,
E veris oman fluvis magis, & magis ubera tendunt,
Et falsa scatium reficat in latte jaquerem.

There be many that trouble themselves about this question; namely, for what cause the Sheep of England do never thirst, except they see the water, and then after seldom drink, and yet have more Sheep in England, then are in any other Country of the world; infomuch that we think in a prodigious thing that Sheep should drink: but the true cause why our English Sheep drink not, is, for there is so much dew on the grass, that they need no other water; and therefore Articolis was deceived, who thought that the Northern Sheep had more need of water then the Southern. In Spain those Sheep bear the belt fleeces of wool that drink least. In the Island of Cepharene as we have fitted in the story of the Goat, all their Cattle for want of water do draw in the cold air; but in the hotter Countries every day once at the leaft about nine or ten a clock in the morning they water their Sheep; and so great is the operation of drink in Sheep, that divers Authors do report wonders thereof, as Vellera Maximus, and Theophrastus, who affirm that in Macedonis, when they will have their Sheep bring forth white Lambs, they lead them to the River Alathan; and when they will have them to bring forth black lambs, to the River Axios, as we have shewed already. It is also reported that the River Scamander doth make all the Sheep to be yellow that drink thereof: Likewise there are two Rivers in Asterindria which turn Sheep from black to white, and white to

S I
The History of Four-footed Beasts.

...black, and the like I might add of the River Borpes, or the two Rivers of Beaus, all which things do not come to pass by miracle, but also by the power of nature, as may appear by the History of Jacob, when he served his father in law Laban.

For after that he had covenanted with Laban, to receive for his fipend all the spotted Sheep, the Scripture faith in this manner: Then Jacob took rods of green Poplar, and of Hael, and of the Chefsnut tree, and piled white fitches in them, and made the white appear in the rods. Then he put the rods which he had piled into the gutters and watering troughs, when the Sheep came to drink, before the Sheep, and the Sheep were in heat before the rods, and afterwards brought forth young of party colour, and with small and great spots. And Jacob parted these Lambs, and turned the faces of the flock towards these party-coloured Lambs, and all manner of black among the Shep p of Laban, so he put his own ficks among these himselfes, and put them not with Labans flock. And in every Ramming time of the stronger Sheep, Jacob layed the rods before the eyes of the Sheep in the gutters, that they might conceive before the rods, but when theSheep were fheele not to put them not, and so the fheeler were Labans, and the stronger were Jacobs. Upon this action of the Patriarch Jacob, it is clear by testimony of holy Scripture, that divers colours laid before Sheep at the time of their carnal copulation, do cause them to bring forth such colours, as they see with their eyes: for such is the force of a natural impression, as we read in Stories, that fair women by the fight of Blackamores, have conceived and brought forth black children, and on the contrary, black and deformed women have conceived fair and beautiful children; whereas there could be no other reason given in nature, but their only cognition of and upon fair beautiful men, or black and deformed Moors, at the time of their carnal copulation.

So that I would not have it seem incredible to the wise and discreet Reader, to hear that the power of water should change the colour of Sheep: for it being once granted, that nature can bring forth divers coloured Lambs, being holpen by artificial means, I fee no caufe, but diversity of waters may wholly alter the colour of the elder, as well as whited fitches ingender a colour in the younger. And thus much shall suffice to have spoken concerning the Summering of Sheep. For the Wintering I will lay more when I come to entreat of their fasting or houching.

Now then it followeth in the next place to discourse of copulation or procreation; for there are divers good rules and necessary observations, whereby the skillful shephard must be directed, and which he ought to observe for the better encrease of his flock. First of all therefore it is clear, that Goats will engender at a year old, and sometime Sheep also follow that season, but there is a difference between the Lambs so engendered, and the other that are begotten by the elder: therefore at two year old they may more safely be suffered to engender, and so continue till they be five year old, and all their Lambs be preserved for breeding; but after five year old their strength and natural vertue decreaseth, so that then neither the Dam nor the Lamb is worthy the nourishing, except for the knife, for that is born and bred of an old decayed substanct, will also resembel the qualities of his fires.

There be some that allow not the Lamb that is yeanded before the parents be four year old, and so they give them four years to engender and breed, namely till they be eight year old, but after eight years, they utterly caft them off: and this opinion may have some good reason, according to the quality of the Region wherein they live, for the fooner they begin to bear young, the sooner they give over; and herein they differ not from Cows, who if they breed not till they be four year old may continue the longer, and so for this caufe I will express the testimony of Alberius, who writeth thus: Oves parere usit ad annum octavum posita, et si bene curatur vil in unedum facultatis partendi praebeat, quod tempus est tota fere vita, even in quibusdam tamen terris arbore ubi ficcata et saepe bebet uinum, viruntur per viginti annos & pariri. That is to say, Sheep may breed until they be eight year old, and if they be well kept until they be eleven, which time is for the moit part the length of their days, although in some Countries upon the Sea coasts, they live till they be twenty year old, and all that time breed young ones, because they feed upon dry and salt pastures, and therefore Aristotle also faith, that they bring forth young ones all the time of their life.

The time of their copulation, as Pliny and Varro write, is from May till about the middle of August, and their meaning is, for the Sheep of those hot Countries. For in England, and other places shephards protract the time of their copulation, and keep the Rams and Ewes afunder till September, or October, because they would not have their Lambs to fall in the cold Winter season, but in the Spring and warm weather: and this is observed by the ancient shephards, that if the strongest Sheep do first of all begin to engender and couple one with another, that it begeteth a very happy and fortunate year to the flock but on the contrary, if the younger and weaker Sheep be first of all stirred up to lust, and the elder be backward and flow, it preageth a perfent and rotten year.

They which drink salt Water are more prone to copulation then others, and commonly at the third or fourth time the female is filled by the male. There is a great similitude and likeness between Sheep and Goats. First, for their copulation, because they couple together at the same time. Secondly, for the time they bear their young, which is five moneths, or a hundred and fifty days: also many times they bring forth twins like Goats, and the Rams must be alwaies fowthing, as admitted as the Lambs may fall in the Spring of the year, when all things grow sweeter and greener; and when...
Of the Sheep.

when all is performed, then must the males be separated from the females again, that for all the time they go with young, they may go quietly without harm.

In their conception they are hindered if they be over fat, for it is with them as it is among Mares and Horses, some are barren by nature, and others by accident, as by overmuch leanness or overmuch fatness. *Pline* maketh mention of an ancient custom among the *Grecians*, that they were wont to drive their Sheep to the habitation of *Aegor*, to be covered by his Rams: And I know not whether he relate it as a story, or as a *Proverb* to signify a fruitful and happy Ramming time. I rather incline to the latter, because he himself faith in the same place, that *Aegor* was a wife and skilful King, Master of many flocks, whose breed of Sheep was accounted the best of all that Nation, and therefore either that they felt their females to be covered by his Rams, or else they signified a happy conjunction of the Rams and Ewes together. *Pliny* writeth, that if the right Rone of a Ram be tyed or bound fast when he leapeth upon an Ewe, he will engender a male, but if the left Rone be tyed, he will beget a female.

Near the City *Patra* there are two Rivers, one of them called *Milletus* and the other *Cheradrum*, and the Cattle that drink of this water in the Spring time, do beget males, and therefore fheepheards when they bring their Sheep and Goats to that River, they drive them to the farther side of the River, because they would have more females then males: for that vertue lyeth in one of the sides, but their Knee suffer to drink on that side, because among their heard the male is best for Bulls and Oxen serve them for sacrifice, and to till the earth, and therefore the male in that kinde, but in all other the female is more acceptable.

Both males and females are begotten as well by the vertues of waters, as by the vertue of the Rams, and likewise by the vertue of the *winter*: for when the North winde bloweth for the most part males are conceived, but when the South winde females: and therefore *Aristotle* faith: In admissa tampeore obovatis *Pecus* *dibus* *babilis* *fepientiales*, ut contra ventum gregem *pasaum*, & cum *fpectus* *amissimus* *pecus*, ut *facina* *generanda* sunt, *animalis* *flebas* *captive*, ut *eadem ratione* *natiuris*. That is to say, In the Ramming time you must observe the blowing of the Northern winde in dry days, and not only feed the flock against the winde, but also cause the Ram to leap the Ewe with his face to the North: but if you would engender females, then mift you in like manner observe the Southern winde. Unto this experiment do *Plutarch*, *Eliasius*, and *Colombella* agree, and these things are necessary to be obseried about the engendering of Lambs.

Now after that the Ewe is filled by the Ram, the diligent shepheard must have as great regard to keep her from abortment, or caunting of her Lamb: therefore *Aristotle* faith, if prefixedly after copulation there fall a fhowre, or if when they are great with young they eat Wallnuts or Acorns, they will call their Lambs: and likewise if in time of Thunder the Ewe with young be alone in the field, the claps of Thunder will cause abortment; and the remedy thereof, for the avoiding of that mischief, is preferred by *Pliny*: *Tontius* (faith he) *collatius obius abortum infirmit*, *remediurn est con- gregare eam ut coitu rumenur*: that is, to call them together in times of Thunder, is a remedy against abortment. Therefore he requireth of a skilful shepheard a voice or whifhel intelligible to the Sheep, whereby to call them together, if they be scattered abroad feeding, at the first appearance and note of thunder. It is also reported, that there are certain veins under the tongue of a Ram, the colour whereof do prefage or fore-fesh, what will be the colour of the Lamb begotten by them: for if they be all white, or all black, or all party coloured, such alfo will be the colour of it that they engender.

*Ewes* bring forth for the most part but one at a time, but sometimes two, sometimes three, and sometimes four, the reason whereof is to be attributed either to the quality of the food whereof they eat, or else to the kinde from which they are derived: For there be certain Sheep in the *Ocean*, which always bring forth two at one time, and many of them six. There are alfo Sheep in *Magnetia*, and *Africa*, that bring forth twice in the year: And *Aristotle* in his wonders writeth, that the *Sheep* of *Umbria* bring forth thrice in a year, and among the *Babians* there are Sheep and Goats, that bring forth twice in the year, two at a time, yet sometimes three, or four, or five, and that they nourith them all together, with their abundance of milk, and besides some of their milk is milked away from them. *Egypt* is so plentiful in grains, that their Sheep bring forth twice in a year, and are likewise twice lipped: so likewise in *Mesopotamia*, and in all moist and hot Countries.

Many times itt is falleth out, that the Ewe dyeth in the yeaining of her Lamb, and many times they bring forth monthers: so alfo do al other Beasts that are *mulipara*: between a Goat and a Ram, is a Mulimon begotten, and betwixt a Goat-buck and an Ewe is the Beatt *Cirrins* engendered; and among the *Babians* many times there are mixed monthers brought forth, for in the hinder-parts they are Goats, and in the fore-parts Sheep: for Rams when they grow strong, old and wanton; leap upon the female Goats, upon which they beget such monthers, but they die for the most part immediately after the yeaining.

Sometimes wilde Rams come to tame Sheep, and beget upon these Lambs, which in colour and woolle do most of al resemble the ffather, but afterward when they bear young, their woolle begineth to be like to other vulgar Sheep: when the Ewe is ready to be delivered, the travaileth and laboureth like a Woman, and therefore if the shepheard have not in him some Midwives skill, that in cases of extremity he may draw out the Lamb when the members fchew croft.
Custody of Ewes and young Lambs and means to encrease their milk.

Having thus brought the Sheep to their delivery for the multiplication of kind, it then relish to provide that the new born Lamb may be secured from Dogs, Wolves, Foxes, Crows, Ravens, and all enemies to this innocent Beast, and also to provide that the Ewe may render to her young one sufficient food out of her udder; therefore they must be well and extraordinarily fed. We have shewed already the use of Salt, and then also it is very profitable when the Ewe is newly delivered of her Lamb, for it will make her drink and eat more liberally. In the Winter time for the encrease of their milk, in stead of green pastures, and such other things as we have expressed, it is requisite to give them corn, and especially plenty of Beans.

For this cause some prescribe to be given unto their Sheep the herb Lararia, which they affirm to be profitable to be given to encrease milk; some the Rone Galactes to be beaten to powder, and anointed upon the Ewes udder; and some prescribe to sprinkle water and salt upon them every morning in the house or field, before the Sun rising.

But herein I leave every man to his own judgement, hoping it will not be offensive to any, to relate those things before expressed, and reeling in opinion, that both the food that is received inwardly, and also the Ointments that are applied outwardly, will be sufficient means to procure abundance of milk in the Summer and Winter feasons.

Now therefore it followeth to enreat likewise of the Wintering of Sheep, for as there is more colt to keep them in cold weather then in warm, so doth require at our hands some discourse thereof. Then it behoveth you to provide for them warm folds and stables, whereof the Poet writeth in this manner:

Incipiens, flabulis caelo in mollibus herbam
Carpeta eves, dom max: frondoja reductura est:
Et multa duram sigula silicunque manipula
Sternere suber humum; glacies ne frigula ledet
Male pecus foabiens; ferat, turpius; podagrum.

Whereby it is evident that the cold Winters do beget in Sheep divers and many diseases, and for that cause it was the counsel of a wife and learned man, that our Sheep should not be turned out to feeding neither in cold or warm weather, until the frost were dissolved and thawaed, from off the grafs and earth.

The Tarentine, Grecian, and Asian Sheep, were wont to be altogether kept in stables within doors, lying continually upon plancks and boards bored through, so that their precious fleeces might be the better safe-guarded from their own filth and urine; and three times in the year they let them out of their stables, to wash them and anoint them with Oyl and Wine: and to have them free from Serpents, they burned in their stables, and under their crutches, Gallanum, Cedar-wood, Womans hair, and Harts-horns: and of thefe Tarentine and Grecian Sheep, Columella writeth in this manner: It is in vain for any man to flore himfelf with thofe Tarentine Sheep, for they ask as much or more attendance and costly food then their bodies are worth; for as all Beasts that bear wool are tender, and not able to endure any hardnes; fo among all Sheep, there are none so tender as the Tarentine or Grecian Sheep, and therefore the Keeper of them must not look to have any playing days, nor times of negligence or sluggifhnes, and much lefs to regard his covetous minde, for they are cattell altogether impatient of cold, being feldom led abroad, and therefore the more at home to be fed by hand; and if by covetouines or negligence, one withdraw from them their ordinary food, he shall be penny wife, and pound foolish: that is, suffer a great los in his cattell, for faving from them a little meat.

Every one of them all the Winter long, were fed with three pints of Barley or Peafe, or Beans three times a day, befdie dried Ewe-leaves, or Vine leaves, or Hay late mown, oriftonches, or chaff. Besides there cannot be any milk taken from the dams, for at the firft yeaning there is no more then to serve the little or leaff Lambs, and after a few days, even while they smell and taste of their dams belly, they were to be killed for want of fuck, that every Lamb which was to be prefervd for breed might have two dams or Ewes to fuck, and fo the poor Ewe was forced to a double miferie; firft to loose her young one, and afterward to lend her paps and milk to a stranger. And moreover, they were forced to nourish more males then females, for that at two year old they were gelded, or killed, to fell their beautiful skins to the Merchant, for their wool was moft precious, by reason that never or seldom they went abroad to the fields. Their custody in the house from Serpents and other annoyances, is thus described by the Poets:

Difsic & odoratam flabulis incinerare cedrum
Gallanum, egsare graves nidoce cheylodas,
Sapes sub immo Baths papebus, aut mala taffu
Vipera delinuit, colunoo, extrittus fugit,
Ani telto affuctus colluber.
Concerning the ancient forms of their Sheep-Itales, I finde this to be recorded by the ancients. First, they made them low and not of any high or lofty building, so stretching them out in length, and not in height, that it may be warm in the Winter time, for although there be no creature better clothed by nature than a Sheep, yet is there not any more impatient of cold, nor more apt to take harm thereby. It must not be over-broad, yet so as the Ewe and her Lamb may lie both together, and the breathing place not left open at the top of the house or the sides, for that will let in too much air, but at the door or porche of their entrance, and that very low, that so the fresh air may quickly and easily come to their low heads and bodies, and also their breath the better avoid out of the stable.

They also had a care to cover all the floor with straw or dry boared boards, or some such other matter, whereby they might stand continually dry and warm, and also clean and sweet, to the end they might not be annoyed in their own flanlings; and therefore the floor was made shelving or falling low on the one side, or else of hurdles like baskets to let out their urine, for they often make water; and these were often changed, cleaned, and turned. In this stable there were eight to divisions or partitione, wherein in time of necessity and sickness, they may easily abide alone and be parted from the residue, and feed without annoyance of one another, and especially that one may not ride another, and during the time of the Winter, they did not let their castr'd drink above once a day.

And these were the cures of the Ancients about their flocks of Sheep. For upon them they lived, they bought and sold, and herein also it is profitable to observe the ancient manner of their bargains about these creatures: for when a man came and bought Sheep, he made this protestation to the seller: \textit{tanti sunt nabi empti?} To whom the seller answered, \textit{sale:} Then the buyer draweth his money with these words: \textit{Sic illice over qua de re agitur, finas relle ete uti pecus ovillum, quod relle sanum est, extra luscam minam v. ventre glabra, nec de pecore morbo eae, habere relle etre sibi responde?} or.

First, the buyer faith, shall I buy these Sheep for such much money? and so draweth his money, to whom the Merchant or seller answered, you shall: Then faith the chapman or buyer again to him, Do you promise to me then that these Sheep are as sound as Sheep should be, without fault of wind or limb, without blindnes, without deafe, without pield bellies, not coming out of any infected flock, and so as it shall be lawful for me to enjoy them without all mens contradifition, if these things be true, on I will strike up the bargain: and yet doth not the seller change the property of his Sheep, nor lose his Lordship over them until the mony be paid. And hereupon it cometh to pats that the buyer may condemn the seller, or the cattel be not so good as his bargain, or if he do not deliver them? even as the buyer is subject to the same judgement, if he do not deliver the price. And concerning shepheardes, and cuttody of flocks I may add a word or two more: First of all for the number of the Sheep, how many may safely be kept in every flock.

There is no need that I should give any rules about this businessman, for the Ancients were wont to set one shepheard over a hundred rough or course woollid Sheep, and two shepheardes over a hundred dreed fine woollid Sheep: the common flocks were meantry, or fourccore, and the shepheard that followed them, was charged to be both vigilant and gentle, and therefore his discipline was: \textit{Duis proprius esse quam domino, & in ogendis, recipienda qui est ovibus, adslamation, at baculo mina, nec unquam tenuit emitat, neque ab his longius recedat, nec aut recubet, aut concidiat, nam maa procedit, habe debet, quantum grex quidem officium officium eis, ali tempore, velatius peculium, desiderat, at nec; tardiore, & gravius dom cum daturum, nec agite & si quidum dom promunt, separati a caetera finat, ne far aut bebis bullam tetram paullum decipiat, & dare offere:} He must rather be a guide unto them then a Lord or Maller over them, and in driving them forward, or receiving them home after they have fraglen, he must rather use his chiding voice, and make hisaffe at them, then call either flome or darte at them: neither must he go far from them at any time, nor sit down, but stand fill, except when he driveth them, because the flock defereth the direction of their Keeper, and his eye likea lofty watch-tower, that so he suffer not to be seperated away, either the heavy Ews great with young, because of their flow pace, nor yet the light and nimble ones which give suck, and are delivered of their young, which are apt to run away, lest that some raving beast or thief defive the loitering shepheard by taking away from him the hindmost or formost. There may also be more in a flock of Sheep then in a flock of Goats, because the Goats are wanton, and so disperse themselves abroad, but the Sheep are meek and gentle, and for the most part keep round together: Yet it is better to make many flocks then one great one, for fear of the Pettifine.

In the fory of the Dogs we have hefew already, how necessary a shepheard Do is to the flock, to defend them both from Woolfs and Foxes, and therefore every shepheard must obserbe those rules there expressed, for the provifion, choice, and institution of his Dog: and to conclude this discouure of the shepheard, when the Lambs are young he must not drive their dams far
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to pasture, but feed them near the Town, Village or Houfe, and his second care must be to pick and call out the aged and sick Sheep every year, and that in Autumn or Winter time, left they die and infect their fellows, or left that the whole flock do go to decay for want of renewing and sublimation of others, and therefore he must still regard that when one is dead, he supply the place with one or two at the least, and if he chance to kill one at any time for the hou behold, the counsel of *Astartepanes* is profitable to be followed; *Nias tantum malum debeo* over ex quibus nullas amplius frustus, vel cædi vel velites, vel laitis, vel agnorum persuitet. That is, to kill those Sheep from whom you can never expect any more profit by their Lamb, Milk, Cheefe, or Fleece.

Of the diseases of Sheep, and their causes in general.

IN the next place it is necessary for the wife and discreet shepherd to avoid all the means whereby the health of his flock should be indiginer, and those are either by reason of their meat and food that they eat, or else by reason of natural sicknefles arifing through the corruption of blood, and the third way is by the biting of venemous beafts, as Serpents and Wolves, and fuch like; and a fourth way, fcrabbs, Gowts, fwellings, and fuch like outward diseafes.

of venomous meats or herbs unto Sheep.

There is an herb which the *Laureans* call *Herba Sanguinaris*, *Viola*, *Numularia*, and by the *Germanus* and *English* called Fumgreek, and by the *French* because of the hurt it doth unto Sheep, they use this circumcriptions of it: *L'orbe qui et la brelis*. The herb that destroys the Sheep. It is called also Serpentine, because when Snakes and Adders are hurt therewith, they recover their wounds by eating thereof, when a Sheep hath eaten of this herb, the belly thereof swelleth abundantly, and is also drawn together, and the Sheep caleth out of his mouth a certain filthy fume or frottage, which smelleth unfavourably, neither is the poor beast able to escape death, except presently he be let bloud in the yein under his tail next to the rump, and alfo in the upper lip: yet is this herb wholesome to all other cattle except Sheep alone, wherefore the Shephards must diligently avoid it. It is a little low hearb, creeping upon the ground with two round leaves, not much unlike to Parley, it hath no favour with it, onsmelleth not at all, the flower of it is pale and fmelletl strong, and the flalk not much unlike the flower. It groweth in moift places, and near Hedges and Woods.

If in the Spring time Sheep do eat of the dew called the Hony-dew, it is poufion unto them, and they die thereof: Likewise cases in the Autumn do make their belly swel unto death, if they drink presently after they have eaten thereof, for that meat breaketh their guts, and the hke may be laid of Savine, Tamarisk, Rhodendron, or Rofe-tree, and all kindes of Henbane.

The female Piemerpell doth likewise destroy Sheep, except affo as they have eaten of it, they meet with the herb called *Fenus-occus*, Wilde-eye; but herein lyeth a wonder, that whereas there are two kindes of this herb, a male and a female, they should earneflly defire a male, and eagerly avoid a female, seeing that both of them have the fame taife in the palat of a man, for they taste like the raw roots of Beets.

There is an herb in *Normandy* called *Duna*, not much unlike Rubarb, or great Gentian, but narrower leaves, and flanding upright, the nerve whereof in the middle is red, and it groweth about the waters, and therefore I conjecture it may be Water-forrell, or Water-planton, whereof when Sheep have eaten, they fall into a disease called also *Duna*, for there is bred in their liver certen little black Worms or Leeches, growing in small bags or skins, being in length half a finger, and so much in breadth, wherewithall when the Bealt is infected, it is unconcurable and therefore there is no remedy but to take from it the life: and that this is true, the Butchers themselves affirm, how many times they do finde such little worms in the Sheepes liver, and they lay, they come by drinking of Fenny or Marshy-water. And to conclude, there is a kinde of *Pannick also*, whereof when Sheep have eaten it destroyeth them, and there be other herbs which every common shephard knoweth are hurtful unto Sheep; and the Bealt it felf, though in nature it be very simple, yet is wise enough to chufe his own fooed, except the vehement necellity of famine and hunger caufeth him to eat poufioned herbs.

In cafe when their bellies fwell, or when they have worms in their belly which they have devoured with the Herbs they eat, then they pour into their bellies the urine of men, and because their bellies prefently fwell and are puffed out with winde, the shepheard cut off the tops of their ears, and make them bleed, and likewise beat their fides with their flaff, and so most commonly they are recovered. If Shepherd chance to drink in their heat, fo as their greafe be cooled in their belly, which Butchers do finde many times to be true, then the shepheard muft cut off half the Sheepes ear, and if it bleed the Bealt fhall be well, but if it bleed not, he muft be killed and eaten, or else he will starve of his own accord. If at any time a Sheep chance to devour a leach, by pouring in Oyl into his throat, he fhall be fafe from danger.
Of the Cold of Sheep.

Sheep are known to be subject to cold, not only by coughing after they have taken it, but also by their strength before they take it; for the shepherds do diligently observe, that when any froth or ice falleth upon a Sheep, if he endure it, and not shake it off, it is a great hazard but the same Sheep will die of cold, but if he shake it off, and not endure it, it is a sign of a strong, found, and healthy constitution: Likewise for to know the health of their Sheep, they open their eyes, and if the veins appear red and small, they know they are found, but if they appear white, or else red and full, they know they are weak, and will hardly live out Winter or cold Weather: also when they are taken in their hands, they press their back bone near the hips, and if it bend not they are found and strong, but if they feel it bend under their hand, they hold them weak and feeble: Likewise if a man take them by the head or by the skin of the neck, if he follow him easily when he draweth him, it is a sign of weakness and imbecility, but if it doth liftive, and follow with great difficulty, then it is a token of health and soundness.

Of Scabs, and the causes of them.

The true original of Scabs is either as we have said already, leannes, or else cold, or wet, or wounds in the flesh by clipping or for to conclude, by the heat of the Beatt in Summer not washt off, by thorns and prickings of bushes, or by cutting upon the dung of Mules, Horfes, or Atles. Now when this first of all beginneth, it is easie for the shepheard to observe by these signes and tokens, for the ticking or itching humor, lying betwixt the skin and the flesh, caueth the poor Sheep either to bite the place with his teeth, or to scratch it with his horn, or to rub it upon a tree or wall, or if he can do none of thefe, flamp hard upon the ground with his fore-feet, for which it is good pretiely to separate the Sheep so affected from the flock. The description and cure whereof is thus exprefsed by Virgil:

\[\text{Topis ovem tentat scabies, ubi frigida lumen.}\]
\[\text{Altius ad viorem perficit, & horda cano.}\]
\[\text{Bruma gelu: vel cum tonis illius adhibet.}\]
\[\text{Sudor: & his faii fecundarii corpore vepres.}\]
\[\text{Dulcis hercis flavus pecus omnem magistri.}\]
\[\text{Perfundunt, uidi, aries in purgato vilis.}\]
\[\text{Mefcur, misfiaq: & fecunda defini ani.}\]
\[\text{Ati tonihm trifii contemptum corpus amaret.}\]

\[\text{Et spumas mifcent argenti, vitaq: sulphura.}\]
\[\text{Ideas: misce, & pingues minguem cetas.}\]
\[\text{Bellumq: helleborosq: graves miserq: bitumen.}\]
\[\text{Non tamen alla maijs prefent: fortuna laborasti.}\]
\[\text{Quam q: quiet ferro potas reformis ivanum.}\]
\[\text{Ulcere or: altum vitium, vitioq: legendo.}\]
\[\text{Dum medicus adibere manus ad vulnera peslor.}\]
\[\text{Abriget.}\]

which may be Englishfed in this manner: When the poor Sheep through wet flowers, cold Winter, Summers sweet, or pricking of thorns, doth incur the filthy disease of scabs, then it concerneth his master to wash him in sweet Rivers over head and ears, yea to caft him in to fwin for his own life, or else to anoint his body after it is clippd with the spume or froth of Oyl, and of Silver with Brimstone, and soft Ideen Pitch, with Wax, Hellebore, Black-earth, or the flesh of Shrimps; or if it be possible to cut off the top of the wound with a knife.

Of the Cold of Sheep, the first remedy.

His disease the French men call Lette, and of all other it is one of the most contagious, for our English proverb julifheth, one flobbered Sheep infecteth a whole flock, and Textor writeth thus of it; Oves frequentium quam ullam aliud animal infensatur scabies, quam factit macies, ut maxim insopia cibi, hinc morbo nisi occurritur una qua totem pecus coquinabilt, nam ovibus contagione vexantis. Thatis to fay, Sheep are more oftentimes infected with scabs then any other creature, whereinto they fall through leannes, as they fall into leannes through want of food; and therefore if a remedy be not pro-\nvided for this evil, one of them infected will defile all the residue, for Sheep are subject to contagion: for remedy whereof in France they use this medicine: Firft of all they fhear the Sheep, and then they mingle together the pure froath of Oyl and water, wherein Hops have been sod, and the lees of the falt Wine, and fo let it soak in two or three days together: afterwards they wash them in Sea water, and for want of Sea water in falt water: and this medicine is approved, whereby both scabs and tikes are removed from the Sheep, and also the wool growth afterwards better then ever it did before; but it is better if a man can cure them without fhearing then by fhearing, as Varro writeth; and furthermore to wash Sheep oftentimes with this medicine, doth preveure them from scabs before they be infected: and others add unto this medicine little flicks of Cypress wood foked in water, and fo wash them therewith; some again make another medicine of Sulphure or Brimstone, Cypress, white Lead and Butter, mingled all together, and fo anoint their Sheep therewith. Some again take earth which is as fofit as dirt, being fo foftned with the fale of an Als, but evermore they have the feabped place firft of all, and wash it with cold or fale urine, and generally in Arabia they were never wont to ufe other medicine then the gum of Cedar, whereithall they purged away by Ointment all scabs from Sheep, Camels, and Elephans.
pharts: but to conclude, there is no better medicine for this evil then Urine, Brimstone and Oyl, as Diophanes writeth.

Another medicine for the Scabs.

Take the lees of Wine, the froath of Oyl, white Hellebore mingled with the liquor of fodd Hops, also the juce of green Hemlock, which is expresssed out of the flake before it hath feed, after it is cut down and put into an earthen vessele with any other liquor mingled, with scorched falt, so the mouth of the vessele being made up close, set it in a dunghill a whole year together, that so it may be concocted with the vapour of the dung, then take it forth, and when you will use it, warm it, first of all scraping the ulcerous or scabbed part with an Oyfter shell, or else with a sharp pumice flone, until it be ready to bleed, and so anoint it therewith.

Another medicine of the fame.

Take the froath of Oyl fodd away to two parts, I mean three parts into two, put thereinto the flake urine of a man, which hath been heated by calling into it hot burning Oyfter-fheles, and mingle a like quantity of the juce of Hemlock, then beat an earthen pot to powder, and infufe a pinte of liquid Pitch and a pinte of fryed or scorched falt, all which being preferred together, do cure the scabs of Sheep so often as they are used.

Another medicine.

Drink being made of the juce of Hops, and the herb Chamælion, and given unto them cureth them. Likewise the fame being fodd with the roots of black Chamælion, and anointed warm upon the place, according to Dioscorides, have the fame operation. Likewise Pliny writeth, that the scabs of Sheep may be cured by falt water alone, either taken out of the Sea, or made by art, and forasmuch as there is great danger in the decoction thereof, left that the water overcome the falt, or the Salt overcome the water, he prescribeth a mean how to know it, namely the equal and just temperament thereof, for (faith he) if it will bear up an Egge then it is well tempered, fo that the Egg will swim and not fink, which you shall find by addition of equal and just quantity of water and Salt, that is, two pintes of water, a pinte of Salt, and fo lefs to lefs, and more to more. But if there be any bunch or great scab which covereth any part of the skin, then open the scab and bunch, and pour into it liquid pitch and scorched falt: and thus much for the dilace of the scabs.

Of the Holy fire which the Shepheardes call the Pox, or the Blitters, or Saint Anthonies fire.

This evil is uncurable, for it neither admittext medicine nor fecution by knife, and therefore whensoever a Beafe is infected therewith, it ought presently to be separated from the residue of the flock, for there is nothing that spreadeth it felf more fpeedily: whenever you adventure to apply any thing unto it, it prefently waxeth angry, and perplexeth the whole body except it be the milk of Goats, and yet my Author fpokeneth of it: quod infusio taniune velet, ut blandiatur igneam feuitiam, differens magis occifenum gregis, quam problemat. That is, it femeeth to clofe with raging fire, as it were to flatter it a little, rather deferving the death of the Beafe, then doing away the difafe. It is therefore prescribed by the moft memorable Author of all the Egyptians, that men do oftentimes look upon the backs of their Sheep to fee the beginning of this ficknes, and when they finde a Beafe affected herewith, they dig a ditch or hole fit for him at the entering in of the Sheep-coat or flable, wherein they put the Sheep alive with his face upward, and back downward, and caufe all the residue of the flock to come and pife upon him, by which action it hath been often found (as Columella writeth) that this evil hath been driven away, and by no other means.

Of the Warts, and C Rachtes of Sheep.

This difafe is called by the vulgar shepheardes the Hedhgoft, and it doth annoy the Sheep two manner of ways: Firft, when some gauling or matter ariseth upon the paring of the hoof, or else a bunch arife in the fame place having hair growing in the middle like the hair of a Dog, and under that a little worm, the worm is bell drawn out with a knife, by cutting the top of the wound, wherein mull be used great warmnes and circumcision, because the worm be cut flinder in the wound, therefore cut out of her such a venemous pullulate matter, that poiyoneth the wound, and then there is no remedy but the foot mull be cut off. But the wound being opened, and the worm taken out alive, presently with a Wax-candle you mull melt into it hot burning fewe, and if there be no bunch but only scabs, take Allum, liquid Pitch, Brimstone, and Vinegar, mingled all together, and apply it unto the wound, or else take a young Pomgranate before the grains grow in it, and bake it with Allum, calling upon it Vinegar, sharp Wine, and the rust of Iron fryed all together.
Of the Falling-sicknes.

T cometh to passe sometimes that Sheep are infected with the Falling-sicknes, but the cure hereof can never be known, nor yet the sicknes well till the Bealt be dead, and then (as Hippocrates wreteth) by opening of the brain it will evidently appear, by the over great moistnes thereof.

Of the pains in the Eyes.

T is reported by Theophrastus and Pliny, that for clouds and other pains in the Eye of a Sheep, horned-poppy and Colunellite are very whollome.

Of Phlegme in Sheep.

Or the Remedy of this Diseafe, take Penyroyal, Marjoram, or wilde Nep made up together in wool, and thrust into the Nofe of the Sheep, there turned round till the Bealt begin to sneeze, also a stalk of black Hellebor bored through the ear of the Sheep, and there tyed falt for the space of four and twenty hours, and then taken out at the fame time of the day that it was put in, by Pliny and Columella is affirmed to be an excellent remedy against the Phlegm.

Of the swelling in the Jaws.

Hereis sometimes an inflammation or swelling in the Jaws of Sheep, which the Latins call Tonsillæ, coming by reafon of a great flux of humors from the head unto that place, which may be cured two manner of ways, firft, by incifion or opening the skin where the bunch lyeth, whereby all the watery tumors are evacuated, and the Bealt cured; or else if through the coldneffe of the weather or some other accident you lift not to cut the skin, then anoint it with liquid Pitch, prepared in such manner as is before expreffed for the Scabs, by operation whereof, it will be diffolved and difperfed: When this evil arifeth in the begining of the Spring, many times it is cured without any remedy, because the Bealt for the greedines of the sweet graffe floopeeth down her head, and stretcheth her neck, by which the straining and forenffe of her jaws and throat depaarteth, and this ficknesse in a sheep is like the Kings-evil in a man. There be some that cure it by putting falt among the meat of these Beasts, or by Juniper berries, and Harts-tongue leaves beaten to powder.

For the Cough, and pain in the Lungs.

Shepherds for these disease do take the powder of the root of Foal-foot, and mingle it with Salt; fo give it unto the Sheep to lick, whereby they are perfwaded, that the Lungs of the Bealt are much conforted and strengthened, and furthermore against the Cough, they take blanced Almonds, and beat them to powder, and fo-tempering in them two or three cups of Wine, do infue it in at the Sheeps Nostrils, and likewise Vervine which is called a kinde of Germander, but falsely, because it hath no good smell, is given by shepherds at this day unto their Sheep against the Cough.

Of sighing and shortness of breath.

Or Sheep that are affected with much sighing, they ufe to bore a hole with an Iron through their ears, and remove the Sheep out of the place where they feed to some other place, and if it come from the sicknes of the Lungs, then the herb called Lungwort or Creswort, is the moft present remedy in the World: If the root thereof be drunk in water, or a piece thereof tyed under the Sheeps tongue, or (as Celsus faith) give unto it as much Vinegar as the Bealt can endure, or half a point of a Mans flate urine warmed at the fire, and infue into the Nostril with a little horn, this also is a remedy against Flegm in the Summer time.

Of the loathing of Sheep, and encreasing of their stomac.

If at any time the Sheep forsake his meat, then take his tail and pull of{t from it all the Wool; afterwards bind it as hard as ever you can, and fo he will fall hard to his meat again; and Pliny affirmeth, that the fame part of his tail which is beneath the knot will die after fuch binding, and never have any lene in it again.
The History of Four-footed Beasts.

Of the Fluxes of Sheep, and looseness of the belly.

For this disease the Shepherds take no other thing but the herb *Tormentilla*, or Set-foyl, whereby they stop all manner of fluxes, but if they cannot get the same herb, then they take salt and give it unto them; and if having increased their thirst, they give unto them black Wine, whereby they are cured.

Of the milk of Sheep.

In April and May, through the abundance of thick grosse blood, the Milk of Sheep is stopped and filled, then the Shepherds will take two of their fingers, and thrust them within the Nostrils of the Sheep, there rubbing them until they make them bleed, and so draw from them as much blood as they can.

Of the sickness of the Spleen.

Forasmuch as a Horse, a Man and a Sheep, are troubled with the same diseases, they are also to be cured with the same remedies, and therefore Spleen-wort given unto Sheep, as to a Man and a Horse (as we have already expressed) is the best remedy for this Malady.

Of the Fevers of Sheep.

Sometimes a shaking rage through an incensed and unnatural heat of the blood in the Sheep begeteth in him a Fever, the best remedy whereof is to let him bloud, according to these Verdes:

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Quintianum imma dolor habeamus lapsus ad asfa,  
Cem furit, ait; artus depacijiter arida fabris:  
Frasul incensos ejfus avertre: & inter  
Ima ferite pedis saltentem fanguiine venam,  
Quam procud aut moiti succedere feptus umbra.
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Viderie, aut summos carpentem ignavius herbas,  
Extremamq; fequi, om medio procumbere campo  
Palpentem, & fora holam decedere nobis.  
Continuo ferre culpam comprofe: pristiquam  
Dira per incuatum sepelat contagio vulgus.

In which Verdes the Poet denifeth the signs of this disease and the cure. The signs he faith are foilatine, and a careless feeding, or bicing off the top of his meat, following always the hindmost of the flock, and lying down in the middle of the field, when others be a feeding, also lying alone in the night time, and therefore he witheth tolet them blood under the pattern or ankle bone of their foot, but by often experiment it hath been proved, that to let them blood under the eyes or upon the eares, is as available as in the legs; but concerning the Fever we will say more in the discours of the Lambs.

Of the Pestilence or Rottemess of Sheep.

The sickness first of all cometh unto Sheep out of the earth, either by some earthquake, or else by some Pestilence humor corrupting the vitall spirit: for *Senea* writheth, that after the City *Pompeii* in *Campania* was overthrown by an Earthquake in the Winter time, there followed a Pestilence which destroyed six hundred Sheep about that City in short time after, and this be faith did not happen through any natural fear in them, but rather through the corruption of water and air which lyeth in the upper face of the earth, and which by the trembling of the earth is forced out, poysoning first of all the Beasts because their heads are downward and feed upon the earth; and this also will poyson men if they were not supersed and overcome by a multitude of good air which is above the earth. It were endless to describe all the evils that come by this disease, how some confume away by crying and mourning, filling both fields and hills with their lamentations, leaving nothing behind them, no not their skins or bowels for the use of Man: For the cure whereof, First change the place of their feeding, so that if they were infected in the woods or in a cold place, drive them to the hills or to sunny warm fields; and so on the contrary, if in warm places and cement air, then drive them to more turbulent and cold pastures: remove and change them often, but yet force them gently, weighing their sick and feeble eftate, neither suffer them to die through lazines and idlenes, nor yet to be oppressed through overmuch. When you have brought them to the place where you would have them, there divide them sfnder, not permitting above two or three together, for the disease is not so powerful in a few as in a multitude; and be well assured that this removing of the air and feeding is the best Physick. Some do prefer the three leaved graffe, the hardest roots of Reeds, and of the Mountain, and such other Herbs or the remedy of this; but herein I can promife nothing certain, only the Shepherd ought oftentimes to give this unto his Sheep when they are found. I will conclude therefore this discours of the Pestilence with the description of Virgil:
Of the Sheep.

It is reported by John Stowe, that in the third year of Edward the first, and in Anno 1275, there was a rich man of France, that brought a Sheep out of Spain (that was as great as a Calf of two year old) into Northumberland, and that the same Sheep fell rotten, or to be infected with the Peltinance, which afterward infected almost all the Sheep of England: and before that time the Peltinance or rottenness was not known in England, but then it took such hold, and wrought such effects, as it never was cleared since, and that first Peltinance gave good occasion to be remembered, for it continued for twenty and six years together. And thus much for this disease of the Peltinance caufed in England for the most part in mild and wet years.

Of Lice and Ticks.

I neither Lice nor Ticks do molest Sheep, take the root of a Maple tree, beat the same into powder, and make it in water: afterwards clip off the wool from the back of the Sheep, and pour the said water upon the back, untill it hathcompassed the whole body: some use for this purpose the root of Madder, and some the roots of Cypresse, and I finde by good Authors, that all of them are equivalent to rid the Sheep from these annoyances: To conclude therefore the discourse of Sheeps diseases, it is good to plant near the Sheep-coats, and pastures of Sheeps, the herb Hysen, or wild Gallow-grasse, for it is very wholesome for Goats, and Sheeps; likewise the flowers of wormwood dried and beaten to powder given unto Sheep with Salt, dostallwage all inward diseases and pains, and also purge them throughly.

The juice of Centory is very profitable for the inward diseases of Sheep, and likewise the flowers of Ivy. the Hoom tree hath four kinds of fruit, two proper, the Nut, and the Grain; two improper, the Line, and Hipehar. this Hipehar is very profitable for Sheep, and it is nothing else but a confection made out of the barks of the Hoom tree: the word it is called an Arcadian word, signifying no other thing than Ipsi and Salsa. Sheep also delight in the branches of Maiden-hair, and generally the Wool of Sheep burned to powder and given to them to drink, is very profitable for all their inward diseases. And thus much shall suffice to have spoken of the several infirmities and sicknesses of Sheep, which I desire the English Reader to take in good part, wondering very much at the manifold wits, and flouting pens of these days, wherein I think our times may be compared to the most flourishing times that ever were since the worlds beginning: yet none have adventured to apply their wits and wits for the explication of the several sicknesses of Sheep and Cattle.

I know there are many Noblemen, Knights and Gentlemen of the Land, and those also which are very learned, that are great masters of Sheep and Cattle, and I may say of them as the Prophet David saith: Their Oxen are strong to labour, and their Sheep bringeth forth thousands and ten thousands in their fields: Whereby they are greatly enriched, and yet not one of them have had so much consideration, either towards the poor Cattle, in whose garments they are warmed, or Charity to the World.

For the better direction to maintain the health of these creatures, as to publish any thing in writing for the benefit of Adam's children, but such knowledge must reit in the brealls of silly Shepherds: and for the masters, either they know nothing, or else in strange visitation and mortality of their Cattle, they ascribe that to Witchcraft and the Devil, which is peculiar to the world of nature.

Horses, Dogs, and almost ever creature, have gotten favour in Gentlemen wits, to have their natures described, but the silly Sheep better every way then they, and more necessary for life, could never attain such kindnesse, as once to get one page written or indited for the safegard of their natures. I do therefore by these presents from my soul and spirit, invite all Gentlemen and men of learning, not only to give their minds to know the defects of this beast, but also to invent the best remedies that nature can afford, for it is a token of highlest mercy unto brute beasts to feed them when they are hungry, and to recover them when they are sick.

Columella and Varro two great Romans, and such as had attained to some of the greatest place of the Common-wealth, being men of excellent wits and capacity, yet had their names been forgotten and they never remembered, if they had not written of rustic and country matters, and it is no little honour unto them to have left that behind them in Print, or writing, which themselves had observed from following the Plough. Therefore it shall be no disgrace for any man of what worth soever to bellow his wits upon the Sheep: for certainly it is no lefe worthy of his wit, that it is of his teeth; and how necessary it is for the nourishment of man, we all know to this day, and besides there is nothing so magnifeth our English Nation as the price of our Wool
in all the kingdoms of the World. But what account the antients made of Sheep, I will now tell you; for their greatest men both Kings and Lords were Shepherds, and therefore you which succeed in their places shall bellow much leafe labour in writing of Sheep then they did in keeping: with the picture of a Sheep they stamped their antient money, and it is reported of Man-
draculam that having found a great treasure in the earth, in token of his blind thankfulness to God, did dedicate three pictures of Sheep to Juno, one of Gold, another of Silver, and a third of Braffe; and besides the antient Romanus made the penalties of the laws to be Oxen and Sheep, and no Man might name an Ox untill he had named a Sheep.

Among the Tragedyts they had their Wives common, yet their Tyrants had lawes to keep their wives to themselves, and they thought it a great penalty for the Adultery of their wife, if the Adul-
terer payed them a Sheep.

The Poets have a pretty fiction, that Endymion the Son of Mercury fell in love with the Moon, who defipd him, and that therefore he went and kept Sheep; afterward the Moon fell in love with his white Sheep, and defired some of them, promising to grant his requelt, if he would gratifie her choice: whereupon the wife-man (as Probw writeth) divided his flock into two parts, the whiter on the one side which had the couler Wool, and the blacker on the other side which had the finer Wool, so the Moon chose the white ones and granted him her love, whereupon Vir-

gil thus writeth;

Pan munere nivos Luna captiv te Luna serelit.

It may appear alfo in what great regard Sheep were in antient time, for that their Priests
made holy Water and facrifices for their fanctification, whereof I finde those relations in Grec-
dian Virgil, and others. At the fuffuration of Sheep there was another manner of fanctifying then at other times, for the Shepherd rofe betimes in the morning, and sprinkled his Sheep all over with Water, making a perfume round about the fold, with Sulphur, Savine, Lawrell, Wine and fire, singing holy verses, and making facrifice to the God Pan for they did believe that by this fuffuration the health of their Sheep was procured, and all consuming difeases driven away.

It is reported that when Sheep of strange colours were sprinkled with this water, it signified great happines to the Princes of the people, and they were gifts for the Emperor, whereupon Virgil made these Verfes;

Ipsa fed in pratis aries jam suave rubenti
Muriae, jam crecoro mutabit tellera into.

When men went to receive answers of the Oracles, they flept all night in the skins of Sheep. There was a Noble facrifice among the Paganis called Eiocantome, wherein were facrificed at one time a hundred Sheep at a hundred several Altars.

It is reported of King Pofias, that he facrificed at one time twelve hundred Oxen and eight and thirty hundred Sheep; so great was the dignity of this Bealt, that God himfelf placed in the death thereof one part of his worship: and whereas it was lawful among the Heathens to make their facrifices of Sheep, Goats Swine, Oxen, Bens, and Gjeefe; they made reckoning that the Lamb and the Kid was belt of all, for that God was not pleased with the quantity, but with the quality of the facrifice. The antient Egyptians for the honor of Sheep, did neither eat nor facrifice them, and therefore we read in holy Scripture, that the Israelites were an abomination to the Egyptians, because they both killed, and facrificed Sheep, as all Divines have declared.

There is a noble fior of Clitus who when he facrificed at the Altar, was called away by King
Alexander, and therefore he left his facrifices and went to the King, but three of the Sheep that were appointed to be offered did follow after him, even into the Kings preffe, whereas Alex-
ander did very much wonder (and that not without caufe) for he called together all the Wife-men and Sooth-fayers to know what that prodigy did forefhow, whereunto they generally anfwered that it did forefhow some fearful events to Clitus, for as much as the Sheep which by appointment were dead, that is, ready to die, did follow him into the preffe of the King, in token that he could never avoid a violent death: and so afterwards it came to paffe; for Alexander being dif-
pleated with him, because (as it is faid) he had rafed on him in his drunkennefs, after the facrifice commanded him to be flaine, and thus we fee how divine things may be collected from the natures of Sheep. These things are reported by Plutarch and Pauflanias.

Another note of the dignity of Sheep, may be collected from the cufmom of the Lacedemoniuns: When they went to the wars they drove their Goats and their Sheep before them, to the intent that before they joyned battle they might make facrifice to their Gods: the Goats were appointed to lead the way for the Sheep, for they were drove forfolt, and therefore they were called Catesedes, and on a time this miraculous event fell out, for the wolves let upon the flocks, and yet contrary to their raving nature, they spared the Sheep, and defroyed the Goats: which notable fact is wor-
thy to be recorded, becaufe that God by fuch an example among the Heathen Paganis did demon-
strate his love unto the good in fparing the Sheep, and his hatred unto the wicked in defroying the Goats, and therefore he referred the Sheep to his own Altar:

Idibus
Of the Sheep.

Ilibum alba Jovi, grandior agna odit,
So faith Ovid.

Nigrum bibent pecudem, ze'phiria solitum album,
So faith Virgil.

And again,

Huc aestim Hilíta
Nigrum multo pecudum te sanguine duct.

To Jupiter and to the Sun, they were wont to sacrifice white Sheep or Lambs, but to Pluto and to the Earth, they sacrificed black Sheep or Lambs, in token of deadness, therefore Tibullus writeth;

Interes nigras pecudes promittite Divi.

And Virgil faith;

Duc nigras pecudes, ea prima piscula sunt.

When the Grecians sent their spies to the tents of the Trojans, to discover what order, strength, and discipline they observed: Neper and the ancients of Greece vowed unto the Gods, for every one of the Captains a special gift that was, Om melam, keles hystera, that is, a black Sheep great with young: the reason whereof is given by the Scholiast, they vowed (faith he) a black Sheep, because the spies went in the night time, blackness being an emblem of darkness, and a Sheep great with young because of good fortune, for they spied well in Troy. In Apollonia there were certain Sheep that were dedicated to the Sun, and in the day time they fed near the river in the bell pasture, being lodged every night in a goodly spacious cave near the City, over whom the greatest men both for wealth, strength, and wit were appointed every night to watch by turns for their better safeguard: and the reason of this custody, and the great account made of these Sheep, was for that the Oracle had commanded the Apollonians to do so unto them, and make much of them: Afterwards Evenium a noble man among them keeping watch according to his turn, fell asleep, so that three of the said Sheep were killed by Wolves; which thing came in question among the common Magistrates to know the reason of that fact, and how it came to pass, whether by negligence or by some other violent incursion: Evenium being no ways able to defend it, was condemned to have both his eyes put out, that so he might be judged never more worthy to see the light with those eyes, which would not wake over their charge, but wink and sleep when they should have been open. And to conclude, I will but add this one thing more, that whereas the Egyptians worshipped the Sheep for a god, God permitted the same unto the Jews to be eaten among common and vulgar meats, and also be burned at the Altar for sacrifice; and whereas the said Egyptians did not only eat but sacrifice swines flesh, God himself did forbid his people that they should never eat or touch of Swines flesh as an abominable thing: by which he signified how contrary the precepts of men are to his own laws, for that which he forbade, they allow; and that which they allow, he forbidde: and therefore how far the people of God ought to be from superstition, and from the traditions of men, is most manifest by this comparison, for that was never comforted that came not into the Temple, and that was never lawful which was not approved by God: and those things which in his law have greatest appearance of cruelty, yet are they most just and equal then the most indifferent inventions of men, which seem to be flushed out with mercy, and gilded over with compassion.

And these things most worthy Readers, I have thought good to express this in the dignity and honorable account which the greatest men of the world in former times have made of Sheep, and thereby I would incite and ill you up, if it were but one noble spirited learned man, which is furnished with wit, means, and opportunity, to dive and pierce into the secrets of English Sheep, and Shepherds, and to manifest unto the world, the belt and most approved means and medicines, for the propelling and driving away of all manner of diseases from those innocent profitable beasts, and for their conservation in all manner of health and welfare.

I am forry that our times are so far poysoned with Covetousnes, that there is no regard of God, man, or beast, but only for profit and commodity: for as for the service of God, we see that common devotion of men, and practice of their Religion, is founded upon a meer hope that therefore God will better prosper them in worldly affairs, and if it were not for the reward in this world, the professors of Religion would not be half so many as now they are; and that is true in them which the Devil flenderously objected to Job, namely, that they do not serve God for nothing, and they had rather with Dives have the Devils favour in rich garments and delicate fare, then with Lazarus with misery and contempt, enjoy the favour of God, and to set up their hopes for an other world. As for Men, we see that the Son loveth his Father but for patronymy, and that one man maketh much of another, for hope to receive benefice and recompence by them; and therefore it is no marvell if the silly beasts have obtained so little mercy, as to be loved, not because they are Gods creatures, but for that they are profitable and serviceable for the necessities of men: for this cause you nourish them, and not like the Apollonians aforesaid for the Oracles sake, but
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for their fleeces and their flesh. Therefore if you have any compassion, learn how to help their miseries, and publish them to the world for the general benefit; for he cannot be good which is not merciful unto a beast, and that mercy doth easily die which growtheth but in one heart of one mortal man.

There were a company of people in Egypt called Lyopolitis, who worshipped a Wolf for a God, and therefore they alone among all the Egyptians did eat Sheep, because the Wolf did eat them; even so I can make no better reckoning of those men that nourish Sheep for their profit only, then I do of the Lyopolitis, which worshipped a Wolf, for such men have no other God but their belly, and therefore I trust their reasons shall peradventure some one or other to write a larger discourse of our English Sheep.

Now in the next place we are to discourse of the utilities that cometh by Sheep, for as it is the meekest of all other Beasts, so as the reward of meekness, there is no part of him but is profitable to man: his flesh, blood, and milk is profitable for meat, his skin and wool both together and separate for garments, his guts and entrails for musick, his horns and hoofs for perfuming and driving away of Serpents, and the excrement of his belly and egestion or dung, for the amending and enriching of plowed lands, and for these occasions did the Egyptians worship it for a God, for that they could see no creature in the world, but had some parts altogether unprofitable unto men, but in this they found none at all.

First of all therefore to begin with their flesh, although Physitians have their several conceits thereof, as Galen (who faith) that the flesh of Hares is better then the flesh of Oxen and Sheep; and Simeon Zebhi, who being forced to confess the goodnes of Mutton or Sheeps-flesh in the beginning and middle of the Spring, yet writeth that it is full of superfuctious and evil juice, and hurtful to all stegmy and moisttomacks. Grefcontienus also writeth, that the flesh of Sheep hath an unpleasant taint through overmuch humidity, and fit for none but for Country labourers: Indeed I grant the opinion of Bataling, who writeth thus concerning Rams: Quem arietem desivitis ne attinges, non modo enim ejus caro non prodeat, etsim etiam vehementer obest; that is, That Rams flesh we ought never to touch, for it is not only through the craft or subtilty of the Butchers, or else through Covetousnes. But in many houes (as I have heard) there is a kinde of Venison made of the flesh of Rams, which is done by this means; First they take the Ram, and best them with stripes on all parts till the flesh grow red, for such is the nature of the blood, that it will gather to the sick affected places, and thence stand to comfort them, so by this means after the Ram is killed, the flesh looketh like Venison: But as in other discourses, namely, Hares and Conies, we have already shewed our hatred of all cruel meat, so also I utterly dislike this, for if it be not sufficient to kill and eat the beast, but first of all put it to Tyrranical torment, I cannot tell what will suffice, except we will deal with beasts, as PILATE did with CHRIST, who was first of all whipped and crowned with thorns, and yet afterward did crucifie him.

But for the taking away of that Rammy humour and rank moistnes which is found in the Male-sheep, they use to geld them when they are young and lack their dams, or else within the compass of a year after their yeaming, whereby the flesh becometh so temperate, sweeter, and favorious, as any other flesh in the world; and if they passe a year, then do they use to knit them, and so in time their flames deprived of nourishment from the body by reason of knitting, do dry and consume away, or utterly fall off, whereby the whole flesh of the Beast is made very feafome and wholesome. It is granted by all, that when they are young, that is to say, a year old, their flesh is very wholesome, and fit for nourishment of mans nature, but that they increase much phlegm, which evil is allayed by eating Vinegar and drinking wine unto it. In many places they sell their Murtons when they are killed, and so eat them out of the pickles, or else roast them in the smock like Bacon. Within the territory of Helvetia, there is a publique law whereby the Butchers are forbidden to buy any forain Sheep, after the feast of St James; that is, the five and twenty day of July, for although that after that time they grow fat, yet is their flesh then leffe wholesome, and their fat more haurfull, then which is gotten in the Spring of the year.

It were needless for me to set down the division of a dead Sheep into his quarters, shoulders, legs, loins, rakes, heads, and purtunances, for that they are commonly known, and the relation of them can minister small learning to the Reader, but every part hath his use, even the blood that is taken from him when his throat is cut, hath his peculiar use for the nourishment of man, and above all other things the fat of his loins commonly called his sweat wherein it excelleth all other beasts whatsoever, for their reins are covered all over with fat.

There is no lesse use of their milk not only for young, but for old persons, as well for the rich to beautifie their tables, as for the poor to serve their hungry appetites: and there be some people in Africa that have no corn in all their Countrie, and therefore in head of bread, their common food is milk, the goodnes whereof is thus expressed by Herrias.

Quad premat & Capra, post & Ovir, inde boves.

Evermore the milk of an Ewe is belt that is newest and thickest, and that which cometh from a black Sheepes preferred before that which is milked from a white, and generally there is no beest whereo
whereof we eat, but the milk thereof is good and nourishing, therefore the milk of Sheep is preferred in the second place, and there is no caufe that it is put in the second place but for the fanners thereof, otherwise it deserved the firft, for as the fanners make it let pleasant to the palace and stomach of man, yet is it more precious for making of Cheefe and we have showed already that in some places as in the Iland Ery bras, the milk of Sheep yeeldeth no whay, and that they can make no Cheefe thereof, but by mingling abundance of water with it: they make abundance of Cheefe in the Amazon hills, and in Lylyra the Cheefe of Sitilia is made of Gofts and Sheeps milk, and generally Cheefe made of Sheeps milk is the better the more new it is. The nature of a Sheep is to give milk eight moneths together, and in Italy they make Butter alfo of the milk of Sheep, all the Summer time unto the fault of St. Michael; they milk them twice a day, but after that, until they cupple with their Rams, they milk them but once a day: the faults of Cheefes made of their milk is either because they are over dry or hollow, and full of eyes and holes, or else clammy like birdlime, the lat proceedeth from the want of prelling, the fenth through overmuch falt, and the third by overmuch drying in the Sun. And thus much fhall suffice to have fpoken of thofe things in Sheep which are fit to be eaten.

In the next place we come to difcourfe of their Wool, and of the shearing or clipping of Sheep, for although their flefh be preuous, yet it is not comparable in value to their fleeces. For that when they are once dead, they yeeld no more profit, but while they live they are thorn once or twice a year, for in Egypt they are thorn twice a year; and alfo in some parts of Spain. And it appeareth that in antient times there were great fleaths at their Sheep-sheerings, as is apparent in the holy Scripture in many places, and especially by the history of Abafan, who after he had once conceived malice againft his Brother Amnon, he found no opportunity to execute the fame, until his Sheep-shearing feast, at which time in the presence of all his brethren the Kings fons (even at dinner) when no man suspected harm, then did Abafan give a fign to his wicked servants to take away his life, which they performed according to their Maffers malice.

It appeareth by the words of Fliny, who writeth thus; Oves non ubi; tendentur, durasque bilam in locis vellendi nos, qui eum non vellam, ante triduo iudice habent quo longe imman radice lana retinent; that is, Sheep are not every where thorn, for yet unto this time in many places they do commonly observe the old custom of pulling the wool off from the Sheeps back, and which they do now pull the wool and not thorn it, do alwayes caufe their Sheep to fall three days before, that to being made weak the roots of the wool may not thiek to fall, but come off more easilie.

And indeed I am confirmed in this opinion by the Latine word V.Plus, which signifieth a fleec, which can be derived from no other Radix or Theam, nor admit any other manner or kind of no- ratio, then a vellendo, that is, from pulling.

Cato alfo in his Book of Originals writeth thus, Palatini collis Roma altera pars Vellidea appellata fuit, vel vellenda lana ante Histrionem tofleam invita montifram, that is to fay, There was one part of the hill Palatine at Rome, which was called Vellidea, from the pulling of wool, for it was their custom there to pull their wool, before the inhabitants learned the Histrion manner of shearing Sheep: by which testimonie we fee evidently the great torment that the poor Sheep were put unto when they lost their fleeces, before the invention of shearing, for it is certain by the antient pictures and statues of Men, that there was no use of shearing either hair or wool, from Men or Sheep.

But the hair of Men grew rude, and in length like Womans, and Sheep never loift their fleeces but by pulling off: and therefore Varro writeth, that four hundred and fifty years after the building of Rome there was no Barber or Sheep-shearer in all Italy, and that Plautus Tullius Menas was the firft that ever brought in that custom among the Romans, for which there was a monument erected in writing in the publick place at Ardea, which untill his time was there sincerely preferred.

Now concerning the times and feasons of the year for the shearing of Sheep, it is not only hard, but alfo an impossible thing to fet down any general rule to hold in all places. The beft hath ever I read is that of Didimus, nec frigido adhuc, nec jam effuso tempore, sed medio vero Oves tendente sunt; That is, Sheep muff neither be thorn in extreme cold weather, nor yet in the extreme heat of Summer, but in the middle of the Spring.

In some hot Countries they shear their Sheep in April, in temperate Countries they shear them in May, but in the cold Countries in June and July, and generally the best time is between the Vernal Equinox, and the Summers solstice, that is, before the longest day, and after the days and nights be of equal length; there be fome that shear their Sheep twice in a year, not for any necessity to disburden the heat of the fleece, but for opinion that the often shearing caufeth the finer wool to arife, even as the often mowing of the graffe maketh it the fweeter. In the hot Countries the fame day that they shear their Sheep, they alfo anoint them over with Oyl, the lees of old wine, and the water wherein Hops are fod, and if they be near the Sea fide, three days after they drench them over head and ears in water, but if they be not near the Sea fide, then they wash them with rain water fod with Salt: and hereby there cometh a double profit to the Sheep; firstly, for that it will kill in them all the caufe of lefs for that year, fo as they fhall live fave from that infection; and secondly the Sheep do thereby grow to bear the longer and the foffer wool. Some do shear them within doors, and fome in the open fun abroad; and then they chufe the hottest
and the calmest days, and these are the things or the necessary observations, which I can learn out of the writings of the antients about the shearing of Sheep.

Now concerning the manner of our English Nation, and the customs observed by us about this business, although it be needleless for me to express, yet I cannot contain my self from relating the same, considering that we differ from other Nations. First, therefore, the common time whereat we shear Sheep is in June, and Lambs in July; and first of all we wash our Sheep clean in running sweet waters, afterward letting them dry for a day or two, for by such washing all the wool is made the better and cleaner: then after two days we shear them, taking heed to their fleeth, that it be no manner of way clipped with the sheares, but if it be, then doth the shearer put upon it liquid pitch, commonly called Tar, whereby it is easily cured and kept safely from the flies. The quantity of wool upon our Sheep is more then in any other Country of the world, for even the least among us (such as are in hard grounds) as in Norfolk, the uppermost part of Kent, Hertfordshire, and other parts, have better and weightrier fleeces then the greatest in other Nations: and for this cause the forein and Latin Authors do never make mention of any quantity of wool they shear from their Sheep, but of the quality.

The quantity in the least is a pound, except the Sheep have lost his wool, in the middle sort of Sheep two pounds or three pounds, as is vulgar in Buckingham, Northampton, and Leicester: But the greatest of all in some of those places, and also in Knebbs marsh in Kent, four or five pounds, and it is the manner of the Shepherds and Sheep-masters to wet their Rams, so to keep their wool two or three years together growing upon their backs, and I have credibly heard of a Sheep in Buckinghamshire in the flock of the L.P. that had thorn from it at one time, one and twenty pound of wool. After the shearing of our Sheep, we do not use either to anoint or wash them, as they do in other Nations, but turn them forth without, leaving them like maddowes new mowen, with expectation of another fleece the next year. The whole course of the handling of our Sheep is thus described by the flower of our English Gentlemen husbands Maifer Thomas Tuffter:

"Wash Sheep fast the better where water doth run,  
And let him go cleanly and dry in the Sun,  
Then shear him and spare not, at two days an end,  
The sooner the better his coats will amend,  
Reward not thy Sheep when ye take off his coat  
With twitchers, and flasties as broad as a great.:"

And in another place of the husbandry of Sheep he writeth thus:

"Good farme and well stor'd, good housing and dry,  
Good corn and good dairies, good market and nigh,  
Good shepherds, good till-man, good Jack and good Gill,  
Make happy husband and baseprice their toivers to fill:  
Let pasture be stord and fenced about,  
And tillage set forward as needeth without."

And in another place speaking of the time of the year for gelding Rams, and selling of wool which he admonisheth should be after Michaelmas, he writeth thus:

"Now geld the gelder, the Ram and the Bull,  
Sow ponds, amend dams, and sell Welfter the woe.

But of the milking of Sheep he writeth thus:

"Put Lamb fro Ewe, to milk a few,  
Be not too bold, to milke and fold,  
Five Ewes allow, to every Cow,  
Sheep wrigling tail, hath made without fail."

And thus far Tuffter, besides whom I finde little discourse about the husbandry of Sheep in any English Poet.

And for the conclusion or rather farther demonstration of this part, concerning the quality of our English wool, I can use no better testimonie then that of worthy Mr. Camden, in his Britannia, for writing of Buckinghamshire he useth these words, Had tonse fere campellris est, sola item argillace, tenaci & facundo, Paulus quisque immunes ovium greges paeuit, quamquam mollie & tenuissima vellera ab Asiae quisquis gentibus exportatur; that is to say, The whole County of Buckingham is of a clammy, champaign, fertile soil, feeding innumerable flocks of Sheep with his rich and well-grown pastures or medowes, whose soft and fine fleecs of wool are desired of the people of Asia; For we know that such is the trade of Merchandise and transportation of English cloth, the rare fineness and smoothness thereof is admired in Asia; namely, in Palestina, and other Kingdoms of the Turk,
Of the Sheep.

Turk, and therefore they have English houes of Merchants, both at Anporto, Trinelt, and other places. Again speaking of lenfetero, or lenfeter woollen Herforfdhre, he writeth thus: Sed ei præcipuebide gloria est una in circun vicinis agis (Lenfeter are vacant) qui excepta Apula & Tarentum, palmae defunt Europæi annos. The greatest glory of that foil is in their wool, which ariseth from Sheep, feeding in the fields and pastures adjoining thereunto, (which wool they call Lenneter orel) and all Chriftendom yeeldeth praffe and price unto it next after the Apulan and Tarentinum wool.

And indeed so sweet is the gain that cometh by Sheep, that in many parts of the Luld there is a decay of tillage and people, for their maintenance, and therefore the said Mr. Camden faith most worthily, even like himself, that is honest and unpartial in all his writings, for in the beginning of his description of Northamptonfhire, where I think above all parts depopulation and defroying of Towns is most plentiful, (fo that for Christians now you have Sheep, and for a multitude of good house-holders, you shall have one Shepheard Swain and his Dog lying upon forty fillings a year, or little more) he writeth in the words of Hypederus after the commendation of the Sheep and wool of that Country: Ovibus opleta & quasi obfefs, quæ (ut Hypederus hic dixit) tam meis effe tamque exiBo ali folomans, nunc (ut fatirc) tam eludes atque indomitas effe caperunt ut boves de novem, ipis agris, domo apitius, ac depopulentur: which worlds I cannot better English then in the words of an Epigrammatarian in our age, for to this effect, according to my remembrance he writeth;

Sheep have eat up our poflerities, our medowes, and our downes, Our Mountains, our Men, our Villages and Towns;
Till now I thought the common proverb did but jefts,
That fayer a black sheep is a biting beefs.

Concerning the goodness of English Wool, and the difference of it from others, the reason is well given by Giffers and Camden: Lame earum mulies & cripte jant, ideeq; nunæ ut eodem Milefa celebratur: nec mirum cum nullum animal venenatum mitat Anglia, & fine laporum mœv pœn-vagitur: nulli enim in Anglica bovis perfortunatur. Rore call fllar hiodant greges, al omní alo ftate arcutor quod alio vi obvius fint existant: that is to say, The wool of English Sheep is soft and cured, and therefore it is now commended as highly as ever was the Milefair wool in ancient times: and not without just cause, for they are neither infected with the fear of any venomous Beast, nor yet troubled with Wolves and therefore the strength of their nature and peaceable quiet wherein they live, doth breed in them the better wool; and besides they never drink, but quench their thirst with the dew of heaven. And thus much for the discourse of English Woyl.

I am never able sufficiently to describe the infinite commodities that come unto men by wool, both for gardens, for hangings, for coverings, for hats, and divers such other things, and therefore it shall not be unpleasant I trust unto the Reader, to be troubled a little with a farther discourse hereof. I blot some paper in describing the quality of the belt wool in other Nations. First of all therefore we are to remember these two things, that the belt wool is soft and cured, and that the wool of the old Sheep is thicker and thinner then the wool of the younger, and the wool of the Ram followeth the fame nature, of whom we will speak more in his story. Only in this place our purpose is to expresse the examination of wool as we finde it related by Authors, according to their several Countries. Therefore as we have said already out of Mr. Camden report, the Tarentinum and Apulian must have the first place, because the Sheepe of those Countries live for the mow part within doors, and besides that, are covered with other skins. In Spain they make greatest account of the black wool, and it appeareth by good History, both in our English Chronicle and others, that the Sheep of Spain were of no reckoning till they were flored with the breed of England.

There is a little Country called Polentia near the Alpes, of the wool whereof Martial maketh mention, as also of the Canusina red wool, and therefore Ovis Canusina was an Emblem for precious wool, his Verbes are these:

Non tanum pullus gentes wellere landis,
Romana moris suis vexitur Gallia ruffis,
Canusinae mitto Syrm effere jadis.

We have spoken already of the wool of Ithria and Liburnia, which if it were not for the spinning in Portugal, and the Weftlers ar thereupon, it were no better for cloth then hair. Stobo writeth that the wool of Mauna, whereby he meaneth all the Country that lyeth upon the Scutana, is very soft and gentle, and the belt of Haly, but that of Liguria and Milain, is good for no other but for the garments of servants.

About Padua their wool is of a mean price, yet they make of it moft precious works of Tapestry, and Carpets for tables, for that which was rough and thick in antient time was used for this purpole and also to make garments, having the flags thereof hanging by it like rugs. There is a City called Feltrum and the wool thereof by the Merchants is called Feltrianus, Felt-wool, they were wont to make garments hereof neither woven nor fewed, but baked together at the fire like hats and caps, whereof Pliny writeth thus, Lana & per fo colecta vestem faciunt, & ei adiecur actuam etiam ferro reficunt.
The History of Four-footed Beasts.

resistent, into vero etiam ignium navifimo sui purgamento quippe abeiis coquentiam extral videbantur usi venierum ut arbitror inventi, certe Gallorum ut arbitror inventi, certe Gallorum etiam igni, certe Gallorum igitur inventi. Wool hath this property, that if it be forced together it will make a garment of it self, and if Vinegar be put unto it, it will bear off the blow of a sword, drest at the fire and purged to the last, for it being taken of from the brazen coffer whereon it was drest, it served for clothing, being as he thought an invention of the Gods, because it was known by French names, and from hence we must see the beginning of our felt-hats. The Biteria wooll is celebrated by Juvenal, when he speaketh how Catullus fearing shipwreck, was about to cast him out into the water:

*Infest nativa pecus, fed & egregius fans*

**Viribus occulit & Biterium adjunct aer.**

Of the colours of Wool.

For the colour of Wool in that Country growth mixed, not by any art, but naturally through their food, or their drink, or the operation of the air. The Lauritian Wooll is also celebrated, not only for the softneffe of it, but for the colour, for that it is as black as any Raven, and yet there are some there of other colours, and for this cause the Spanish Wooll is commended, especially Turditian, and Cornus (as Strabo writeth) for he faith the gloffe of the Wool was not only beautiful for the purity of the black, but also it will spin out into thin a thread as was admirable, and therefore in his time they fold a Ram of that Country for a talent. I may speak also of the Wooll of Parma, and Altinum, whereof Martial made this dittochon;

**Vellera primus Appulia; Parma secundus**

**Nobilis, Altinum tertia lundat ovus.**

We may also read how for the ornament of wool, there have been divers colours invented by art, and the colours have given names to the Wool, as Solaria lana, wool of Sea-water-colour, some colour taken from an Amalybi flone, some from brightnefs or clearnefs, some from Saffron, some from Roses, from Mirtles, from Nuts, from Almonds, from Wax, from the Crow, as Coehor coeacum, and from the purple flith, as from the Colouline, or the Tyrian, whereof Virgil writeth thus;

*He quoq ton cura nabie duore tuende,
Neceinm visis erit, quamvis Milifia magno*

**Vellera matenior Tyrian inconla rubores.**

From hence cometh the chalke colour, the Lettece colour, the Loot-tree root, the red colour, the Azure colour, and the Star colour. There is an herb called Fullers-herb, which doth soften Wool, and make it apt to take colour, and whereas generally there are but two colours, black and white that are fimple, the antients not knowing how to die Wool, did paint it on the outside; for the triumphing garments in Homer were painted garments. The Phrygian garments were colours wrought with needle-work, and there was one Attalus a King in Asia, which did firft of all invent the weaving of Wool and Gold together, whereupon came the name of Vefis Attalica, for a garment of cloth of gold.

The Babylonians and the Alexandrians loved diversity of colours in their garments alfo; and therefore Metellus Scipio made a law of death against all fuch as should buy a Babylonian garment, that was carpets or beds to eat upon for eight hundred Sesterces. The shearing of cloth or garments made of thorne cloth, did firft of all begin in the dayes of St. Augustine, as Penfella writeth. The garments like popples had the original before the time of Lucullus the Poet, as he maketh mention in Targumat.

The casting of Wooll.

There was a fashion in antient time among the Romans, that a dilaffe with Wool upon it, was carried after Virgins when they were going to be married: the reason thereof was this (as Varro writeth) for that there was one Tanapulus, or, Caius Geirus, whose Dilaffe and Wool had endured in the Temple of Sangi many hundered years, and that Servius Tullius made him a cloake of that Wool, which he never used but in the temple of Fortune, and that that garment afterwards continued 500 and 60 years, being neither conformed by moths, nor yet growing threadbare, to the great admiration of all which either saw it or heard it. And thus much I thought good to add in this place concerning the diversity of Wool, distinguished naturally according to several regions, or else artificially after sundry tinctures. Lakewife of the mixing and mingling of Wool one with another, and diversities of garments, and lastly of the casting and enduring of Wool and Garments, for it ought to be no wonder unto a reasonable man, that a woollen garment nor eaten by moths, nor worn out by use, should last many hundered years, for seeing it is not of any cold or earthy nature, but hot and dry, there is good cause why it should remain long without putrefaction: and thus much in stead of many things for the Wool of Sheep.

As we have heard of the manifold use of the Wool of Sheep, so may we say very much of the Skins of Sheep for garments and other ues: and therefore when the Wool is detracted and pulled off from them, they are applied to Buskins, Brent-plates, Shooes, Goves, Stomachers, and other ues, forthey are also dyed and changed by tincture into other colours, and also when the

The use of Sheep skins,
Wool is taken off from them, they dress them very smooth and stretch them very thin, wherefore it is made writing parchment, such as is commonly used at this day in Eng.watt, and I have known it practiced at Tuscany, called once Tripantium in the County of Northampton: and if any part of it will not stretch but remain stiff and thick, thereof they make writing tables, whereas they write with a pencil of Iron or Brass; and afterward deface and rake it out again with a sponge or linnen cloth. Hereof also (I mean the skins of Sheep) cometh the coverings of Books, and if at any time they be hard, stubborn, and stiffe, then they soften it with the Sheep's sweeter or tallow.

The bones of Sheep have also their use and employment for the fastening of knives. The bodies of the urine of Sheep do make a kind of counterfeit Nitre. And Ruflius, that if a man would change any part of his Horst's hair, as on the forehead, take away the black hairs and put them into white, let him take a linnen cloth and wet it in boiling milk of Sheep, and put it so hot upon the place that he would have changed, so oftentimes together till the hair come off with a little rubbing, afterward let him wet him with the same cloth in cold Sheeps milk, and lay it to the place two or three days together, and the hair will arise very white (thus faith he;) and there are certain flies or moths which are very hurtful to gardens, if a man hang up the panch of a Sheep, and leave for them a passage or hole into it, they will all forake the flowers and herbs, and gather into that ventricle, which being done two or three times together, make a quiet riddance of all their hurts, if you please to make an end of them.

The Swallows take off from the backs of Sheep flocks of Wool, wherewith the provident Birds make their nests to lodge their young ones after they be hatched.

With the dung of Sheep they compaffe and fat the earth, it being excellent and above all other dung necessary for the benefit and increase of Corn, except Pigeons and Hens dung which is hotter, and the sandy land is fittest to be amended with Sheep's dung, also plants and trees if you mingle therewith ashes.

Now we are come to the gentle disposition of Sheep, and to express their inward qualities and moral ume, and first of all considering the innocency of this Beast, I marvel from whence the *Gyptianus* Cretian custom proceeded, which caused Adulterers for their punishment to ride throughout the whole City crowned with Wool, except that so they might signify his tender and delicate efficiency; and therefore as some are crowned with gold in token of virtue and valiant acts, so vice (especially the wantonness of the flesh) deferveth to be crowned with Wool, for the leoneness and basilines thereof, not because such a crown was a sufficient punishment, for an opprobry and continual badge of ignominy, even as forgers and perjured persons ride with papers on their heads, upon bare horse backs, and so forth.

By the behaviour of Sheepe at their Rutting or Ramming time the Shepherds observe tempers, rains, and change of weather. If they be very lustful and leap often upon their females, but if they be slow and backward, then is the poor naked man glad, for that thereby he conceiveth hope of a gentle Winter, and temperate weather. Also if in the end of Autumn they ramp upon the ground with their feet, it betokeneth hard weather, cold Winter, much Frost and Snow, about the time of the first rising of the Pleiades or seven Stars. Which thing is thus Poetically expressed by *Avienus*:

*Si deniq. terra*

*Laurea solutis capitis, ut tensantur in auribus,\*  
*Cum modius per marmor turbida condit,\*  
*Pliadas occidunt, cum brume in frigor arduis,\*  
*Frugifer Autumnus, ruat aether concitus imber.*

Concerning the simplicities of Sheepe, I must say more, and also of their innocency, yet the simplicity thereof is such, and so much, that it may well be termed folly, or *Animal inepistimum*, for *Aristotle* writeth thus concerning it, *Reptis in debita fine causa, byme objiciante ipsum sese egrediebat stabulo, occupatam a nuncio, nisi pater conspiceret, abide non valit, sed perit deficiens, nisi metas a prollo decantaret, ita enim religios greges se fugaverint*, that is, Without cause it wandereth into deficit places, and in the winter time when the air is filled with cold winds, and the earth hardened with hoare frostes, then it forsaketh and goeth out of his warm coat or fable, and being in the cold Snow, there it will tarry and perish, were it not for the care of the Shepherd, for he taketh one of the Rams by the horns, and draweth him in adiors, then do all the residue follow after. They are also very obedient to the voice and call of the Shepherds, and to the barking and cry of their Dogs, and no leffe is their love one toward another, every way commendable, for one of them pityeth and forroweth for the harm of another, and when the heat of Sun offendas them, *Avestor* writeth, that one of them interpothes his body to shadow the other.

Their Dam or Ewe loveth her Lamb, and knoweth it by fmelling to the hinder parts, and if at any time the Dam do not love or make reckoning of her young one, they give her the herb Pennywort or Water-well to drink in water, and then as the *Sehalii* affirmeth, natural affection increaseth in her. Of the foolishnes of Sheepe, there was an Emblem to signifie by a man riding upon a golden Fleece, one ruled by his servante or wife;
The History of Four-footed Beasts.

Transt aquas residunt pretiosi in vellere Pbyrxyu, 
Et lamiam impavidus per mare tandit ovem.

Ego qui id es? vis senju habeti sed drite geza,
Conjuus aut servi quem regit arbitrium.

And therefore Aristophanes reproving the folly of the Athenians, calleth them Sheep: And Orig- 
gen writing upon Lebions, faith, Ovium immotato aefellium saltorum, & irritationeullium certulio. The 
Sacring and killing of Sheep, is nothing else but the correction of our foolish and unreasonable 
affections. We have shewed already in the story of the Goat, of a Goat that nourished a Wolf's 
whelps, which in the end did destroy her, and the self fame is ascribed also to a Sheep.

They observe great love and concord with Goats, and live in flocks together, and for this cause 
it happeneth, that more Goats are destroyed by Wolves then Sheep, for that the Goats forfake 
their fellows, and fraugle abroad for food, but the Sheep very seldom: and it is observed, that 
if a Wolf kill a Sheep, and afterwards any garments be made of the wooll of that Sheep, they 
easily and more speedily breed Lice and vermin then any other, and also procure itch in the bodies of 
them that wear them, whereof Car\dran giveth this reason; Haud mirum videri debet ovis pellem a Lupo 
dilaniata pravitatem mutaret, nam ob vehementem mutem, tum etiam ob contratium naturam mul aflcitur, et si 
mari enim ultimum sit sapientium, majus tamen affiliotur corpus in uo quantum in altero gener. metuit homo magis 
in maris flunctum quam coram bofibus. It ought not (faith he) move any man to wonder, that the wooll 
of a Sheep torn afunder by a Wolf should beget and breed itch, for that affection ariseth from both, 
from the vehemency of fear before it be dead through the sight and sense of the Wolf, and also by 
reason of a contrary nature that is oppressed and devoured by another, and although death be the 
least punishment, yet we see divers affections follow carcasses after death, and as a man is more 
afraid of the Sea when he is in peril of death therein, then of the face of his enemy, fo is it in this cafe, 
between the Sheep and the Wolf.

The same Cardan affirmeth, that Sheep are afraid of Wolves even after death; for the wooll of a 
Sheeps skin will fall off in the presence of a Wolf. Unto this subcribeth Oppianus, or rather Al- 
bertus received it from Oppianus, and furthermore (it is said) that if the string of a Sheeps and Wolves 
guts be fastened to one and the same Instrument, they will never make good Harmony; and furthermore, 
if a Drum be made of a Sheeps skin, and another of the Wolves skin, the Drum of the Sheeps skin will jar, and found unpleasantly in the presence of the Wolves skin: but of these things 
I have no certain grounds, only I say, there may be natural reason from the substance and 
matter, both of one and other, why this accident may chance without discord and hatred of each 
other, but from the difference and folly of the matter; as for example; the guts of a Wolf are 
strong and hard, and will abide greater strain then the guts of a Sheep; if therefore the Musitain 
will strain the one like the other, it must needs fly afunder: likewise the skin will give a deeper and 
lowered found upon a Drum, by renfon of the substance, than a Sheeps; and fo some may ignorantly 
ascribe that difference to an antiopathy in nature, for as a Candle in the presence of a great Torch 
or Fire, giveth lefs light to the eye, fo doth a drum made of a Sheeps skin, lefs found to the sense 
of hearing, in the presence of another made of a stronger and harder beasts skin: and to conclude, 
as a twine thread will not hold tretching in the presence (I mean in comparison) of a silk thread, al- 
though it be of the same quantity, even fo will not a Lute string made of a Sheeps gut, in compa- 
riffion of another made out of a Wolf. But all the question is, how it cometh to pass, that one of 
the skins hanged up in the presence of the other should be consumed before other, that is, a Sheeps 
skin in the presence of the Wolves, as a Goofes skin will loose the feathers before the Eagles. The 
answer is easy, for the dryer that the body is, the lefs excremental humor it containeth: and fo will 
lift the longer, and all wilde fiveltraile beasts are dryer then the tame, modern, and domesfical, as 
for example, the Wolf then the Sheep; the Lion then the Dog; the Pheasant then the Cock; the 
Eagle then the Goofe: and for these causes the skins of the one doe waffe before the other, nor for 
fear or secret opposition, but for want of better enduring subsistance.

The Poets do ascribe unto their Gods Lanus pedes, feet made of Wool, for that they come softly 
and suddenly without noise to take vengeance upon malefactors; and therefore when they describe 
Saturn ryed up a whole year with bands of wool, their meaning is, shew how with patience he 
forbare his wrath and indignation. Bees are enemies to Sheep; and there are no cateel that do so 
much innrich men as Sheep and Bees.

There is a story in Suidas and Hefcibius, of one Chryfamis, who was very rich in Sheep in the Iland of 
Cow, and there came every year an Eel, and what away his best Sheep among all the flock, at last 
he met with it and flew it; afterward the ghost of the Eel appeared to him in the night, warning 
him (for fear of other harm) to fee him byued. Chryfamis neglected it, and therefore he and all his 
family perished. By which story I cannot guess any other meaning, but that some man stole away his 
Sheep, and for that he took upon him a private revenge, mock inhumanely suffering him to be unbu- 
ried, and setting more by a beast then the life of a man, as a just punishment of God he perfired: and 
thus I conclude this natural and moral discourse of the Sheepe with that fiction of Efop, who writeth, 
that on a time as the Shepherds were making merry in a Cabbage, and eating a Sheep, the Wolf came 
and looked in, saying unto them: Asqui ego si tantum facerem, quantum curis virum tumultum? If I should eat a 
Sheep as you do, you would all rise in an uprore: which is fitted against them that make good laws, 
and observe none themselves.
Having thus made a general description of the Sheep, wherein we have spent no more time than was fit and convenient, we are now forced to the several species and kindes, and first of all, order and nature teacheth us to discourse of the male, which in our English language is called a Tup or Ram, derived I do not doubt from the French, Ram, although also they call him Belier; the Germans, Haden widers, and Hammell; the Italius, Montone, and Ariete; the Spaniards, Carneros; the Helvetians, Ramchen; the Greeks in ancient time Krios, Ariacha, Cerse, and now in these days Kris; the Hebrews, Di, or Eel; the Chaldees, Dikrins; the Arabicans, Kaha; and the Persians, Ne-rumusch. Now concerning the Greek and Latin names, there is some difference among the learned about their notation, etymology, or derivation; for although they all agree, that Aries sti dux et mat-rius proorum, yet they cannot content from what root, item, or fountain, to fetch the same. Isid- rus bringeth Aries ab aris, that is, from the Altars, because the sacrificing of this beast was among all other Sheep permitted, and none but this except the Lambs. Others derive it of Aretes, which signifieth
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The chief of Rams for breed.

Crescentius.

And therefore for as much as the young ones do commonly resemble the father, and bear some notes of his colour, let your Ram be all black, or all white, and in no cafe party-coloured; and for the stature and habit of his body let it be tall and straight; a large belly, hanging down and well clothed with wool; a tail very long and rough; a broad fore-head; large horns; crooked wind-horns toward his snout, having his ears covered with wool, a large breast, broad shoulders and buttocks; his fleece pressed close to his body, and his wool not thin nor flanding up. And for the horns, although in all Regions Rams have not horns, yet for windy and cold Countries the great horned Beasts are to be preferred, for that they are better able through that defence to bear off windy and weather, yet if the climate be temperate and warm, it is better to have a Ram without horns, because the horned Beast being not ignorant what weapons he bears on his head, is as apt to fight with the pold Sheep, and also more luxurious among the Ewe, for he will not endure a rival or companion-husband, although his own strength and nature cannot cover them all; but the pold Ram on the other side is not ignorant how naked and bare and unarmed is his head, and therefore like a true coward, fleepeth in a whole skin, being nothing so harmful to his corrivals, nor to the females, but well indureth partnership in the work of generation.

There is no Beast in the world that so much participate with the nature of the Sun as the Ram, for from the Autumnal Equinolium unto the Vernal, as the Sun keepeth the right hand of the Hemisphere, so doth the Ram lie upon his right side; and in the Summer feaston as the Sun keepeth the other hand of the Hemisphere, so doth the Ram lie upon his other side. And for this cause the Lyrians which worshipped Ammon, that is the Sun, did picture him with a great pair of Rams horns. Also, although in the heavenly or celestial sphere or Zodiac there be nothing firr or lat, yet the Egyptians have placed the Ram in the first place, for their Astronomers affirm, that they have found out by diligent calculation, that the fairest day which was the beginning of the worlds light on the face of the Earth, then was the sign Aries in the midit of Heaven, and because the middle of Heaven is as it were the crown or upper-most part of the World, therefore the Ram hath the first and uppermost place, because it is an Equinoctial sign, making the days and nights of equal length, for twice in the year both the Sun pas through that sign, the Ram fitting as it were judge and arbiter twice every year, betwixt the day and night.

There be poetical fictions how the Ram came into the Zodiac; for some fay, that when Bacchus led his Army through the Deferts of Lybias, wherein they were all ready to perish for water, there appeared to him a goodly Ram, who fowed him a most beautiful and plentiful fountain which relieved and preferred them all; afterward Bacchus in remembrance of that good turn erected a Temple to Jupiter Ammonius, also in that place for so quenching their thirst, placed there his Image with Rams horns, and translated that Ram into the Zodiac among the Stars, that when the Sun should pas through that sign, all the creatures of the world should be fresh, green and lively, for the fame cause that he had delivered him and his Hoatt from perishing by thirst, and made him the Captain of all the residue of the signes, for that he was an able and wise Leader of Souldiers. Other again tell the tale somewhat different, for they fay, at what time Bacchus ruled Egypt, there came to him one Ammon.
Of the Ram.

Amon, a great rich man in Africa, giving to Bacchus great store of wealth and cattle to procure favour unto him, and that he might be reckoned an inventor of some things: for requisit heereof Bacchus gave him the land of Thesos in Egypt, to keep his Sheep and Cattle, and afterward for that invention he was priceted with Rams horns on his head, for remembrance that he brought the first Sheep into Egypt, and Bacchus also placed the sign of the Ram in Heaven: These and such like notions there are about all the signs of Heaven, but the truer observation and reason we have shewed before out of the Egyptian learning, and therefore I will cease from any farther prosecution of these fables.

They ought to be two year old at least before you suffer them to joyn in copulation with the Ewes, and for two months before to be separate and fed more plentifully then at other times, that so at their return they may more esperly and perfectly fill the Ewes: and then also before copulation, and at the time that they are permitted in some Countries they give them Early, and mix Oats with their meat, and feed them with the herb Salomon's seal, for all these are vertuous to ftrir up and incease their nature. And likewise one kinde of the Satyrium and salty water, as we have said in the discourse foregoing.

Now, at the time of their copulation they have a peculiar voice to draw and allure their females differing from the common bleating, whereof the Poet speaks, Blaterat hine ater, & pia balatvow: This Bealt may continue in copulation, and be preferred for the generation of Lambs till he be eight year old; and it is their nature the elder they be, to seek out for their fellows the elder Ewes or females, forfaking by a kinde of natural wildom.

Now concerning the time of their admittance to copulation, although we have touched in the former Trettise, yet we must add somewhat more in this place. In some places they suffer them in April, and some in June, that so they may be paff danger before Winter, and be brought forth in the Autumn, when the grapes after harvest is sweet, but the belt is in October, for then the Winter will be over-paffed before the Lamb come forth of his dam's belly. Great is the rage of these Beasts at their copulation, for they fight irrefuly till one of them have the victory; and for this cause Aries among the Writers is a word to express singular violence:

Arietat in porto & duos objice poster.

And Sibis of Dioecippus,

Arietat in primos obiectis; immania membri.

And so Seneca in his book of Anger, Magno imperatori antequam ateris inter se arietarent, cor exilixat: And indeed great is the violence of Rams, for it is reported that many times in Rhetia to try their violence, they hold betwixt the fighting of Rams a flick, or bat of Corn-tree, which in a bout or two they utterly dimnish and bruise in pieces.

There is a knowne fable in Alfinius, of the Wolf that found a couple of Rams, and told them that he must have one of them to his dinner, and bad them agree betwixt themselves, to whom lot that death should happen, for one of them must die; the two Rams agreed together, that the Wolf should stanf in the middle of the clofe, and that they twain should part one into one corner, and the other into the corner of the field, and so coming runne to the Wolf, and he that came last should lose his life to the Wolves mercy; the Wolf agreed to this their device, and chose his standing, while they conferred with their horns, when they came upon him to make him sure enough from hurting any more Sheepe: forth therefore went the Rams, each of them unto his quarre, one into the East, and the other into the West, the Wolf standing joyfully in the midit, laughing at the Rams destruction; then began the two Rams to fet forward with all their violence, one of them so attending and observing the other, as that they might both meet together upon the Woff, and fo they did with vengeance to their enemy; for having him betwixt their horns they crushed his ribs in pieces, and he fell down without stomach to Rams flesh.

This invention, although it have another moral, yet it is material to be infected into this place to shew the violence of Rams; and from this came so many warlike inventions called Arietet, whereewith they put down the walls of Cities, as the Readers may see in Vitruvius, Valerius, and Alfinius, for they lay that the warlike Ram was made of wood, and covered over with fheels of Tortoise, to the intent it should not be burned when it was set to a wall, and it was also covered with the skins of fack-cloth by rows artificially contrived, within the same was a beam which was pointed with a crooked iron, and therefore called a Ram; or rather because the front was so hard that it overthrow walls, when by the violent strength of men it was forced upon them; and whereas it was shaped over with Tortoise fheels, it was for the true resemblance it bare therewith; for like as a Tortoise doth sometime put forth his head, and againe sometime pull it in, so also doth the Ram sometime put forth the ficke, and sometime pull it in, and hide it within the frame, so that by this engine they did not over-throw the walls, but also they caused the ftones to fly upon the enemies like thunder-bolts, striking them down on every side, and wounding with their fall or stroke like the blows of an armed man; and against these forces there were counter-forces devisd on the part of the besieged, for because the greatest thereof was such as it could not be moved without singular note and ostentation, it gave the besieged time to oppose against it their instruments of war for their safeguard, such were called

Coldites.
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Cingul, Lappi, Lappi ferum. made like a pair of tongs, whereby as Palleus writhe, many times it came to pass, that when the wall was overthrown the enemies durst not enter, saying: Certe hostes sumpsit ab orbibus dieis mortuum ingredi in urbem non ambulant. And thus much for the force of Rams both their true and natural strength, and also their artificial imitation by men.

Now on the other side the wife the shepherds want not desires to till them in the heart of the impetuous Beasts. For Epicharmus the Syrus faith, if there be a hole bored in the barker part of his crooked horn near his ear, it is very profitable to be followed, for seeing that he is a Captain of the flock, and that he leads all the residue, it is most necessary that his health and side-guard be principally regarded; and therefore the ancient shepherds were wont to appoint the Captain of the flock from the prime and first appearance of his horns, and to give him his name, whereof he took knowledge, and would lead them at the appointment and direction of his Keeper.

When he is angry he beateth the ground with his foot, and they were wont to hang a board of a foot broad, wherein were drawn many sharp nails with the points towards the head, so that when the Beast did offer to fight, with his own force he woudeth his fore-head. They were wont also to hang a thimph at the horn of the Ram, and then the Wolf will never set upon their flocks.

And concerning their horns which are the noblest parts of their body, most regarded, yet I must speak more, for there was wont to be every year amongst the Indant a fight between men, wide Beasts, Bulls, and tame Rams: and a murtherer in ancient time was wont to be put to death by a Ram, for by art the Beast was so instructed, never to leave him till he had dafhed out his brains.

It is reported of a Rams horns consecrated at Delos, brought from the coast of the red Sea, that weighed twenty and six pounds, being two cubits, and eight fingers in length. There was a Ram in the flocks of Pericles, that had but one horn, whereupon when Lampeus the Poet had looked he said: Ex duasque in urbi vigenter falliubus, fore ut altera obfurator ad annum Periclis, apud quem visum fo- rent pectorum, residerit civitatis potestas. That whereas there were two contrary raging factions in the City, it should happen that Pericles, from whose possessions that moniter came, should obscure the one, and take the whole government of the City.

It is reported by Rafi & Alberius, that if the horns of a Ram be buried in the earth, they will turn into the herb Sprage, for rottennes and putrefaction is the mother of many creatures and herbs. There was, as Aridus reporteth in his Wonders, a child born with a Rams head: and it is affirmed by Ovid, that Mnes inclofed an old decrepit Ram in a brazen vessel, with certain kinds of medicines, and afterwards at the opening of the said vessel, she received a young Lamb, bred upon the Meta- morphosis of his body.

Concerning Phrixus, whereof we have spoken in the former part of our discourse of the Sheep, there is this story. He was the son of Athaman, and Nephela: Afterward his mother being dead, he feared the treachery of his mother in law, and flep-dame Inua, and therefore with his father Helle, by the consent of their Father, he swam over a narrow arm of the Sea upon the back of a Ram, carrying a golden fleece, which before that time his Father had bestowd upon him. His father Helle being terrified with the great roaring of the water, fell off from the Rams back into the Sea, and thereof came the name of Heliosfoi, of Helle the Virgin, and Ponto, the Sea, but he came safely to Colchis to King Actae, where, by the voyce of a Ram, who spake like a man, he was commanded to offer and dedicate him to Jupiter, surnamed Phrixus, and allo that golden fleece was hanged up and revered in the Temple of Colchis, until Jason by the help of Medea aforesaid, did fetch it away, and the Ram was placed among the Stars in his true shape, and was called Phrixus, of Phrixus, who was the Father of the Phrygian Nation.

Of this fabulous tale, there are many explanations and conjectural tales amongst the learned, not unprofitable to be reherced in this plaice. Callus and Palæphatus say, that the Ram was a ship, whose badge was a Ram, provided by Athaman for his son to sail into Phrygia: and some say, that Ariés was the name of a man that was his foster-father, by whose counsel and charge he was delivered from his step-mother Inua.

Other say, that there was a Book of parchment made of a Rams skin, containing the perfect way to make gold, called Alchimy, and thereby Phrixus got away. But in Avent there was reserved the Image of this Phrixus, offering the Ram (upon which he was born over the Sea) to the God Lapplifi- us: and whereas there are in Colchis certain Rivers out of which there is gold growing, and oftentimes found, whereupon some of them have received their name, as Chalybous, and the men of that Countrey said to be greatly enriched thereby, they gave occasion of all the Poetical fictions about the golden fleece. There are in some places of Africa certain Sheep, whose wool hath the colour of gold, and it may be, that from this occasion came the tale of golden Fleece. It is said, that when Aretus reigned in Pel-pomnesia, he vowed to Diana the belft whatsoever should be brought forth in his flock, and it fortune that there was yeased a golden Lamb, and therefore he neglect- ed his vow, did not offer it, but that it up in his chest. Afterward when he gloried and boast- ed of that matter, his brother Jbnys greatly envied him, and counterfeiting to give his wife Aretus, he received from her the golden Lamb. Then being in possession thereof, he contradicted Aretus before the people, affirming that he had had the golden Lamb thereof to be King, and to reign among them, and so laid a wager of the whole Government or Kingdom thereof with Aretus, where-
Of the Ram.

Mollis Pityxis jecuri collis marit,
Hoc meruit tunicum quiti jape debitis.

Mollis Pityxii secusii colla mariti,
Hoc meruit tunicum quiti jape debitis.

And seeing that I have entered into the discourse of these Poetical fables, or rather riddles, which Transmutari seem to be outwardly clothed with impossibilities, I trust that the Reader will give me leave a little to prosecute other Narrations, as that Nepiune transforming himself into a Ram, deceived and de- floured the Virgin Bapty, and the Ancients when they swore in jett and merriment, were wont to swear by a Ram, or a Goofe. When the Gyants waged war with the Gods, all of the Gods (as the Poets write) took unto them several forms, and Jupiter the form of a Ram, whereof Ovid wrote, he was called Jupiter Ammonius:

---Unde recurris
Nunc quoque formatis Lybis effe omn crucibus Amnon.

There be some that say that at what time Hercules defird very earnestly to see Jupiter, whereunto he was very unwilling, yet he cut off a Rams head, and pulled off his thick woolly rough skin, and put it upon him, and so in that likenes appeared to Hercules, and for this cause the Thebans to this day do not kill rams, but spare them like sanctified things, except one ounce in a year, which they sacrifice to Jupiter, and say, that Jupiter was called Ammonius aries, because that his answers were my Strabo. Sacrificing of Rams among the Greeks.

—Ita rex plebra sacrorum
Nomina langere conjuge debet Ovis.

There was at Tanagrum a statue of Mercury, carrying a Ram (and therefore he is called the Ktesphos Hermes, and by that name was worshipped of all the Tanagrians. Now there was a cunning workman of Calamis that made that statue, for they say, that when the City was grievously afflicted with a pestilence, Mercury by carrying a Ram about the walls, delivered the same; and therefore they did not only procure that statue for Mercury, but also ordained that every year one of their most beautifull young men shoule carry a Sheep on his shoulder round about the walls. In January they sacrificed to Jupiter a Ram, and in February a Ram. Pliny writes a strange Riddle, which is this; Cina- monum in Ethiopia signatur, nec mittur usi permisit Deus. There is Cinnamon growing in Ethiopia, and yet it is not reaped by men, except the God thereof gave permission or leave, whereby some understand Jupiter, whom they called Sabius, and the Latines, Asfabinus. Now Pliny saith, that if they had sacrificed forty and four Oxen, Buck-goats and Rams, with their intrails, they purchasid leave to gather that Cinnamon.

When the Romans observed their Soli-Taurilia, they sacrificed a Bull, a Goat, a Ram, and a Boar, but unto Jupiter they held it not lawful to offer a Ram. Ulysses offered to Neptune a Ram, a Bull and a Boar; and to conclude this discourse of the Rams sacrifices, I finde a lory worthy the noting, recorded by Paulus Venetus, although it be altogether superstitious and full of humane blindnes and error.

There is a City of Tartary called Sachin, the Inhabitants whereof are Mahometans and Idolaters, all as any of them have a fon born, he presently commendeth him to one Idols tuition and protection or other. Therefore together with his young Son he nourisheth a Ram tamed in his own house: at the years end, he offereth his Son and the Ram at the next festival day of that Idoll which he hath chosen; that is, he presenteth his childe and killeth his Ram, with great solemnity and ceremony in the presence of all his kindred, friends, neighbours, and acquaintance, and maketh earnest request to that Idoll to protect his son, and to guide and govern him all the time of his life, and therefore he hangeth up the flesh of that Ram in his presence, and afterward they take away again the same flesh, and carry it to another private place, wherewith the said Father and all the Kindred assembed do make a great and rich feast, revering the bones for religious fake: And thus we see how miserable men beguiled with error, do not only make fiew of false Religion, but also play the hypocrities in that which is erroneous, thinking it an ese thing to deceive Almighty God.

Concerning other things of Rams, they concur with that which is said already of Sheep in general, except their medicinal parts, which I will referre to the due place: And herein add one thing more of the horns of the Arabicans Rams, and in some places of Italy, namely, that after
be five, six, or seven years old, they bring forth under their great horns two other little horns, and that these Rams are weak of body, and have but rough and course wool. In other places, if at any time they chance to bear more horns then two, it is prodigious and unnatural. And thus much of the Ram.

Of the WEATHER-SHEEP.

A I though this Beef have all things in common with the Ram aforesaid, for he is a male-beef, and in nature different not from him, but only by the art of man. I might very well have con- founded and conjonied his story with the precedent; but seeing that all Nations do dilignough him from the Ram, because of one property or defect of him, for that he is not fit for generation, I will follow the stream, and not strive against my Authors, nor rare from their method. Therefore in Latin it is call'd \textit{Versex quadra verba natura}, for that his natural feed is changed and turn'd in him, for his stones are taken away, and so he remaineth libbed and gelded, being an Eunuch among Beasts. The 

Grecians call him \textit{Krion Tomion}, that is, a gelded Ram, for they have not one word to express him. The 

Latines do also call him \textit{Setarius}; and \textit{Felius} rendeth this reason thereof, \textit{Quia eum fqueqantur egini}, because the little Lambs love his company and follow him: and indeed by reason of his unaptness to generation, the Ewes forfake his company, and the Rams cannot endure him, therefore in stead of other he associateth himself with the Lambs. In some parts of \textit{Germny} they call him \textit{Fribbling}, and also \textit{Hammel}, which word feemeth to be derived from the Arabin word \textit{Lefan Albam}, a Ram tongue. The Italians call him \textit{Caftrone}, \textit{Castrato}, and \textit{Montone}; the \textit{French} \textit{Mouton}; and the \textit{Illyrians} \textit{Beram}.

Concerning the gelding of Rams or making of Weathers, I have not much more to say, then that which is already express'd in the general tractate of the Sheep, and for the manner I do refer the Reader, not only to that part, but also to the discourse of the \textit{Caif and Oxe}, wherein I truth I shall finde satisfaction for this point, whether he will do it by a knife, by reed, by finger, or by hammer, for all those ways are in differently proposed. The best time for the gelding of Rams, ought to be in the wane or decreafe of the Moon, at five months old, so as he may neither be troubled with extremity of cold or heat. And if it be not libbed at that age, but prolonged till two, three or four year old; we have wethed already the \textit{English} manner for knitting of Rams.

Being thus libbed or knit, their horns grow not so great as the other males ungelded, but their fleth, and lard, or fewet, is more acceptable then of any other Sheep whatsoever, except they be over old for that it is neither for moist as a Lambs, nor yet so rank as a Rams or Ewes, whence \textit{Baprisa Fiera} made these verses;

\begin{quote}
\textit{Annicius placeat, vel si fines terribilis agnis, Pinguior est budo quincalet olla, vores.}
\textit{Hunc amò si duri per poxum monis ambolas. Maluros, si sunt velere dures eis.}
\end{quote}

Platina also writeth thus of the flesh of Weathers, \textit{Versecum caro factis salubris est & melior quam agn- na, catida eum & humida heluet, ad temperamentum tendens, illo vero plus humiditatis quam caliditatis habet.} This is to say; The flesh of Weathers is wholesome enough, and better then the flesh of Lambs, because it is hot and moist, but that hath in it more moisture than heat, and therefore this tendeth to a better temperat. Munter writeth, that the Inhabitants and people of \textit{Valus} take this flesh of Weathers, and lat it, afterward dry it in the air where no smoke may come unto it; afterward they lay it up in straw, and so hold it much more delicate then that which is raked in the smoke.

As the flesh of these Beasts grows better for their gelding, because they live more quietly and peaceably, for that their fore-heads grow weak and tender, and their horns small, so also it is reported that their tails grow exceeding large and fat. In some Regions, as in \textit{Arabia Felix}, and other places, and because the report shound not seem feign'd by me, I will describe it in the Authors own words, \textit{Pudus Venustus} writeth thus of the Weathers of \textit{Seopia}, and in the Region \textit{Camundia}, sub- ject to the great \textit{Tartar}. In \textit{Tartaria Regione Camundia} arietex non minores asfnis sunt, caude tam longe & late, ut triginta libraram pondus acquent. In \textit{Camundia} a Territory of \textit{Tartaria} there are Rams like Asles in stature and quantity, whose tails are fo long and broad, that they balance in weight thirty pound. \textit{Vartaman writeth}; in \textit{adibus reis Arabium} fuiffe prapinquem vervecum, cujas cauda ades obesa fact, ut libra quadraginta appendaret, & prope \textit{Keame urbem Arabice falisci, veravecum genero reperturum, quorum caudam animadvertere pondo efe libraram quadraginta quattuor, current cornibus, adeos, efe obesi &pingues ut vir incedere poffint. Circa Zeclam urbem \textit{Ethiopiae} veravecum non nulli ponderofisimis trahunt caudus, ut- pote pondo sedecim libraram. Hic caput & collam nigricant, caeteris alb fum. Sunt etiam veravecum pro- fus abscientes, cujas cauda subitatis est longitudinis modo elaborat vieti, palaeara ut tabula a mento pendent, que humum prope vurrum. That is to say, In the ouhle of the King of \textit{Arabia}, there was a Weather very fat, whose tail weighed forty pound, and near unto \textit{Reamia}, a City in \textit{Arabia Felix}, there are a breed or race of Weathers, whose tails for the most part weighed four and forty pound. They want horns, and are so fat that they can scarcely go. Alfo of some the City \textit{Zecla} in \textit{Ethiopia}, the Weathers draw long tails, weighing fifteen pound. Whereof some have their heads and neck black, and all the other parts of their body
body white, some of them again all white, having a tail but of a cubit long, like a curious and planted Vine, their crests and hair hanging from their chin to the ground. Thus far of the Arabian Weathers. Of the Indians he writeth thus in another place: 'Circa Tarentum, ibem India tanta est produxum copia extensius verticeti singulò aureo venen. Confutatione igitur verticeti alii, cornualum alii simplicia dum habentem, norris longe majores ferturque. Circita verticeti in pergini regiuntur tanea jacta, quatuor multus apud nos vertes. Contingit hic quae bullum fibrum post animal, & inter quinquedecim signum fibrum, concepta ex altera extensō nequeant, ne pinguinum immensa, extensi etiam effum et nervum parum, quem hominum naturae vetus plices saper incrementio atq. sanct. That is. About the City Tarentor in India, there is such a great plenty of Cattel, that they fell twelve Weathers for a noble, and yet there are Weathers which have horns like to the horns of Deer, being longer, greater, and fiercer then our Rams, and their tails in foreign and friege Countries are fatter then any Weathers among us, as the reafon hereof is, because it is the moste and coldest creature among all four-footed Beasts: and becaufe the bones are not enlarfed to receive that moisture, and left that it should destroy the Beaste by exuberance and abundance, therefore nature hath provided this remedy to fend it forth into the tail, whereby in ftreth and fat it groweth exceedingly, the bones and nerves whereof are not a little extended, for they are also of a millet nature like fibers, and therefore apt to encrease and grow immeasurably.

Thus much say they of the tails of Weathers, now I know such is the solidify of divers Readers and people, that for these reports, they will presently give both these Authors and me the Whetstone for rare untruths and fictions: I do not marvel, for such (I dare assure my self) do not believe all the miracles of Christ, having short and shallow concepts, measuring all things by their own eyes, and because they themselves are apt to dye for their profit, therefore they are not athamed to lay like imputations upon honeft men, yet I could shew unto them as great or greater wonders in our own Nation (if we worthy to be confuted) for which other Nations account us as great liars (as any as these Infidel fools) do them, and yet they are common among us.

The use of the several parts of this Beaste, is no other then that which is already reported of the Sheep and Ram, and therefore I will not band to repeat that which is lately related, and for the remedies or medicinal vertues, I finde few that are special except those which are common between this and others of his kinde. It feemeth by Plautus, that a Weather. Sheep is accounted the moit foolish of all other, a coward and without courage; for speaking of a mad doitth fellow, he writeth thus: 'Ego ex huc fiatua vertecea volo trigiter, mea nimina quid fit fatum filio. That is. I will demand of this blockhead Weathers picture, (meaning his foolish servant) what is become of my younger fon.

These were among the Pagans sacrificed, but not among the jews; for they have not so much as a name for it, and it is probable, that feeling it is an unperfect Beaste, God forbidde it into his sanctuary: when the Gentiles brought a Lamb at the side of a Weather to be sacrificed, they called them Ambeal, and so also a Lamb and an Ox. Aevius maketh this pretty emblem of a Weather which with a Hegg-hog is the Arms of Millan, wherewith I will conclude this discourse.

Of the LAMB.

The Lamb is diversely termed by the Hebrews, as is already shewed in the story of the Sheep, (in some part) and now more particularly, Soth signifieth a Lamb, Keseth and Kebet, a Lamb of a year old, also Gedi, according to the opinion of David Kimbi; in Greek, Arminus, and Arnus, and Arnos, and at this day Am; the Italian, Agna, Agnus, Agnello; the Spanish, Cordos; the French, Agneau, and Agenele; the German, Lamb, and Lamben, and as the first year we call it in English a Lamb, to the second a Hog, Lamb-hog, or Tet if it be a female, the third year Hoggris and Thaves: the Latine calls it Agna, of the Greek word Agnis, calls us quie of bullus purus & immanentis aptus. That is, that which for a female is pure and clean, and fit for sacrificing. And the common Ephithes expressing the nature of this Beaste are thirfe, rough, yeaning, weak, unripe, fucking, tender, butting, fat, milk-eater, merry, sporting, bleating, affable or gentle, field-wanderer, horn-bearer, horn-lighter, unarmcd, vulgar, wool-skinned, wool-leater, wanton, meek, delicate and fearful: and all these are the Ephithes of a male Lamb, but of the female l finde their following: dumb, snow-white, neat, young, fearful, black, tame, humble, and tender, and the Graciouis, Hopbtminus, because of the sweet smell that is found in them when they are young and suck their dam's milk.

We read that the Lamb of Africa, both males and females, are yeaned with horns, the reason whereof is shewed in another place, and it is a common and natural thing to them all assoon as they are fallen out of their dams belly, they presently leap and run about their dams, and also learn to know them by whom they are nourished, according to the saying of Lucretius.
S. Ambrose writeth thus of the inclination of a Lamb to his mother, and the love of her milk. *Agrius simplicissimus ovium recognoscenti locum parentis,* etc., *matre quandas, avertit,* *regnantem tam baluatu extasiem, multijies lacte et facie, etibis omnibus, fatisfinit et eas mus, qui quoniam bibi & posuimus delineant, neueur transirem parentem eam ubera, hinc humere laitis grandias evamendam, fain, materum lacti fontes requirit.* The Lamb is a most simple Beast, and erreth many times from his mothers sides, having no other means to provoke his mother to seek him out but by bleating; for in the midst of a thousand Sheep it differeth the voice of his parent, and so hasteneth to her when it heareth her; for such is the nature of this poor Beast, that although there be many other Eues which give suck, yet they pass by all their udders to taste of their mothers fountains, and the Ewe knoweth her young one by smeling to the backe part: The Lamb all the while it sucketh waggles and playeth with the tail. When the Lamb is newly fall, in some Countries they put them up close into a stable for a day, or two, or three, till they grow strong, and are well filled with Milk, and know their Dams, and so long as the Rams feed with the females they keep in the Lames, that so they may be clear day and night from all violence of the Rams, for at night they lodge fingle and alone by their dams sides. The like regard is to be had if they do not suck their mothers; they must anoint their lips with butter or Hogs-grease and milk, and for two months after their yeaning it is not good to rob them of any milk, but suffer them to suck all that their Dams can breed, for so their Lambs will grow more strong, and also their wooll more fine. And when they are to be weaned, they must first of all be brought out of love of their mothers milk, left after their separation they languish, and lose all natural joy, whereby they are never likely to come to good: afterward let them be herded or drove to field, but after their yeaning it is profitable when they are a week old to give them Salt, and so the second time after they be fifteen days old. It is never good to nourish the firstling or first Lamb of an Ewe, for that commonly they are weaker and more tender then any other, but the beft to be nourished are twins.

They are also the beft and strongest which are bred in the Spring time. and much fatter, and more able then those which are yeaned in the Autumn. And yet there are some that affirm, that they which are bred in the Winter are fatter then those which are bred in the Summer, for strength of nature be able to live out the Winter at the first yeaning, much more will they be able to endure when they are elder: in the first sucking of a Lamb, the bleedings must be milked out, for they are apt to fall into many diseases, such as are already mentioned in the discourse of the Sheep generally to preserve them in health, they give them Ivy when they are vexed with an Auge, and separate them from the Ewes, lest by ticking them infect their mothers, then must they be milked alone, and their milk mixed with rain water, and so given to the sick Lamb and if they will not take it willingly, then infile it into her throat with a horn, and if they be troubled with Scabs, take Hydrop and Salt, of each an equal quantity: and if the mouth be broken out and blistered, then rub the afflicted place therewith, afterward wash them with Vinegar, and then anoint them with liquid Pitch and Hogs grese: there must be also a care had to keep them from Lice:

Concerning the use of their several parts, we have already shewed in the story of Sheep, and therefore we need not prosecute it in this place. Their skins are fitter to clothe men, then the skins of their dams, and therefore the *Herdwai* say that they are fitteft for the garments of young men, for they encreaseth their strength and natural vigor. The Skinners make great account of these Lambs skins, and use them for the linings of many garments, such as are killed they call the skins of slaugther-lambs. The beft are brought out of *Itay and Apulia,* and all those parts which are beyond *Rome; Nerbis,* and *Spain,* yeeld plentiful store of black Lambs, and their skins are sold by Merchants; and white skins are plentiful in England.

Their fleth is nourishable and convenient for food, but yet inferior to Weather Mutton, for that it containeth more moisture then heat. To conclude this discourse of the Lamb, the greatest honor thereof is, for that it pleased God to call his blessed Son our Saviour by the name of a Lamb in the Old Testament, a Lamb for Sacrifice, and in the New Testament, filled by *John Baptista,* the Lamb of God that taketh away the sins of the world. There is a proverb in *Greeck,* *Agnus fidea lepakken agonis bibi locutor ejus,* A Lamb hath spake this unto you, and it was a proverbial speech to express a divine Revelation of some fulness, that men cannot attain unto by ordinary and common means, because either it is concealed, or else it concerneth things to come. For it is reported by *Suidas,* that once in *Egypt* there was a Lamb that spake with a mans voice, upon the Crown of his head was a regal Serpent having Wings, which was four cubits long, and this Lamb spake of divers future events.

The like is laid of another Lamb that spake with a mans voice, at what time *Romulus and Remus* were born, and from these miraculous events, came that common proverb: and so for this story I will conclude with the verse of *Valerius: Ageni praecipua contrarius aqua loco. There is in *Mosevia* reer *Voce,* a certain Beall of the quantity and form of a little Lamb, the people call it *Eoma,* and it is reported by *Sigismundus,* in his description of *Mosevia,* that it is generated out of the earth.
Of the Musmon.

I have thought good to referre this Beast to this place, for that it is a kinde of Sheep, and therefore of natural right and lineage to this story, for it is not unlike a Sheep, except in the wool which may rather seem to be the hair of a Goat; and this is the same which the antients did call Umbrice ovem, Umbrian Sheep, for that howsoever it differeth from Sheep, yet in simplicity and other inward gifts it cometh nearer to the Sheep. Strabo calleth it Musmo, yet the Latins call it Musmon. This beast by Cato is called an Affe, and sometimes a Ram, and sometimes a Mufmon. The picture which here we have expressed, is taken from the sight of the Beast at Caen in Normandy, and was afterwards figured by Theodore Beza. Muyter in his description of Sardinia remembret this beast but he faith that it is speckled, whereat I do not much wonder, seeing that he confesseth that he hath all that he wrothe thereof, by the Narration of others.

Some say it is a Horse or a Mule, of which race there are two kinds in Spain, called by the Latins, Afircones, for they are very small; but I do not wonder thereat, seeing that those little Horses or Mules are called Musmones, because they are brought out of those Countries where the true Musmones (which we may interpret Wilde Sheep, or Wilde Goats) are bred and nourished. There are of those Musmons in Sardinia, Spain, and Corsica, and they are said to be gotten between a Ram and a Goat, as the Cervus between a Buck-goat and an Ewe. The form of this Beast is much like a Ram, savie that his bell is more rough and hairy; his horns do grow from his head like vulgar Rams, but bend backward only to his ears: they are exceeding swift of foot, so as in their celerity they are comparable to the swiftest Beall. The people of those Countries wherein they are bred, do use their skins for breastplates. Pliny maketh mention of a Beall which he called Opium, and he faith he found the remembrance of it in the Grecian books, but he thinketh that in his time there was none of them to be found in the world; herein he speaketh like a man that did not know God, for it is not to be thought, that he which created so many kinds of bealls at the beginning, and conferred of every kinde two, male and female at the generall deluge, would not afterward permit them to be destroyed till the worlds end, nor then neither: for seeing it is apparent by holy Scriptures, that after the world ended, all creatures and bealls shall remain upon the earth, as the monuments of the first six days works of Almighty God, for the farther manifestation of his glory, wisdom, and goodnes, it is an unreasonable thing to imagine that any of them shall perish in
The History of Four-footed Beasts.

The bodies of such as are beaten, and have upon them the appearance of the stripes, being put into the warm skins of Sheep when they are newly pulled off from their backs, eate away the outward pain and appearance, if it continue on a day and a night. If you leethe together a good feedon the skin of the feet, and of the snowt of an Ox or a Sheep till they be made like glee, and then taken forth of the pot and dried in the windy air, is by Silbus commended against the burthenes of the belly.

The bloud of Sheep drunk, is profitable against the falling sicknes in. Also Hippocrates prescribeth this medicine following; for a remedy or purification to the belly, first make a perfume of Barly steeped in oyl upon some coles, and then leethe some Mutton or Sheep flesh very much, and with decoction of Barley leet it abroad all day and night, and afterward leethe it again and eat or fup it up warm, and then the next day with Hony, Frankincenfe, and Fariely, all beaten and mingled together, make a Suppository, and with wool put it up under the party, and it shall ease the diftret. The same flesh burned and mixed in water by washing, cureth all the maladies or diletases arising in the secrets, and the broth of Mutton, Goofe, or Veal, will help against the poifon by biting if it be not drawn out by cupping gaffe nor by horse-leach. The fewet of a Sheep melted at the fire, and with a linen cloth anointed upon a burned place, doth greatly ease the pain thereof.

The Liver with the fewet and Nitre causeth the scares of the flesh to become of the same colour that it was before the wound, it being mixed with toasted Salt, scattereth the bunches in the flesh, and with the duft of womens hair, cureth fellons in fingers, or any part of the bodies. The fewet of Sheep or Goats, being mingled with the juice of Rhenish wine grape, and fining horse flies, doth without all scruple or doubt, ease the pain of the milt, if it be anointed thereupon. The fat of Sheep doth very easily expell the roughness of the nails.

The fewet of Sheep or any other small beast, being mixed with the herb called Melander, and pounded with Sulphur, afterward baked together, and wrought into the manner of a Seren-cloth, doth very much ease those which are burned by fire in any parts of their body, being well applied thereupon. The fewet of a Sheep being also applied to those which have kibes in the heels, or chilblaines in their feet, will presently heal them.

The fewet of a Sheep mixed with womens hair which is burnt to powder, doth very effectually cure those which have their joynts or articules looie, being anointed thereupon.

The fat of Goats or Sheep moistened with warm water, and boiled together, being anointed upon the eyes, doth speedily cure all pains, spots, or blemishes in the same whatsoever. The fat of a Sheep boiled and drunk with sharp wine, is an excellent remedy against the cough. The same medicine is also effectually used for the expelling of horsey coughes. The fewet of a Sheep being boiled with sharp wine, doth very speedily cure the obstruction of the small guts, bloody flux, and any cough of what continuance ever.

The same being in like manner drunk while it is hot, is accounted for an excellent remedy against the Collick passion. The fewet of a Sheep, or of a Male goat, being mingled with the fume or dung of a Female-goat, and Saffron, doth very effectually cure those which are troubled with the Gozt or swelling of the joynts, being anointed upon the place so grieved. It is also reported that the outward fewet of Sheep (between the flesh and the skin) between the hinder legs, is very wholesome for the curing of sundry pains and diletases.

Sheeps fewet or the fat of any other small beast being gathered from the reins, mixed with salt, and the duft of a pumice stone, being applied unto the yard of any man, doth speedily cure all pains, aches, or swellings therein. The fat of Sheep which is gathered from the caul or cell, being mingled with the aforesaid medicines do heal all other pains in the privy members of man or woman whatsoever. The same fewet doth stay the great exces of bleeding in the nose, being anointed thereupon.

Sheeps fewet being mixed with Goofe grease and certain other medicines, being taken in drink, doth help abortments in women. The live: of a Sheep is accounted an excellent remedy against the shedding of the hair on the eye lids, being rubbed thereupon. The same being also baked or boilied,
Of the Sheep.

is accounted very profitable for Sheep's eyes, if it be well rubbed thereon. The marrow of Sheep is very good to anoint all aches and swellings whatsoever.

The horns of Sheep or of Goats pounded to powder, mingled with parched Barley which hath been well steamed, and altogether mixed with Oyl, being taken in a certain perfume, doth help Women of their fevers, and refethcth to them their mensurall fluxes. Sheep horns burned and beaten in wine until they be tempered like a pill, the right foot being anointed with the right horn, and the left foot with the left, will mitigate the sorrow of those which are very sore pained and troubled with the gout.

Rheumatick, or watry eyes, being anointed with the brains of Sheep are very speedily and effectually cured. The brains of the same beast is exceeding profitable for the breeding of young childrens teeth, being anointed upon the gums. The lungs or lights of small beasts, but especially of a Ram, do restore the true skin and colour of the fleece, in those bodies are full of crops and scars.

The lungs or lights of the same beast concocted upon the uppermost skin of any man, and applied very hot thereunto, do diminisht the black or blew places therein, which have been received by the occasion of any stipes or blows.

The lungs of Sheep being new taken out of their bellies, and applied while they are hot unto beaten or bruised places, doth quite abolish the signes thereof, and in short space procure remedy. The lungs of Sheep or small Cattle being roasted and taken by any man before he drinketh, will refit all kind of drunkennes.

The lungs of Sheep taken out of their bellies, and bound about the heads of those which are phrenisic while they are hot, will very speedily ease them of their trouble. The lungs of Sheep being hot and bound to the head, is accounted very profitable for those which are troubled with the peliferous disease called the Drowsie evil.

The lungs of Sheep being boiled with Hemp-feed, so that the fleth be eaten, and the water wherein it is sod be drunk, doth very effectually cure those which are grievous with exsorations in their bellies, and the bloody flux. The lungs of Sheep being applied while they are hot, doth heal the Gout.

The liver of white Sheep well boiled, made moist with water, throughly beaten and applied unto the eye-lids, doth purge Rheumatick eyes, and caule them to be of a more clear and ample sight. If a woman bearing young, shall be puffed up with windes, give her the liver of a Sheep or Goat beaten into small powder while it is hot, being pure andwithout mixture for four days together, to eat, and let her drink only wine, and this will very speedily cure her.

The gall of a Sheep mingled with hony, heateth the Ulcers of the ears, and procureth easie hearing. The gall of a Sheep mingled with sweet wine, if it be tempered in the manner of a glycer, and afterwards rubbed upon the ear-laps, the ulcerers being quite purged, will procure a speedy cure and remedy. The gall of the same beast distilled with a womans milk, doth also most certainly heal their cares which are broken within, and full of matterly corruption.

The gall of a Sheep being mixed with common oyl, or oyl made of Almonds, doth also heal the pains of the ears, being powdered therein to. Cankers, or the corruption of the fleth being anointed with the gall of a Sheep, is very speedily and manifestly cured. The Dandrafte or scarres of the head being anointed with the gall of a Sheep mixed with fullers-earth which is hardened together while the head burneth, are very effectually abolished, and driven quite away.

The gall of little cattle, but especially of a Lamb, being mixed with hony is very commended for the curing of the Falling evil. The milk of a Sheep new taken out by magical precepts is accounted very good for the curing of the pain in the mit, he saying which may be healed that he maketh a remedy for the mit. After these things the Magicians command that the grievous party be included in his Doctor or Bed-chamber, and that the doors be feeted up, and that a verfe be spoken thrice nine times. The milk of a Sheep being parched and beaten in wine, and afterward taken in drink, doth refit all the obstructions or stopping of the small guts. The same being used in the like manner is very medicable for the whining of the guts.

The duft of the uppermost of a Sheepes thigh, doth very commonly heal the loofeness of the joints; but more effectually if it be mixed with wax. The fame medicine is made by the duft of Sheepes jaries, a Harts horn, and wax mollified or allwaged by oil of Rofes. The upper parts of the thighs of Sheep decocted with Hemp-feed, do refreh those which are troubled with the bloody flux, the water whereof being taken to drink For the curing of a Horfe waxing hot with wearines and longitude of the way; mingle Goats or Sheepes ewer with Coriander, and old dill, the Coriander being new gathered, and diligently pounded in the juice of Barley, and so give it thoroughly strained for three days together.

The huckle-bone of a Sheep being burned and beaten into small duft, is very much used for the making of the teeth white, and healing all other pains or aches therein.

The bladder of a Goat or Sheep being burned and given in a potion to drink, made of Vinegar and mingled with water, doth very much avail and help those which cannot hold their water in their fleeth. The skins which cometh from the Sheep at the time of their young, doth very much help very many enormities in women, as we have before rehearsed in the medicines arising from Goats.

The milk of Sheep being hot, is of force against all poisons, except in those which shall drink a venomous fly called a Wag-leg, and Libbards bane. Oatmeal also doth cure a long lingering disease, a pinte of it being sodden in three cups of water, until all the water be boiled away: but afterwards you must put thereunto a pinte of Sheeps milk or Goats, and allo Hony every day together.

Some men do command to take one dram of Swallows dung in three cups full of Goats milk or Sheeps milk before the coming of the quarter.Ague. Goats milk, or Sheeps milk being taken when it is newly milked from them, and gargarized in the mouth, is very effectual against the pains and swellings of the Almonds. Take a pinte of Sheeps milk, and a handful of sifted Amifeed, and let them sethe together, and when it is somewhat cold let it be drunk, and it is very good to loozen the belly. Medicines being made of Goats milk and Sheeps milk, and so being drunk, is very good for the shortness of breath.

A hot burning gravel stone being decocted in Sheeps milk, and so given to one that hath the Bloudy flux, is very profitable to him. Goats milk or Sheeps milk given alone luke-warm, or sodden with Butter, is very profitable to those that are brought very weak with the passions of the stone, and fretting of the guts. To wash one face with Sheeps milk, and Goats milk, is very good to make it fair and smooth. Evenings milk of Sheep, that is, the left milk that they give that day, is very good to loozen the belly, and to purge choler. The hairs of the head of a Dog burned into ashes; or the gut of the privy place sodden in Oyl, is a very good and sovereign remedy for the loofenets of the flesh about the nails, and for swelling of flesh over them, being anointed with Butter made of Sheeps milk and Hony. An Oyl sodden in Hony, and Butter made of Sheeps milk, and Hony melted therein, is very profitable to cure ulcers. Old Cheefe made of Sheeps milk, is very good to strenthen those which have been troubled and made weak with the Bloudy flux. Again, old Cheefe made of Sheeps milk, taken in meat, or scratch upon it, and being drunk with Wine, doth caele the passion of the Stone.

There was a certain Phyllitian being skilful in making medicines, dwelling in Asia by Hellespont, which did use the dung of a Sheep washed and made clean in Vinegar, for to take away Warts and knots rising on the flesh like Warts, and kernels, and hard swellings in the flesh. Alfo he did bring Utiers to cicatrizing with that medicine which were blased or seaded round about, but he did mingle it with an emplaifer made of Wax, Rofin, and Pitch.

The dung of Sheep also doth cure puthe rising in the night, and burnings or scaldings with fire, being smeared over with Vinegar without the commixture of any other things. The dung of Sheep being mixed with Hony, doth take away small bumps rising in the flesh, and also doth diminith proud flesh: and also it doth cure a disease called an emitor, as Kaffis and Albertus say. The dung that is new come from the Sheep being first worked in thy hands, and applied after the manner of an emplaifer, doth eat away any great warts growing in any part of thy body. The dung of a Sheep being applied to thy feet, doth conjure and waife away the hard flesh that groweth thereon.

Sheeps dung doth also cure all kinds of swellings that are ready to go into Carbuncles. It is also good being sodden in Oyl and applied after the manner of an emplaifer, for all new wounds made with a sword, as Galen faith:

\[
\text{Aut si conclusion feruuit tibia vulrus,}
\text{Stercus ovi placidae junger, adipis, metarust,}
\text{Pandere qui potenter bulcus, patulqs mederi.}
\]

The dung of Sheep and Oxen being burned to powder, and smeared with Vinegar, is very good against the bitings and venemounets of Spiders; And again it is very effectual being new come from them, and sodden in Wine against the huggings of Serpents. Sheeps dung being mixed with Hony, and applied to Horfes whose hoofs are broken, is very effectual.

The dung of Oxen and Sheep being burned to powder, and intermixed therewith, is very effectual against Cankers, and also the bones of the Lambs thigges, being burned into ashes, is very profitable to be applied to thofe ulcers which cannot be brought to cicatrize. Alfo Sheeps dung being made hot in a Gally pot, and knaewed with thy hands, and afterwards applied, doth presently caele the swellings of wounds, and doth purge and cure Filitas, and also dizes in the eyes.

The Oyl of Cyprus and Hony, is very effectual against Alopecia, that is, the falling off of the hair. An emplaifer made of Sheeps dung, and the fat of a Goofe and a Hen is very effectual against hair rising in the root of the ear, as Kaffis and Albertus say. Sheeps dung being applied hot, is very effectual against the swellings of womens paps or dugs.

Sheeps dung being put into the decoction of Wood-bine, or Hony and water, and so drunk, is very profitable against the Yellow-jauders. If the Spleen be outwardly anointed with Sheeps dung and Vinegar, it doth leffen the rising of it. The dung of Oxen and Sheep which is very moist, doth caele all manner of Gouts. The thin or outmolb skin which is taken from the privy part of Sheep, is very profitable against the disease called the flowers in Women. The dung alfo hath the fame operation. The Urine of Sheep is very profitable against the Hydrofe being mixed with Hony. But Kaffis faith otherwise, which is, that the dung being drunk with Hony is available against the Dropfe.
Of the Sheep.

To take the weight of a penny of Ox dung and Sheeps dung, and a grain of Myrrh, and two ounces and a half of Wine, doth stay or retst the coming of the Kings evil. The ninth which is Pleg. taken out of the ears of these beasts is said to be very effectual against the flowers. It doth make a barren woman to conceive with child also, as Serenius faith in these Verstes:

Pendenteum [pumam melt deducet auro,  
Autoris in fidibus sfrallis sum ramina herbis,  
Angi iladem meminit misfa potare salerno.

The sweat of a Horse being made warm and mixed with Vinegar, is very convenient against the Falling sickness, and is used against venemous bites. And also the sweat of Sheep is very much profitable unto it. If the hoof or ankle-bone of an Ox chance to be cut with a Plough-thare, Pitch and fat with Sulphur is very good, but you must roul round about the wound Wool.

Unwashed Wool doth very much profit those that are frenzie being applied with a fume that stoppeth the sweat or blood or hudors from running to and fro. It is also said to be very good being dipped in Hony (and so rubbed upon the teeth or gums) for to make one breath or gaspe easier. Unwashed Wool being smeared over with Hony, and rubbed upon the teeth, doth make them look white presently after. Unwashed Wool with a little salt put to it and tyed clofe in a hinnen cloth, and so scorched and beaten to powder, is very good to keep the teeth from pain, being rubbed upon them.

Unwashed Wool being mixed with Niter, Brimstone, Oyl, Vinegar, and with Tar, being applied twice a day, doth safe all pains of the knuckle and ankles. Sheeps dung and other things with unwashed Wool is very effectual against the stone in the bladder, as it is spoken above in the cure and remedies of Sheeps dung. Unwashed Wool doth cure all the diseases in the privy parts of men or women being applied thereunto. The black Wool of Sheep, is very profitable for all swellings in the bones or code of men. The gall of Bees put upon unwashed Wool, is very profitable for the flowers of women. Unwashed Wool being applied unto those parts that are dead, doth very much good unto them.

White fleeces of Wool being either applied alone, or with Brimstone, is very good for hidden pains and griefs. Pieces of Wool given in a fume with Brimstone, is very good for the remedy of the Kings evil. Wool being dyed of a purple colour, and so applied, is very good against the pains of the ears. There are moreover very many remedies made against diseases by unhorn Wool, besides the expelling of cold, being taken in Oyl, Wine, or Vinegar, for as much as the same being applied to the members which are out of joynt, or to any pains in the Nerves, doth very speedily and tenderly heal the same.

Sheeps Wool being mixed with Herbgrace and Sheeps greasfe, is very much applied unto those which are bruised, or have hard swellings in any parts of their body. Unwashed Wool being often put into the fores which are bitten by mad Dogs, doth perfectly cure them in seven daues.

Sheeps wool in cold water doth being remedy unto those whose skin is loose about the Nailes. The same being steeped in hot Oyl may be well applied unto moift or running fores: but mingled with Hony is very medicinable for old fores or felters: and steeped in Wine, Oyl, Vinegar, or cold water, doth heal any new wound which feemeth to bring the wounded party in danger of death. Disforbiter doth also affirm that Sheeps wool being unwashed is curable for all kinds of wounds whatsoever.

The same is very much applied unto those whose bones are bruised or broken, if it be mixed with the brains of a wanton Dog, and bound hard upon the grieved place in a linen cloth. The Carthaginian Shepherds do use the unwashed Wool of Lambs of the age of four years, for the curing of the Temples, or the crown of the head. If the plough-thare chance to hurt the huckle-bone or hoof of an Ox with hard Pitch and Baton grease mingled with Brimstone, and ravelled in unwashed Wool, and mark the wounded place with all these together with a fiery hot iron, it will bring present help and remedy.

Unwashed Wool being taken in some certain perfume doth cure those which are Frantick, and restore them to their former wits. Spleen wound being boyled in Hony and mixed with unwashed Wool which was steeped' in Oyl or Wine, is very good for the aforesaid diseases, being bound about the forepart of the head in a broad linen cloth. Sheeps wool being also applied in the same manner, is an excellent cure for those which are troubled with a certain watery rheum running in the eyes, as also the ach in the forepart of the head.

Unwashed
Unwashed wool boiled in Vinegar and applied unto the eares, doth expell all filth or moisture therein, and the slue thereof being afterwards stopped, the fame kind of wool, is very speedily cured. Sheeps wool is also very good and effectual for the curing of the pains of the ears, which are but new coming up on them. Unwashed wool being mixed with Oyl of Roses and put into the Nostrils of any man, the ears being stopped close with the same kind of wool, will stay the issuing of the bloud at the Nofe, how fluent ever it be.

The same being also steeped in Oyl and put in the Nofe, doth restrain the bleeding thereof. Wool being plucked or wreted from the back of Sheep, and kept unwashed, doth colinde the abundance of bloud, being steeped in pure liquid Oyl of Roffes. The fame being taken from the back of a Ram, doth stay over much bleeding at the Nofe, the joynts of the fingers being bound as hard as possible can be suffered. Unwashed wool steeped in Hony and rubbed upon the teeth or gums, doth make the breath of any man more sweet and delightful then it hath been accustomed.

The same being used in the said manner, doth procure a very great whitnenesse and clearness in the teeth.

Unwashed wool being parched and bound in a linen cloth, a third part or portion of fake being afterwards added thereunto, and all beaten together in small dust or powder, and rubbed upon the teeth, will keep them from any pain or grief therein. Unwashed wool being dipped in Nitre, Brimstone, Oyl, Vinegar and liquid Pitch, being all boiled together, doth affwage all pains in the hanches or loins whatsoever, being twice a day as hot as possibly may be suffered thereunto. Sheeps dung mingled with unwashed wool and certain other things, is very much applied against that troublesome and painful disease called the flone or gravel.

Unwashed wool in cold water, doth cure diseases in the privy parts of any man or woman whatsoever. The wool of black Sheep is commonly reported to be very commodious and helpful for those whose Cods or stones are much swelled. The gall of an Ox being mixed with unwashed wool, doth help the purgation or menstrual fluxes of women; but **Olympe the Theban** affirmeth, that Hyfop and Nitre ought to be mixed with this wool for the helping of the same. Unwashed wool being applied unto the secret parts of women, doth caule a dead child to come forth. The same doth also slay the fluxes of women. The pure or clear cleeves of Sheep either by themselves, or mingled with Brimstone, do cure all hidden or secret griefs whatsoever: and **Pliny** commendeth them above all other medicines whatsoever. Fleeces of wool mingled with quickfliver, are very profitable to be taken for the same diseases in certain perfumes. The root of a Mallow being digged up before the rising of the Sun, and wrapped in undyed wool, doth cure the Wens or matter impostumes of those Sheep which have lately brought forth young. Sheeps wool being dyed in purple colour, doth very much profit the ears: but some do steep it in Vinegar and Nitre, to make the operation more effectual.

The duff of wool being burnt, doth bring forth the matter or corruption lying hid under feabs, restrain the swellings in the flehs, and bringeth all Ulcers to a secret. Wool being burnt hath a sharp force, and like wise hot together with the liddenemes of the parts, it doth therefore very speedily cleanse and purge the fores in the flehs, which are molt and too much full of matter. It is also put in drying medicines. It is burned as if there were many other things init, filling a new pot, which may be covered with a cover which is bored through with many holes like unto a live. The powder of unwashed Wool is anointed upon divers fores and is very curable for them as bruised, new wounded, and fores half burnt, and it is used for the curing of the diseases in the eyes, as also in the easing of the Fistulaes and corrupt matter fores in the ears. The power of the powder of unwashed wool is cleansing, and doth very effectually purge the eye-balls or cheek-bals. It doth also cleanse and cure for the most part all diseases, as **Serena** saith in these Verces;

\[
\text{Succida cum tepido nelineur lana Lyce,}
\text{Ambuleuu cinis compliti vulneris ora,}
\text{At tu succofe cinerem perdutio lane.}
\]

The hairs which grow about the secret hole of Sheep being burned, beaten and drunk in sweet wine, doth help the shortness of the breath, and ease the purgations of the thorow. The wool of a little Sheep being pulled from betwixt his thighs and burnt, and afterwards dipped in Vinegar, doth very speedily cure those which are troubled with the head ache, being bound about the temples. The duff of Sheeps fleeces is very medicinable for the curing of all diseases in the genital parts whatsoever. The duff of Sheeps wool, doth heal all passions in Cattle. The **Grecians** Plautier (called **Ennepharmaeaum**) composed of nine several things, and amongst the rest of unwashed wool. The filth which sticketh to the Sheeps wool and groweth thereunto, from which the thing which the **Grecians** call **Olypsion** is made, hath the force of digestion like unto Butter, and also a like ability of concoction.

In a certain medicine of **Antoniamachus**, for the curing of the disease of the secret parts, unwashed wool is added to the rest: but **Lepus** (as **Galen** saith) for unwashed wool doth add Goose greafe in the same quantity. Some do allo for unwashed wool use the marrow of a young calf, and apply it in the aforesaid manner; but this unwashed wool is termed of the **Grecians**, **Arepa**, and therefore being by divers Authors set down diverly concerning the making and virtue thereof,
of the Sheep.

of, I have thought good to let down the true and excellent way to make the same (as Dioscorides) whom in this I suppose bet to follow, reporteth; First to take new thorn wool which is very soft, and not trimmed with top-wed, and wash it with hot water; then to prefile all the filth forth of the same, and call it into a Cauldron which hath a broad lip, and afterwards to pour the water in, and to stir it up and down with a certain instrument with such great force as it may foam again, or with a wooden rod still greatly to turn and trouble it, so that the filthy froth or spume may more largely be gathered together, afterwards to sprinkle it over with Sea water, and the fat remaining which did swim upon the top, being gathered together in an earthen vessel, to pour the water into the Cauldron; then must the froath be powdered again into the Sea water; and lastly, taken out again: this is so often to be done, that the fat being consumed, there will not any froath be left remaining; the Aesopus then being gathered together, is to be mollified with men's hands, and if there be any flith therein, it must out of hand be taken away, and all the water by little and little excluded, and being fresh poured in, let it be mingled with one hand, until the Aesopus being touched with the tongue of any one, may lightly bind it, but not favour either sharp or tarally, and the fat may seem very white, and then let it be hid in an earthen vessel, but let there be great care had they been done in the hot sun. But there are some which use another manner of way to make the same, which is, to cleanse the fleeces, and wash away all filth, and preffe it forth of the same, and boyl them in water over a hot fire in a brown vessel, then to wash the fat which swimmeth on the top being gathered together with water, and being strained in another platter which may have some hot water in it to hide or overcast it with a linnen cloth, and lay it forth in the sun until it be very white and thick enough.

Some also do use another way, as this, to wash the fat being strained with cold water, and to rub it with their hands, not much otherwise then women do a fear-cloth, for by that means it is made more white and purer.

There is yet another kind of way to make Aesopus, described by Aetius in these words, Take (faith he) the greffe Wool which groweth in the shoulder pits of Sheep, and wash them in hot water, being thick and soft, and squeeze all the filth forth of the same, the washing whereof you shall put in a vesell of a large mouth or brim, calling afterwards hot water in the same, then take the water in a cup, or in some other such like instrument, and pour it in and out, holding it up very high until there come a froath upon it, then sprinkle it over with Sea water, if you shall get any, if not, with some other cold water, and suffer it to stand still; when it shall wax cold take that which shall flow on the top away with a ladle, and call it into any other vesell, afterwards having put a little cold water in it, stir it up and down with your hands, then having poured out that water, put new hot water in it, and repeat again the same thing all together, which we have now taught, until the Aesopus be made white and fat, containing no impure or filthy thing in it at all, then dry it in the sun, being hid for some certain days in an earthen vesell and keep it. But all these things are to be done when the Sun is very hot, for by that means it will be more effectual and whiter, and not hard or sharp.

There are moreover some which gather it after this manner; They put new thorn wool which is very filthy and greasse in a vessel which hath hot water in it, and burn the water that it may somewhat wax hot, afterwards they cool it, and that which swimmeth above in the manner of fat, they fume it off with their hands, and put it away in a vesell of Tin, and so do fill the vesell it self with rain water, and put it in the Sun covered with a thin linnen cloth, and then we must moiten it again, and put up the Aesopus, for it hath strength mollifying and releasing with some sharpness, but it is counterfeited with wax, feuer, and Rozen, and it is slights ways perceived, and forasmuch as the true Aesopus referveth the scent of the unwashed wool, and being rubbed with any one's hand is made like unto Cereufe, or white lead.

Even the fift and sweat of sheep, cleaving to their wool, hath great and manifoldt use in the world, and above all other which is most commended which is bred upon the Athenian or Grecian Sheep, which is made many ways, and especially this way; First they take off the wool from those places where it groweth, with all the fewer or filth there gathered together, and so put them in a brown vesell over a gentle fire where they boyl out the sweat, and so take of that which swimmeth at the top, and put it into an earthen vesell, setting again the firft matter, which fat is wafted together in cold water, so dryed in a linnen cloth is scorched in the Sun until it become white and transparent, and so it is put in a box of Tin. It may be proved by this, if it fwell like the favour of sweat, and being rubbed in a wet hand do not melt, but wax white like White lead, this is most profitable against all infallamation of the eyes, and knots in cheeks, or hardenes of skin in them.

Of this Aesopus or unwashed Wool the Grecians make great account, and for the variety of drefling or preparing it, it divide diversely, sometimes the call it Oesopus Pharmaceina, sometimne Oesopus Keroticus, or Keroticen, sometimne Oesopus Hygrot, and such like. Of it they make Pliisiers to affwage the Hypochondria infallamation and venoocity in the fides. Some use Aesopus for Oesopus; but ignorantly, and without reason, it is better to let it alone, but in the collection hereof it must be taken from the found and not from the scabby Sheep. But when we cannot come by the true Oesopus, then in stead thereof we may take that which the Apothecaries and Ointment-makers do ordain; namely, Mediceo uo. 5. Cardamone uo. 2. Hygrop herb. uo. 2. with the unwashed Wool taken from the hams or flanks of a Sheep. Myrisph use this Oesopus against all Gowts and aches in the legs or articles.
.articles, and hardneis of the spleen. Galen calleth it \textit{jus lane}, and prescribeth the use of it in this fort; Make (faith he) a Plaister of \textit{Oefipm} or \textit{jus lane} in this fort, Take Wax, freth greafe, \textit{Scomontie}, old Oyl, one ounce of each, of Fenny-greek six ounces, then feethe or boil your oyl with the \textit{jus lane}, and Fenny-greek very carefully, until it equal the oyl, and be well incorporated together, and then again set it to the fire, with the prescripition aforesaid; and also he teacheth how to make this \textit{jus lane}, for (faith he) take unwashed Wool and lay it deep in fair water until it be very soft, that is by the space of fix days, and the seventh day take it and the water together, that feethe well, taking of the fat which ariseth at the top, and put it up as is aforesaid; these things faith Galen.

\textbf{ Dioscorides.}

The use of this by reason it is very hot, is to display Ulcers and tumors in wounds, especially in the secrets and seat, being mixed with Melilot and Butter, and it hath the fame vertue against running fores. The same also with Barly meal and ruff of iron, equally mixed together, is profitable against all swelling tumors, Carbuncles, Tatters, Serpgoes, and fuch like, it catcheth all proud fith in the brims of Ulcers, reducing the fame to a natural habitude and equality, also filling up the fore and healing it, and the fame vertue is by Dioscorides attributed to Wool burnt, also in bruises upon the head when the skin is not broken, a Poultreis made hereof, is said by Galen to have excellent force and vertue. The fame mingled with Rofes, and the oar of brafie (called Nil) cureth the holy fire, and being received with Myrrh steeped in two cups of wine, it encreafeth or procureth fleep, and also is very profitable against the falling-ficknes. And being mixed with Corfick Hony, it taketh away the spots in the fkin, because it is molt fharp and cibliche, whereunto fome add Butter, but if they be whealed and filled with matter, then prick and open them with a needle and rub them over with a dogs gall or a Calis gall mingled with the faid \textit{Oefipm} also being filled into the head with oyl, it cureth the Megrim, and furthermore it is used against all forenes of the eyes, and fcars in their corners, or upon the eye-lids, being fod in a new fheil: and the fame vertue is attributed to the smoke or foot thereof, if the eye-brows or eye-lids be anointed therewith; mixed with Myrrh andwarmed, it is thought that it will reftore the fhair that is wanting and fallen off: but Marcellus prescribeth it in this manner, You must take \textit{Oefipm} or fweat of Sheep from under the wool of their shoulders, and adding unto it a like quantity of Myrrh, beat them together in a morter, and with a warm cloth anoint the bare places.

If there be any bruife in the eyes, then you must anoint them firit with Goose greafe, and the bloud of a Mallard, and afterward with the fweat of a Sheep, and the fame cureth all Ulcers in the mouth, ears, and genitals, with Goose-greafe. This is also mixed with a Sear-clot, and laid against the Pithifis (as \textit{Actium} writeth) with a moif cloth against the Plurifie, also a Plaifter made hereof with Goose greafe, Butter, Allum, and the brain of a Goose, is very profitable against the pains in the reins, and all other incontinencies of the back, and for the fame caufe it is applieth to women, for it provoketh their monthly courses, and alfo caueth an eafefull delivery in childe-birth, it healeth the Ulcers in the secret and privy parts of men and women, and all infiltration in the feet, especially being mixed with butter, Goose greafe, and Melior: and fome add thereunto the oar of Brafie and Rofes. If there be a Carbuncle in the privy parts, take this \textit{Oefipm} with Hony and the froath of lead, alfo white lead, womens milk, and this Sheeps fweat, cureth the Gows, at the leaft marva-loufly affwageth the pain thereof, and fome Phyflitans for this evil take Greafe, Goose greafe, and the fat of Buis, added to \textit{Oefipm}, alfo unwarfed wool with the gall of a Bull laid to a womans secrets, helpeith her monthly purgation, and \textit{Olimpis} added thereunto \textit{Nitre}. The dung which cleaveth to Sheeps tails made into small bals, and fo dryed, afterward beat into powder and rubbed upon the teeth, although they be loofe, falling out, or overgrown with fith, yet \textit{Pliny} faith, they will be recovered by that fricaffing. If the which is fick of a Droffe drink this sweat or \textit{Oefipm} in wine with Myrrh of the quantity of a Hafeel nut, Goose greafe, and Mittle oyl, it will give him great eafe, and the fame vertue is acribed to the fweat of an Ewes udder, which is and hath been said of all the former \textit{Oefipm}.

\textbf{The medicines of the Ram.}

Even as the skins of other Sheeps newly plucked from their backs and applied warm, do take away the ach, swelling, and pains of ftripes and blows from bodies, fo also have the skins of Rams, the fame property. \textit{Arniodius} commendeth a plaifter made of a Rams skin for burfting and falling down of the gums, and this is found ready prepared in many Apothecaries shops, and the happy effects thereof is much commended by \textit{Atliius}. If a man take the flones of a fighting cock, and anoint them with Goose greafe, and so wear them in a piece of a Rams skin, it is certain that it will cohbithe and refrain the rage of venereal luff, and a woman wearing about her the right fide of a dunghil cock in a Rams skin shall not suffer abortion. The washed fleece of a Ram wet in cold Oyl, putriyeth the inflammation of the secrets; and likewife the black wool of a Ram wet in water, and then in oyl, and fo put to the fick places, keepeth the fundament from falling, and also affwageth the pain. Alfo the wool of a fighting Ram taken from betwixt his horns, and perfumed into a fmoke, caufeth the pain, and some take the pound thereof in Vinegar for that Malady. They say that \textit{Lais} and \textit{Salpe} cure the bitings of mad Dogs, and also Tertian and Quar tan Agues, with the menthous purgation taken in a piece of Rams wool, and inclosed in a bracelet of filver. Alfo they write that a woman fhall have an eafefull travall if the wear in the wool of a Ram, fed
Of the Ram.

The breast of the rump of a Ram is commended against blisters. The flesh of a Ram being burnt and anointed upon the body of any leprous person, or any whole body is troubled with Ringworms or itch it is very effectual to cure them. The same force hath it against the bites of Serpents, and stings of Serpents, and Algeracæ; it is also being taken in wine is good for the bitings of mad dogs, and healeth the white skins in the eyes. The fat of a Sheep or Weather hath the same in it, as Pork grease, and cureth the suffocation of the womb, and all other difficulties incident unto the secret parts, and also helps places in the body being burnt by fire. The fat of a Ram being mingled with red Arsenic and anointed upon any fcal or fcarb, the same being afterward pared or scraped, doth perfectly heal it. It doth also being mixed with Allum, help those which are troubled with Kibes or Chilblains in their heels.

The fewer of a Ram mingled with the powder of a pumice stone and salt, of each a like quantity, is said to heal felonions and inflammations in the body. The Lungs of small Cattle, but especially of a Ram doth relieve chaps or scars in the body to their right colour. The same vertue hath the fat of a Ram being mingled with Nitre. The gall of a Ram mingled with his own fewer, is very good and profitable for those to use who are troubled with the Gowt or swelling in the joyns. The horn of a Ram being burned, and the durt of the same mixed with oil, and so pounded together, being often anointed upon a faven head, doth caufe the hair to rifie and curl. Acomb being made of the left horn of a Ram, and combed upon the head, doth take away all pain upon the left part thereof, if likewise there be pain in the right fide of the head, the right horn of a Ram doth cure it. For the curing of the lofe of one was springing from the imperfection of the brain, take the head of a Ram never given to venery, being chopped off at one blow, the horns being only taken away, and feethe the whole with the skin and the wool in water; then having opened it, take out the brains, and add unto them these kinds of spices: Cinnamon, Ginger, Mace, and Cloves, of each one half an ounce; there being beaten to powder, mingle them with the brains in an earthen platter diligently tempering of them by a burning cole, not very big, for fear of burning, which might easily be done, but that must great care be had that it be not too much dried, but that it might be so boiled that it be no more dryed then a Calls brains being prepared for meat.

It shall be sufficiently boiled when you shall well mingle them at the fire, then keep it lid, and for three days give it daily to the sick person failing, so that he may abtain from meat and drink two hours after. It may be taken in bread, or in an Egge, or in whatsoever the sick party hath a desire unto: but there must be regard that he be not in a clear place, and that he use this forty days space, which they are wont to use whose blood is withdrawn or fled away: and let him abstain from wine affaying his head.

There are those which are holpen in a short space, some in six or eight weeks by this Medicin being received. But it is convenient that it be required for three months, and then it will have the more power therein. The Lungs of a Ram while they are hot applied unto wounds wherein the flesh doth too much increase, doth both repress and make it equal. The Lungs of small Cattle, but especially of Rams being cut in small pieces and applied whiles they are hot unto bruised places, do very speedily cure them and reduce them to the right colour.

The same doth cure the feet of such as are pinch'd through the straightnefs of their fhooes. The Lungs of a Ram applied unto Kibed heels or broken Ulcers in the feet; doth quite expel away the pain, notwithstanding the exceeding ach or prickling thereof. One drop of the liquor which is boil'd out of a Ram lungs put upon the small nails upon the hand, doth quite expel them. The like operation hath it to expel Warts being anointed thereupon. The corrupt blood of the Lungs of Ram unroasted, doth heal all pains in the privy members of man or woman; as also expel Warts in any place of the body. The juice of the Lungs of a Ram while they are rosted upon a Gridiron being received, doth by the suction thereof purge and drive away the little black Warts which are wont to grow in the hair or privy parts of any man.

The liquor which distil'd from the Lungs of a Ram being boyl'd, doth heal Tertian Agues, and the difeafe of the reins which grow therein. The Lungs of a Lamb or Ram being burned, and the dust thereof mingled with Oyl, or being applyed raw, do heal the forenefs of Kibes, and are accounted very profitable to be bound upon Ulcers. The Lungs of a Ram being pull'd forth and bound hot unto the head of any one that is enfireze, will presently help him. Against the pestilent disease of Sheep, take the belly of a Ram and boyl it in wine, then being mixed with water; give it to the Sheep to drink, and it will bring present remedy.
The gall of a Ram is very good for the healing of those which are troubled with any pains in the ears, coming by the casualty of cold. The gall of a Ram mingled with his own sweat, doth ease those which are troubled with the Gout. The gall of a Weather mingled with the wool and placed upon the navel of young children, doth make them loose in their bellies. The stones of an old Ram being beaten in half a penny weight of water, or in three quarters of a pint of Affes milk, are reported to be very profitable for those which are troubled with the filling tickens. The stones of a Ram being drunk in water to the weight of three half pence, cureth the same diseafe.

The delt of the inward parts of a Rams thigh being lapped in rags or cloths, washe very exactly before with womens milk, doth heal the ulcers or running of old fores. The dut of the hoof of a Ram mingled with horse, doth heal the bitings of a Shrew. The dung of Weathered mingled with Vinegar and infused in the form of a Plaifter, doth expel black spots in the body, and taketh away all hard bunches ariling in the fleth. The same being applied in the like manner, cureth St. Antonies fire, and healeth burned places.

The fifth or sweat which groweth between the thighs of a Ram being mingled with Myrrh and the Herb called Hart-wort, and drunk of each an equal part, is accounted a very excellent remedy for those which are troubled with the Kings evil. But Pliny commendeth the fifth of Rams ears mingled with Myrrh, to be a more effectual and speedy remedy against the said diseafe.

The medicines of the Lamb.

The best remedy for bitings of Serpents is this, presently after the wound to apply some little creatures to the same, being cut in small pieces, and laid hot unto it, as Cocks, Goats, Lambs, and young Pigs; for they expel the poison and much ease the pains thereof. An ounce of Limbs blood being fresh before that it doth congeal mixed with Vinegar, and drunk for three dayes together, is an excellent remedy against the vomiting or spitting of blood. The like force in it hath the blood of a Kid. The blood of a Lamb mingled with wine, doth heal those which are troubled with the Falling tickens, as also those which have the foul evil. For the conception of a Woman, take the yard and gall of a Buck, a Kid, and a Hare, with the blood and fweat of a Lamb, and the marrow of a Hart, and mix them all together with Nard and Oyl of Roses, and after her purgation, let them be laid under her, and this without all doubt, will make her apt to conceive.

The skins of Serpents are anointed with water in a bath, and mingled with wine and Lambs sweeter, doth heal the diseafe called St. Antonies fire. The marrow of a Lamb melted by the fire, with the Oyl of Nuts and white sugar, distilled upon a clean dish or platter, and so drunk, doth dissolve the stone in the bladder, and is very profitable for any that piffeth blood. It also cures all pains or griefes of the yard, bladder or reins. The skin of a Lamb being daubed or anointed with liquid pitch, and applied hot unto the belly of any one that is troubled with excoriations of the bowels or of the Bloody flux, will very speedly cure him, if he have any fente or feeling of cold in him.

If a Virgins menstrual fluxes come not forth at the due time, and her belly is moved, it is convenient to apply Lambs skins being hot unto her belly, and they will in short space caufe them to come forth. A garment made of Lambs skins is accounted very good for the corroboration and strengthening of young men. The skins of Lambs are more than then Kids skins, and are more profitable for the confirming of the back and the reins. The little bone which is in the right fide of a Toad being bound in a young lambs skin being hot, doth heal both Quartin and all other Fevers being applied thereunto. The durt of Lambs bones is very much and rightly used for Ulcers which have no chops, or lars in them. The durt of small Cattles dung being mingled with Nitre, but especcially of Lambs, hath in them great force to heal Cancers: the durt of Lambs bones, is very much commended for the healing and making of green wounds sound and solid, which thing by the Saracens is much verified in regard that at all times they go to war, they never forget to take of the same along with them.

The Lungs of Lambs do very effectually cure those whose feet are wrung or pinched by their shoo-foles. The Lungs of Lambs or Rams being burned, and the durt thereof mingled with Oyl is very profitable for the curing of kibes or ulcers, being applied thereunto. It hath the same virtue being raw and bound upon the fore.

The runner of a Lamb is of very great force against all other evil medicines. The runnets of small Cattle, but especially of a Lamb, is very effectual against all kinds of poyson. The runnets of a Kid, a Lamb, and a hid-calf are conveniently taken against Wolf-bane drunk in wine. The runnet of a Hare, a Kid, or a Lamb taken in wine to the weight of a dram is very effectual against the Fork-fish, and cureth the bites or strokes of all Sea-fishes. The runnet of a Lamb drunk in wine is an excellent cure for the bitings of a Shrew. The runnet of a Lamb drunk in water is accounted for a safegarde to young children who are vexed with thick and concrete milk: or if the default shall happen by curded milk, it will be soon remedied by a Lambs runnet given in Vinegar. A Lambs runnet bid or powdered into water, doth speedily cohibit the bleeding of the nofe, when nothing else can stay it. The gall of small Cattle, but especially of a Lamb being mixed with hony, are thought to be very medicinable for the curing of the Falling tickens.
Of the Strepsigeros.

The places which are infected by Cankers, being anointed over with the gall of a Lamb are very speedily and effectually healed.

There is also by the Magicians delivered unto us a speedy means for the curing of the milt, which is this, to take a Lamb new born, and infantly to pluck him in pieces with one hand, and when Marcellus, the milt is pulled out to put it hot upon the milt of the party so grieved, and bind it on fast with swaddling clothes, and continually to say, I make a remedy for the milt; then in the last day the same being taken from his body to put it to the Wall of the bed wherein the diseased party is wont to lie, it being first daubed with dung thereof, to the better lick, and to sign the durt with seven and twenty marks, laying at every mark. I make a remedy for the milt: this remedy being done three times it will heal the diseased party, although he be very weak and full of danger. But this is the opinion of the Magicians, which I here set down that they should rather see their folly than believe, knowing them to be mere fopperies. For making the wool to grow flower, the gelders of Cattle against the bloud which cometh from the stones of gelded Lambs, which being anointed, doth proft fit very much for haws being pulled away, as also against poison. The dung of Lambs before they Ply, have tafted of any grasse, being dried in the shadow, and rubbed to powder and applied in the manner of a plaiter, doth heal and cave all kinds of pain in the chaps or jawes. And thus much for the medicines of the Sheep.

Of the STREPSIGEROS.

Here is in Crete near the Mountain Ida, a kind of Sheep called by the Shepherds Strepsigeros, Bovinus, which is not different from the vulgar Sheep, except only in the horns, for they bend not like other, but stand straight and upright like the Unicorn, and besides are circled about with certain round speers like a Goats horn. This liveth in flocks, and we have here besides the figure of the beast, expressed a double form of their horns, and fore part of their head, the figure of a Harpe being fasting to one of them as it was presently drawn. The description whereof was taken by Doctor Cat of England, in these words following.

The horns of this Strepsigeros are so lively expressed by Pliny, and so fitly fitt to bear Harps, that they seem not to ask any further narration of words. I will therefore only add this, they are hollow within, and long, about two Roman feet and three palms if you measure them, as they are straight; but if you take their canting and length as they crook a little, then are they about three foot long, they are in breadth where they joyn to the head, three Roman fingers and a half, and their whole compass in that place is about two Roman palms and a half. In the top they are smooth and black, but at the root they are more dusky and rugged, growing lefser and lefser to a sharp point. They with the dried face did weigh seven pounds and three ounces, and the face which remaineth is joyned to the horns, and likewise the hair of the neck and face. It is said that this Beast is as great as a Hart, having a red hair like a Hart.

But whether his nostrils were so ato I could not conjecture, by reason that the age and long use of the piece had defaced the nose which was dried up, and also the hair was worn away, so as it was bald, but by that which was most apparent unto it, I rather inclined that it resembled a Hart, from hence
hence it was that the drawer made the nostrils less; then might answer the proportion of the face, and that which is seen betwixt the horns it is a piece of the neck, by which relation I cannot believe that the Cretian or Ileian Sheep is a Strepsiceros, because the horns thereof do not bend at all, although it answereth not the name, but the true horns of the Strepsiceros do as I have said resemble the ancient fashion of harps, among our fore-fathers, especially the handle being taken away, and the face of the beast placed in stead thereof.

Unto this I may add another horn, which is to be seen in the Castle of the L. William Wernere Count of Cambrie, being black, hollow, and of the length of one arm, and as thick as a great staff, and it was said, that the beast beareth two of them, which are to be seen among the rare monuments of Ferdinandus the Emperor.

Of the Squirrel.

The name of this Beast is by the Grecians called Sciuros, and it was given them from the fashion and proportion of their tail, which covereth almost the whole body, for that which is fabulously said of the Scipodet to have feet that cover their whole body, is more truly verified of a Squirrel's tail, for in the day time being out of her nest, she hideth her self there under both from sun and rain.

The first Author that ever wrote of this Beast was Oppianus, who lived in the days of Antoninus Caesar, and the Latins have no proper or native name for it, but borrow from the Grecians, although some of the latter writers call it Pirolo, and Spinum, I think they would say Sciurus, for so it is vulgarly termed in Latin; some also call it Scirum a currente, because of his nimble running upon boughs. But all the Nations of the world derive their several denominations from the Grecians, as the English Squirrel from Sciurus is not far fetched; the French words Escurieu, and Escurian, from whom the German borrow their words Eschen, or Eschen, or Esch bora, or Esch bora, that a Wessel of the tree, and Das Eschen.
Of the Squirrel.

The Lutherans call it Scurivole, and the Venerians (as Mauritian teiltthith) Scurivolt, the Spaniards Parda, and Eqisto, and some do interpret Coma diera Fora a Squirrel; the Iriatians, Wemerve, and some of the Populians, Vite Wymjck, and so they turn the Moufe Varius, as we have said else where in this History, and some of the Germans call Vore, and Voreh.

Now Albertus and Agricola say, that there is no difference between the Moufe Varius and the Squirrel, but only in the Region which alters the colour, and therefore we have expressed the same figure thereof, remitting the Reader to that which is said in that History, for this (say they) in Germany is red after it be a year old, but before that time it is blackfth, that is till it be a year old: In Poland it is of a red-ah colour, or branded gryffell, in Buffia of an ordinary ahs colour, and for the quantity, food, and manner, or natural inclination, it hath the same in all parts with the moufe Varius.

Varius and Hezeblis say, that the Grecians call this beast also Cmptettites, and Hippocart, and some call the Captivatous Moufe Nocio a Squirrel; the Neris at this day call a Squirrel Coach, for it is apparent that in ancient time till they came into these parts of the world into Geneva and Europe, they never knew or saw this beast; and this shall suffice to have said of the name.

A Squirrel is greater in compass than a Weasel, but a Weasel is longer then a Squirrel, the back parts and all the body is red, except the belly which is white. In Helvetia they are black and branded, and they are hunted in the Autumn at the fall of the leaf, when the trees grow naked, for they run and leap from bough to bough in a most admirable and agile manner, and when the leaves are on, they cannot be so well discerned. They are of three colours, in the first age black, in the second a heavy Iron colour, and last of all when they be stricken in age, they are full of white hoar hairs. Their teeth are like the teeth of Mice, having the two under teeth very long and sharp, their tail is always as big as their body, and it lyeth continually upon their back, when they sleep or sit full; It seemeth to be given them for a covering as we have said already. The mauget differeth from all other, for it is C Trentum, that is, as I take it without a passages out of it into any other part the other guts, or like a mans bladdery and it was great as their ventricle, which in digestion hath been found full fluid with excrements. The genitalis like a bone, as Vesivial writeth.

They use their fore feet in head of bars, for they sit upon their buttocks, and move their meat to their mouth with them, in this point rephembling every little vulgar Moufe, yet being put to the mouth, they hold it in their teeth. They will eat Nuts and Almonds very greedily, and also Apples, Bucknails, Acorns, and sometimes herbs, especially Lettuce, and all other fower fruits. Their feet are cloven like Mice, and their hinder parts very neatly to sit upon. In the summer time they build them nefts, (which in our Country are called Draey) in the tops of trees, very artifically of twigs and moss, and such other things as woods do afford them.

The mouth of their neft is variable, sometimes at the fides, and sometimes at the top. But most commonly it is shut against the winde, and therefore I think that the make most passages, stopping and opening them as the windeth me. In Summer time they gather together abundance of fruits and Nuts for winter, even so much as their little Draey will hold and contain, which they carry in their mouths, and they lodge many times together, a male and female (as I suppose.) They sleep a great part of the Winter like the Alpine Moufe, and very Gould, for I have seen when no noise of hunters could awake them with all their cries, beating their nefts on the outside, and shooting bolts and arrows through it, until it were pulled afunder, wherein many times they are found killed before they be awaked.

They are of incredible agility and motion, never standing still, as it appeareth by them which are tame. When they leap from tree to tree, they use their tail in head of wings, which is most apparent, because many times they leap a great distance and are supported without finking to mans appearance.

And again I have seen them leap from the top of very high trees down to the ground in such an ordinary pace as Birds flee from trees to light on the earth, and receive no harm at all: for when they be hunted, men must go to it with multitude, for many men cannot take one with bowes and bolts with Dogs, and except they dart and rouse them in little and small slender woods, such as a man may shoke with his hands, they are seldom taken.

Bowes are requisite to remove them when they cull in the twills of trees, for they will not be much terrified with all the hollowing, except now and then they be shock by one means or other. Well do they know what harbour a large Oak is unto them, and how secure they can lodge therein from Men and Dogs; therefore seeing it were too troublesome to climb every tree, they mall supply that busines or labor with bowes and bolts, that when the Squirrel refeth, preffently the may feel the blow of a cunning Archer, he need not fear doing her much harm, except be hit her on the head, for by reason of a strong back bone and fleshy parts, she will abide as great a throw as a Dog: yes, I have seen one removed from a bough with a fhot to the ground.

If they be driven to the ground from the trees to creep into hedges, it is a token of their wearisome, for such is the lateley minde of this little Beath, that while her limbs and strength lalfeht, the tarryeth and faveth her fell in the tops of tall trees, then being defenced, she falleth into the mouth of every Cur, and this is the use of Dogs in their hunting.

The admirable wit of this Beath appeareth in her swimming or paffing over the Waters, for when hunger or some convenient prey of meat constraineth her to paffe over a river, she seeketh out some rinde or small bark of a Tree which the fetteeth upon the water, and then goeth into it.

X x 3
and holding up her tail like a tail, letteth the winde drive her to the other side, and this is wit-
nessed by Olaus Magnus in his description of Scandinavia, where this is ordinary among Squirls,
by reason of many rivers, that otherwise they cannot passe over, also they carry meat in their
mouth to prevent famine whatsoever befall them, and as Peacocks cover themselves with their tails
in hot Summer from the rage of the Sun, as under a Shadow, with the same disposition doth the
Squirrel cover her body against heat and cold.

They grow exceeding tame and familiar to men if they be accustomed and taken when they are
young, for they run up to mens shoulders, and they will oftimes sit upon their hands, creep into
their pockets for Nuts, go out of doors, and return home again; but if they be taken alive, being
old, when once they get loose, they will never return home again, and therefore such may well be
called Semiferi rather then Cleveres.

They are very harmful, and will eat all manner of woollen garments, and if it were not for that
discommodity, they were sweet-sportful beasts, and are very pleasant playfellows in a house.

It is laid, that if once they tattle of Garlic, they will never after hire any thing, and this is prescribed
by Cerdan to tame them, their skins are exceeding warm, and well regarded by skinners, for
their heat is very agreeable to the bodies of men, and therefore they are mixed also with the skins
of Foxes. Their flesh is sweet, but not very wholesome, except the Squirrel were a black one. It is
tender and comparable to the flesh of Kids or Conies, and their tails are profitable to make
brushes of.

The medicines are the same for the most part which are before expressed in the Dormouse, saving
that I may add that of Archigenes, who writeth, that the fat of a Squirrel warmed on a rubbing
cloth, and so infilled into the ears, doth wonderfully cure the pains in the ears. And so I conclude
this history of the Squirrel with the Epithets that Martial maketh of a Peacock, a Phoenix, and a
Squirrel, in a comparision of a beautiful Virgin Erosion.

Cui comparatum indecens erat pavo,
Inamabilis fæterus & frequent Phoenix.

Of the Getulian Squirrel, described and figured by Doctor Cai.

The Getulian or Barbarian Squirrel, is of mixt colour, as it were betwixt black and red, and from
the shoulders all alone to the tail by the sides, there are white and ruffet striakes or lines, which
in a decent and feemly order stand in ranks or orders; and there be some of those Squirrels which
have such lines of white and black, with correspondent lines in the tail, yet they cannot be seen ex-
cept the tail be stretched out at length, by reason there is not much hair upon it. The belly feem-
eth to be like a blew colour upon a white ground. It is a little lefse then the vulgar Squirrel, and
hath not any ears extant or flanding up as that, but close press'd to the skin round, and ariling a
little in length by the upper face of the skin. The head is like the head of a Frog, and in other
things it is very like the vulgar Squirrel, for both the outward shape, the manner, and behaviour,
the meat and means of life agree in both, and she also covereth her body like other Squirrels.
This picture and description was taken by him from one of them alive, which a Marchant of London
brought out of Barbary.

They are very pleasant and tame, and it is very likely that it is a kinde of Egyptian or African
Mouse, whereof there are three sorts described by Herodotus, the first called Bipedes, the second
Zegersis, and the third Echines, of which we have already spoken in the story of divers kinds of
Mice, and therefore I will here end the discourse of this Beast.
Of a Wilde Beast in the New-found World called Su.

There is a Region in the New-found World, called Gigantes, and the Inhabitants thereof are called Pantogates; now because their Country is cold, being far in the South, they clothe themselves with the skins of a Beast called in their own tongue Su, for by reason that this Beast liveth for the most part near the waters, therefore they call it by the name of Su, which signifieth water. The true Image thereof as it was taken by Thevetius, I have here inferred, for it is of a very deformed shape, and monstrous presence, a great ravener and untamable wilde Beast. When the Hunters that desire her skin set upon her, she flyeth very swift, carrying her young ones upon her back, and covering them with her broad tail: now for so much as no Dog or Man darest to approach neer unto her, (because such is the wrath thereof, that in the pursuit she killeth all that cometh near her;) the Hunters dig several pits or great holes in the earth, which they cover with boughs, ficks, and earth, so weakly that if the Beast chance at any time to come upon it, she and her young ones fall down into the pit and are taken.

This cruel, untamable, impatient, violent, ravening, and bloody Beast, perceiving that her natural strength cannot deliver her from the wit and policy of men her hunters, (for being inclofed, she can never get out again,) the Hunters being at hand to watch her downfall, and work her overthrow, first of all to save her young ones from taking and taming, she destroyeth them all with her own teeth; for there was never any of them taken alive; and when the feet the Hunters come about her, the roareth, cryeth, howleth, brayeth, and uttereth such a terrifying noise, and terriblecli- mor, that the men which watch to kill her, are not thereby a little amazed, but at last being animated, because there can be no resistence, they approach, and with their darts and spears wound her to death, and then take off her skin, and leave the carcass in the earth. And this is all that I finde recorded of this most savage Beast.

Of the SUBUS, a kind of wilde Water-sheep.

This Beast is called by Oppianus Soubis, and therafter the Latines call it Subus. Bodine in his interpretation of Oppianus, doth make it one beast with the Strepsiceros, but because he expresseth no reason thereof, I take it that he was deceived by his conjecture, for we shall manifest, that either the colour or feat of living, cannot agree with the Strepsiceros, for he faith only it is the same Beast which Pliny calleth a Strepsiceros.

But we know by the description of Oppianus, that this Beast is of a red-gold-colour, having two strong armed horns on the head, and liveth sometimes in the Sea, and Water, sometime on the land. Of all kinds of Sheeph this is the worst and most harmful, ravening after life and blood; for it goeth to the water, and therein swimmeth: when the silly little fishes see this glorious shape in the waters, admiring the horns, and especially the golden colour, they gather about him in great flocks and abundance, especially Shrimps, Lobsters, Mackerel, and Tenches, who follow him with singular delight on either side, both the right and the left, presuming that shall come nearest, to touch and have
The History of Four-footed Beasts.

have the hullet sight of him; so they accompany him in ranks for love of his strange proportion. But this unkind and ravenous Beasts, defpising their amity, society, and fellowship, make but a bait of his golden outside and colour, to draw unto him his convenient prey, and beguile the innocent fishes, for he snatcheth at the nearest, and devoureth them, carrying no longer in the water than his belly is filled, and yet these simple foolish fishes seeing their fellows devoured before their faces have not the power or wit to avoid this devourers society, but still accompany him, and weary him out of the waters till he can eat no more, never hating him, or leaving him, but as men which delight to be hanged in silken halters, or flabb'd with silver and golden bodkins, fo do the fishes by this golden-coloured-devouring-monster. But such impious cruelty is not left unrevenged in nature, for as the gathereth the fishes together to destroy them, fo the Fishermen watching that concourse, do entrap both it and them, rendering the same measure to the ravener, that it had done to his innocent companions. And thus much shall suffice for the Subu or Water-sheep.

Of the SWINE in general.

Being to discourse of this beast, although the kindes of it be not many as is in others, yet because there are some things peculiar to the Bore, and therefore he deserveth a special story by himself, I will first of all deliver the common properties in a general Narration, and afterward descend to the special. For the names of the beast, there are many in all languages, and such as belong to the several sex and age of every one. For as in English we call a young Swine a Pig, a Weaning Pig, a Shead, a Yealk, and so forth: likewise a Hog, a Sow, a Barrow, a Libd-hog, a Libd-low, a Splayed Sow, a Gelt Sow, a Bafs, for the elder Swine, so in other Nations they observe such like titles. The Hebrews call a Bore Chajir, and a Sow Chafertab, the Chaldees, Deut. 4. for Chajir translate Chajira; the Arabians, Kanifer; the Persians, Maron-bak; the Septuaginis, Hut; and S. Hieron, Sus; the Arabians also use Hazir, and Acambil, for a Hog, Acheira, and Scrofa.

The Grecians do also use Sus, or Zat, Chensos, and Snaros. The wilde Hog is called Kapron, from hence I conjecture is derived the Latine word Apex; the Italians do vulgarly call it Porco; and the Florentines peculiarly Cicas; and also the Italians call a Sow with Pig Scrofa, and Tretata, or Porco fastice. The reason why that they call a Sow that is great with Pig Troyata, or Troyaria is for the similitude with the Trojan Horse, because as that in the belly there-of did include many armed men, so doth a Sow in her belly many young Pigs, which afterward came to the table and dines of men. A Barrow hog is called Majdrin Latine, and the Italians, Porcoignare, and Lo Majale. The French call a Swine Fasecon, a Sow

The several names.

Sylvaticus.

Alumnus.

Eostraus.
Of the Swine.

For Tiuye again, a thing among foot-prints and grains, and indeed for this cause the Egyptians kept their Swine in the hills all the year long, till their feed time; for when their corn was fowen, they drove them over their now plowed lands, to tread in the grain, that the Pows and Birds might not root it or scrape it forth again, and for this cause also they feared Swine from Sacrificing. But in mine opinion it is better derived from Hyle, the Greek word: For the Latine, Porca, is thought to be fercet, & from Parellus, because his stout is alwaystretched forth, and he feedeth, digging with it in the earth, and turning up the root of trees; but I better approve the notation of Iiforus, Parum gaffi speciosus cano & timo favulent. That is, because it roweth and walloweth in the mire. Pareeta or Perca for a Sow that hath but one arrow, and Sowpa for a Sow that hath had many. The Grecians had in their Swine their Swine-herds, and the Swine-herds did in the Swine their meats: they served Sigiz in one Countrey their feeders cry Tiq, Tiq, Chiro, of their feeding and nourling their young ones. And indeed from Swine we finde that many men have also received names, as Setps Suartic, and Tremellus or Sowfa, whereupon lyeth this history as he wrote: when Lithinus Nerous was Praetor, his great Uncle was left Querel in his absence for Macedonia, until the Praetor returned. The enemies thinking that now they had gotten opportunity and advantage against their besiegers or assailants, causeth an overt to be made, and a flight to be offered; then his Uncle exhorting the Roman-Souldiers to arms, told them, Secrullus boles disjuturnum in Sowfa porcella. That he would as easily call them off and scatter them, as a Sow doth her Pigs sucking her belly, which he performed accordingly, and so obtained a great victorie, for which Nerous was made Emperor, and he was always evermore afterwards called Sowfa.

Macrobius telleth the occasion of the name of the family of Sowfa somewhat otherwise, yet pertaining to this discourse. Tremellius, faith he, was with his family and children, dwelling in a certain Village, and his servants fattting a fayr Sow come among them, the owner whereof they did not know, presently they flew her, and brought her home. The neighbour that did owe the Sow called for witnesses of the fact or theft, and came with them to Tremellius, demanding his Sow or Sow again. Tremellius having underfoot by one of his servants the deed, laid it up in his Wives bed, and covering it over with the clothes, causeth her to lie upon the Sows carcasse, and therefore told his neighbour he should come in and take the Sow, and he did go and brought him where his wife was, and swore he had no other Sow of his but that, shewing him the bed, and so the poor man was deceived by a deeming oath, for caufe (he faith) the name of Sowfa was given to that family. There was one Pope Sergius, whose christen and first name was Ot pard, Hogs face, and he being elected Pope, changed his name into Sergius, which custom of alteration of names, was that the beginning, for it hath continued ever since that time among all his successors. Likewise we read of Porcellus a Grammorian, of Porcellus, a Poet of Naples, who made a Chronicle of the affairs of Frederick Duke of Urbino, Porcius, Suetius, Verres the Praetor of Sicilia, Sydus, Sybaistas, H. et, Hygias, Gryphus, Porcella, and many such other give sufficient testimony of the original of their names to be drawn from Swine, and not only men, but people and places, as Hyatta, Sudes, Cenarette, some names of the Dori in Greece: Hysa a City of Lucera, Hyamena a City of Me- frequa, Hyamelen a City of Troy, Hymampis a City of Phocis, whereby to all politerit it appeared, that they were Swineherds at the beginning: Esut Hyantanos incantus regna per agros. Hyatta, Hysa, a City in Iberia, Hysa a City of Bætis, and Plun calleth the talle people of Easter, which were eight cubits in height Sybaista, and the like I might adde of many places, Cities, People, Fountains, Plains, Engins, and deviles, plentiful in many Authors; but I will not trouble the Reader any longer with that, which may be but thought to be unnecessary. Only I cannot contain my selfe from the fiction of a Swines name and Teflation, or fay Will for the murther and wit thereof, as it is renmbred in Ca- iv, and before in S. Jerome, and lately by Alexander Broccorum, and Geo. Fabricius, I will express both in Latin and English in this place.


A fiction of a Hogs will and testament.
The History of Four-footed Beasts.

In English without offence I may translate it thus; I, M. Gruter Hog-fon little Pig have made this my last Will and Testament, which because I could not write with my own hand, I have caused it to be ended by other. Magirur the Cook said unto me, come hither thou underminer of houses, thou roister up of land, fearful, fuggitive little Pig, I mult this day take away thy life. To whom Hog-fon made this answer; if I have done any harm, if I have offended, if I have trod in pieces any velvets of worth under my feet, then I intreat thee good M. Cook pardon me, and grant me my requit. But Magirur the Cook said, Run (if Kitchin-boy) and bring me a knife out of the Kitchen, that I may let this little Pig bleed; presently I the little Pig was taken by the servants, and by them led the xvi. day of the Calends of Torch-light into the place of Cool-worts, when Fiery-furnace and Pepper-space were Confuls, and when I saw no remedy but that I must die, I entreat the Cook but an hour's space to make my Will. Which when I had obtained, I call’d my Parents and Friends about me, and made my Will in manner following: Of all my meat and provision left behind me, first I give unto Bore-brown my father 30 bushels of Buck-maft. Item I give to my mother Town-\footnote{Town, 40 bushels of the belt Wheat.} following, 40 bushels of the belt Wheat. Item I give my father Whine-pig 30 bushels of Badly, and for my bowels I bellow them in manner following: I bequeath my bristles to the Cobblers and Shoemakers, my brains to Wranglers, my ears to the deaf, my tongue to Lawyers and Pratlers, my in-trails to the Tripe-makers, my thighs to the Pye-makers, my loins to women, my bladder to boys, my tail to young maids, my muscles to shameless Dancers, my ancle-bones to Lcases and Hunters, my hoofs to Thieves. Item I give unto this (unworthy to be named) Cook the Knife and the Pefle, that I brought out of the spiny of an Oak, into my ftye, and so let him tie his neck with a halter. Also my Will is, that there be made for me a monument, wherein shall be ingraven in Golden Letters, this inscription or title, M. Gruter Hog-fon, Little-pig, lived nine hundred ninety nine years and a half, and if he had lived but one half year longer, he had lived a thousand years. And you my Lovers and best Counsellors of my life, I beseech you do good to my dead carcasse, Satt it well with the best feaston of Nutmegs, Pepper, and Hoany, that so my name and memory may remain for evermore. And you my Masters and Kindred which have been prevalent the making of my Will, I pray you cause your marks to be put thereunto.

Witnifies;

\begin{itemize}
  \item \textit{Wood-bogs mark, Brffle-backs mark, Town-boars mark, Mountain-hogs mark, Bacon-backs mark, Swill-hogs mark, Merf-bogs mark.}
\end{itemize}

I have expressed this discourse for no other purpose but to shew the Reader, what proper fignified names have been or may be given to Swine, and so not to hold him any longer in this discourse, I will proceed from the names to the natures of this Beast. And first of all to begin with the common and vulgar epithets, which are as so many short definitions as they are words, as that of \textit{Heroces, Amica fui hats}, a dirt-lover, cloven-footed, beaty, clamorous, Acrion-eater, rough, horrible, fearful, flourish, filthy, unclean, impatient, loud, glad of food, miry, fat, wet, follower, moit, greedy, tender, and milk-fucker, according to the Poets sayings;

\begin{itemize}
  \item \textit{Laete meo pastum pig et mihi matris alunnum,}
  \item \textit{Ponut et \textit{Etla} de fue divers edas.}
\end{itemize}

Countries wherein Swine do not breed.

Swine are in the most Countries of the world. Yet Arifhate and Elian report, that there are none in \textit{India}, and \textit{Arabia Scien} \textit{s} and moreover there is in the people of those countries such a deflation of them that they cannot endure to eat their flesh, which is not wrought in them by any instinct or opinion of Religion (as it is in the \textit{Jews}) but rather by a natural inclination of the place and Region wherein they live, for it is said also, that if Swine be brought thither from any other place, they die within short space.

\begin{itemize}
  \item \textit{Pliny} affirmeth, that there are Boars among some of the \textit{Indians} which have horns, and the like is affirmed of the \textit{Ethiopians}. The Swine of \textit{Sicily} are accounted the best of all other for food. In \textit{Bavaria} they are lean, but in \textit{Burgundy} or the neather \textit{Germany}, they are fierce, strong, and very fat. Those which are carried into \textit{Hispamula}, are said to grow to the natur of Mules.
\end{itemize}

Pet Martyr.

Now concerning the several parts of Swine, it is most certain that inwardly they do more rememble
Now r the 3VCI by obferved this meat, and their thicknefs is due to their temples, and their under chap there are teeth which grow out of their head, and the Boars have some which the females have not. For even as the Elephant hath two teeth growing downward, so hath the Boar two growing upward. The male as we have faid, hath more then the female, and neither of both do lose or change them by any course of nature. As the Horfe hath his mane, so hath a Swine certain bristles on his neck (called therefore by the Grecians, Lopha) this neck is broad and thick, and in it lyeth the strength of the beast, and it is therefore observed by the Physiognomers, that a man with fuch a neck is an angry fool.

The collar next to the neck called vulgarly Collum, ought to be broad and flifte. It is faid of fore Harts, that they have their gall in their ears, and indeed in the ears of Swine there is found a certain humor not much unlike to a gall: yet lefs liquid, and therefore by reafon of the density or thickness thereof, comparable to the humor of the Spleen. The ventricile is large to receive much meat, and to concoct it perfectly, we call it vulgarly the Buck, and there are in it but few smooth ribs or trefts, and in the liver parts which are very great, there is a certain hard thing white like a bone. The females have twelve udders or dugs under the belly, but never lefs then ten, if they want of twelve; and the Boars have their ilones on their feat behind them joined together, which being taken off, are called by the Latins, Polimenta.

But in the female there is a great miracle of nature, for the place of conception is only open to the udders, or downward, but when her lust comes on her, by often tickling and driving the tumeth it about to meet with the Boars inuirtment in generation. And this bag is called Atris, which hangeth in the female inward, as the ilones of the Boar do outwardly.

In some places there are Swine which are not cloven-footed, but whole hoofed like a Horfe, yet this is very seldom or accidental, for the molt part all are cloven-footed. Aritfale affirmeth, that there are Swine whole hoofed in Africa, Paonia, and Macedonia, and Albertus faith, that he hath been informed of some such leen in England, and also in Flanders. The Anckles are doubtful, as it were in proportion between the Anckle of a whole and a cloven hoof. Now by this that hath been faid and shall be added, we must make up the defcription of a perfect Swine, for the better knowledge of the Reader, which may be of this, a right and small head. The body is to have large members, except the head and feet, and of one uniform colour, not parted or variable, not old, but of a good race or breed. There be some that for the choice of their Swine do make this observation, they chufe them by their face, by the race, and by the Region, by the face, when the Boar and Sow are of good and beautiful aspects: by the race, if they bring forth many and safely, not casting Pigs: by the Region, when they are not bred where they be of a small, slender, or vile nature, and especially this is observed in the male, because that in all beasts they are oftentimes more like the fire then the dam; therefore it is better in Swine to have a thick, round, and well fet Hog, then a long fided one, howbeit some approve Hogs with long legs. The buttocks ought to be flifty, the belly large and prominent, and the snows short and turning upward, yet the Sow is best, that hath the largest fides, if all the other members be correspondent.

Likewise in colde Countries they muft chufe their Swine with rough and thick hair, but in warmer and more more temperate Countries, any hair be it never fo small will serve the turn, especially if it be black. And thus much fhall serve in this place for their several parts and members: Now we will proceed on to their nourishment and copulation.
It is most certain that Swine are of a hot temperament, and for that cause it cometh to pass that they do not lose their Winter hair, for by reason of the fat near to their skin; there is abundance of heat which keepeth fall the roots of the hair. Their food therefore and nourishment is easily digested in every part, for that which is so strong in the nourish of the hair, must needs be correspondent power in other parts. Some have thought that Swine care not for grags or herbs, but only roots, and therefore hath a peculiar smot to attain them, but I finde by experience, that they will eat grags above the earth, as well as roots beneath, and they love to feed in herds together. They love above measure Acorns, and yet being given to them alone they are hurtful, and bring no less damage to them then to Sheep, (though not so often) especially to Sows that be with Pig. The belt time for gathering of Acorns is in November, and it is a work for women and children. The Woods of Italy are so full of Acorns, that they nourish abundance of Swine, and that therewith are fed the greatest part of the Roman people.

They delight also in Buck-mast, and that meat maketh the Swines flesh light, easie of digestion, and apt for the stomach. In some Countries Haws have the same vertue to fat Hogs, that is in Acorns, for they make them weighty, straight, neat, and sweet. The next unto this Holm-berries do fat Hogs, saving that they procure looseness, except they be eaten by little and little. There is a tree which hath bitter fruit (called Halipheum) whereof no beast will take, hereof Hogs will taft, but in extreme famine and hunger, when they are without all other food and meat.

The fruit or Apples of Palm-trees (especially such as grow in salt grounds near the Sea sides, as in Cyrene of Africa, and Judea, and not in Egypt, Cyprus, Syria, Helvetia, and Africa) do fatten and feed Hogs: And indeed there is scarce any food whereof they do not eat, as also no place wherein they pick not out some living, both in Mountains and Fens, and plain fields, but belt of all near waters, wherein by the banksides they gather many sweet and nourishable morets.

There are no better abiding places for Hogs then are the Woods, wherein abound either Oaks, Beeches, Cork-trees, Holm, Wilde Olives, Tamarisk, Hafels, Apples, or Crab-trees, white Thorn, the Greek Carobs, Pine-trees, Corn-trees, Loce-trees, Prune-trees, Shrubs, Haws, or wild Pears, or Medlers, and such like; for these fruits grow ripe successively one after the other, for there is no time of the year wherein some of them are not to be gathered soft and nourishable, whereby the herds of Swine may be maintained.

But if at any time this food cease, and not to be found, then must there be some other provision out of the earth, such as corn, or grains, and turn your Hogs to moist places, where they may pick up worms, and suck up fat tenny water, which thing is above all other things grateful to this beast; for which cause it pleased the holy Ghost in Scripture, to compare the pleasur that beastly men take in sinning, to the wallowing of Swine in the mire. The Dog (faith S. Peter) is returned to his vomit, and the Sow that was washed to wallow in the mire. For this cause also you must suffer them to dig in the water, and to eat Canes and Wilde Bulrushes likewise the roots and tops of Water-creefles; and you must provide to lay up for them in water Acorns, and not spare corn to give it them by hand, as Beans, Peafe, Fitches, Barly, and such like. And Calamela (from whom I have taken these instructions) addeth moreover, that in the Spring time before your Hogs go abroad to bite at the sweet and fresh growing herbes, let they provoke them to looffenest, you must give them some fodder drink, wash or wof, by vertue whereof that itchie must be avoided, for it is not, such leannes will follow, that it will overthrow and kill them.

In some Countries they also give them the scapes or refuse Grapes of Vintage, and moreover the fruits of yew tree, which is poyson to Dogs, Aesforaemata the Athenians by many and sundry praifes advanced three-leaved-grafs, and among other, for that as when it is greene it is commodious for Sheep, so being dried it is wholefome to Swine. They love green corn, yet it is reported that if Swine eat of it in the Isle of Salamine, their teeth by the law of the Country are beaten out of their mouths. It is wholefome to give them crude or raw Barly, especially to a Bore when he is to couple with a Sow, but unto a Sow with Pig fod.

There is in Bavaria a kind of Scallion which beareth a red purple-flower, like to the flower of the Lilly of the Vallies, which is greatly bought and devised by Swine. They also seek after wilde Vines, and the herb called Hogs-bread, and the root of wilde rapes, which beareth leaves like unto Violets, but sharper, and a white root without milk: By fome it is called Buclfcip, because it groweth in Woods among Beeches. They eat also fluff, and abhain not from fat Bacon, and herein they differ from most of the raving creatures, for Dogs will not taste of Dogs fluff, and Bears of Bears, yet will Hogs eat of Swines fluff, yea many times the dam eateth her young ones: And it is found that Swine have not abatiment from the fluff of men and children, for when they have been slaine by thieves, before they could be found, the greatest part of their body was torn in pieces and eaten by wilde Swine: And indeed as we see some Hens eat up the Eggs that they themfelves have laid, so shall we observe some Sows to devour the fruits of their own wombs, whereas we ought not to marvel at a monftrous prodigious thing, but rather acknowledge a natural voracity, constrained in them through famine and impatience.

They also eat Snails and Salamandrers, especially the Boars of the Mountains in Cilicia, and although there be in Salamanders a very deadly poyson, yet doth it not hurt them at all, but after
afterward when men or beasts fall of such a Swines flesh, the operation of the poyson worketh upon them mortally: neither is this any marvel, for it is when a Hog eateth off a Toad: and whereas if a man eat Hemlock, presently all his blood congealeth in his body and he dyeth, but if a Hog eat thereof, he not only not dyeth, but thriveth and groweth fat thereby. Antiquity reporteth one great wonder of a place about Three(As he faith) wherein for the compass of twenty paces there groweth Barly, whereof men eat safely, but Oxen and Sheep, and other creatures avoid it as mortall poyson, and Swine will not vouchsafe to taff of mens excrements that have eaten thereof, but avoid them carefully.

As Swine delight in meat, so also they delight more in drink, and especially in the Summer time, and therefore they which keep suckling Swines, must regard to give them their bellyful of drink twice a day, and generally we must not lead them to the waters as we do Goats, and Sheep, but when the best of Summer is about the risings of the Dog-star, we must keep them all together by water sides, that so they may at their own pleasure, both drink and lie down to wallow in the mire, and if the cold be so dry that this cannot be obtained or permitted, then must they have water fea in troughs and vesells, whereof they may taff at their own pleasure, for otherwise they want of water they grow Liver and Lung fick.

The merry water doth most quickly make them fat, and they will drink Wine or Beer unto drunkenness, and in those Countries where Grapes grow, if the Swine come into the Vintage they grow drunk with eating of Grapes. Also if the Lees of Wine be mingled with their meat, they grow fat above measure and fentile in their fat, whereby it hath been seen that a Mouse hath eaten into the sides of a fat Hog without the resistace of the beast: and the like is reported by Pliny of the fat of L. Apronius who had been a Conful. for his body grew so fat that it was taken from him, his body remaining immoveable. And in the Spring time Swine of their own accord grow fat, many times they cannot stand on their legs their bodies be so heavy, nor go anywhere, so that if they are to be removed, they are not to be driven but to be carred in a Cart.

Varro and Ctesienniis, do report admirable things of the fatten of Swine. For first Varro faith that he received knowledge of a credible honest man in Portugal, of a Swine that was there killed, the offal whereof with two ribs was sent to Volumnius a Senator, which weighed twenty and three pounds, and the fat betwixt the skin and the bone, was a foot and three fingers thick. Unto this he addeth the story of the Ataedian Sow, who suffered a Mouse to eat into her fat, and breed young ones therein, after she made a nest: which thing he likewse affirmeth of a Cow. And Ctesienniis reporteth of another Luicanian Swine, which after the death, weighed five hundred and fivey pounds, and the Lord of that Hog was one foot and three fingers broad. And the like may be told of a Hog at Saflit, nourished by a certain Ovli-man, in whose Lord or fat, after his death were found many paffaggs of mice to and fro, which they had gnawed into his body without the fenie of the beast. Hogs grow fat in short time. In antique days (as Pliny writeth) they put them up to fatting threeoere days, and first of all they made them fat three days together, after five days they may febibly be perceived to grow fat. There is not any beast that can better or more easily be accustomd to all kinds of food, and therefore doth very quickly grow fat, the quantity and Rature of their body considered, for whereas an Ox or Cow, or Hart, and such like beasts ask long time, yet a Swine which eateth of all sorts of meat, doth very quickly even in a moneth or two, or three at the most, prove worthy the knife and also his Malleys table, although in some places they put them up to fatting a whole year together, and how much they do profit & gather in their feeding, it is very safe for them to observe that plainly keep and attend them, and have the charge and overseeing of them.

And there must be he great care of their drink. In Thrace, after they put a Hog to fatting, they give him drink the first day, and then let him fast from drink two days, and so give him drink by that proportion till the seventh day, afterward they obverse no more diet for their Swine, but give them their fil of meat and drink till the slaughter day. In other Countries they diet them in this fort: After Beans and Pease they give them drink abundantly, because they are solid and hard; but after Oats and such like, as meall, they give them no drink, lest the meall might and down in their belly, and so be ejected into the excrements without any great profit. There is nothing whereon it lieth, but thereby it will grow fat except grazing, and therefore all manner of grain, Millet feed, Figs, Acorns, Nuts, Pears, Apples, Cucumbers, Roots, and such things saule them to rise in flesh gratefully, and so much the sooner if they be permitted to root now and then in the mere.

They must not be used to one simple, or unmingle, or uncombined meats, but with divers compounds, for they rejoice in variety and change like other beasts, for by this mutation of food, they are not only kept from inflammation and windines, but part of it also gaueth into flesh, and part into fat.

Some ule to make their fly wherein they are inclosed to be very dark and close, for their more speedy fatting, and the reason is good, because the beast is more apt to be quiet. You shall have Bakers that will fat their Hogs with Bran: and in Elisia a Country of Germany, they fat them with Bean meal, for thereby they grow fat very speedily, and some with Barly-meal wet with flat milk. And in the Alpes they fat them with Whay, whereby their fat and fleth groweth more white and sweet then if they were fatted with Acorns, yet Whay is very dangerous: for such is the ravening intemperancy of this beast, to wall in whatsoever is plesant to its taff, that many times in drinking of Whay their bellies grow extended above measure, even to death, except that they be dieted by a wife keeper, and driven up and down not suffered to rest till it flow forth again backward.

The meat and belt manner to fatten Hogs.

The great fats of Swine.

Of the Elisiaces.
Barly is very nourishable to them, whether it be sod or raw, and especially for Sowes with Pigs, for if he preferveth the young ones till delivery, and at the farrowing caufe them an easy and safe piggling. And to conclude this part, Millers and Bakers fat with Meal and Bran, Brewers with Ale, or Barly steeped in Ale, Oyl-men with the refufe of Nuts and Grapes.

Some again there be that grow fat with the roots of Fern. When a Sow is very fat the hath alway but little milk, and therefore is not apt to make any good tidy Pigs, and yet as all other beast grows lean when they give fucc, so alfo doth Swine. All swine in hot Regions by reason of a vifous humor, grow more fat then in the cold regions. In that part of Frisia neer Germany, they fat Oxen and Swine with the fume meats, for there you fhall have in one Sow and a Hog tyed behind him at the Swall, for the Ox being tyed to the rack esteth Barly in the fray and chaffe, which he swalloweth down without chewing, and fo the foffet thereof is digefted in his belly, and the other cometh forth whole in his dung, which the Hog licketh up and is therewithal ferved. And it is to be remembred, that Swine gelded or fplaited, do sooner fatten then any other.

To conclude, they love the dung of men, and the reafon thereof is, because the scat of their luft is in their Liver which is very rad and inftaflable, and there is nothing that hath a duller fenfe of fluming then this Beaf, and therefore it is not offended with any carrion or thinking smell, but with sweet and pleafant omtentions, as we fhall fhew afterwards.

Concerning their generation or copulation, it is to be noted, that a Boar or male Swine will not remain of validity and good for breed paft three year old, by the opinion of all the antient, for such as he engendereth after that age, are but weak and not profitable to be kept and nourished. At eight moneths old he beginneth to leap the female, and it is good to keep him clofe from other of his kinde for two moneths before, and to feed him with Barly raw, but the Sow with Barly sodden One Boar is sufficient for ten Sowes; if once he hear the voice of his female defiring the Boar, he will not eat untill he is admitted, and fo he will continued pining, and indeed he will fuffer the female to have all that can be, and groweth lean to fatten her; for which caufe Homer like a wife husbandman prefcribeth, that the male and female Swine be kept alfother till the time of their copulation. They continue long in the act of Copulation, and the reafon thereof is, because his luft is not hot, nor yet proceeding from heat, yet is his feed very plentiful. They in the time of their copulation are angry, and outrageous, fighting with one another very irefully, and for that purpofe they fufe to harden their ribs by rubbing them voluntarily upon trees. They chooe for the mofl part the morning for copulation; but if he be fat and young, he can endure it in every part of the year and day; but when he is lean, and weak, or old, he is not able to fatigue his females luft, for which caufe the many times finketh underneath him, and yet he filleth her while the lyeth down on the ground, both of them on their buttocks together.

They engender oftentimes in one year, the reafon whereof is to be ascribed to their meat or fome extraordinary heat, which is a familiar thing to all that live familiarly among men, and yet the wilde Swine couple and bring forth but once in the year, becaufe they are feldom filled with meat, endure much pain to get and much cold; for Venuis in men and beafis, is a compafion of fairety, and therefore they only bring forth in the spring time, and warm weather, and it is obferved that in what night lower a wilde Hog or fow farroweth, there will be no form or rain. There be many caufes why the tame domesticall Hogs bring forth and ingender more often then the wilde; firft becaufe they are fed with eafe; fecondly becaufe they live together, without fear, and by fociety are more often provoked to luft; on the other fide the wilde Swine come feldom tgether, and are often hungry, for which caufe they are more dull and lefe venefious, yet many times they have but one fow, for which caufe they are called by Aristophane and the antient Greatem Clother and Monarches.

But concerning the Sow, the beginneth to fuffer the Boar at eight moneths of age, although according to the diuerfity of Regions and air, they differ in this time of their copulation, for fome begin at four moneths, and other again tary till they be a year old: and this is no marvel, for even the male which engendereth before he be a year old, begeteth but weak, tender, and unprofitable Pigs. The befl time of their admifion is from the Calends of February unto the Vernal Equinox, for so it happeneth that they bring forth the young in the Summer time, for four moneths the goeth with young, and is good that the Pigs be farrowed before harveft, which you purpose to keep all the year for flore. After that you perceive that the Sows have conceived, then separate them from the Boars, left by the raging luft of their provoking, they be troubled and endangered to abortment. There be none that day, a Sow may bear young till the be seven year old, but I will not thrive about that whereof every poor Swineherd may give full fatisfaction. At a year old a Sow may do well, if he be covered by the Boar in the moneth of February. But if they begin not to bear till they be twenty moneths old, or two years, they will only bring forth the stronger, but also bear the longer time even to the feventh year, and at that time it is good to let them go to rivers, fens, or muddy places, for even as a Man is delighted in washing or bathing, fo doth Swine in filthy wallowing in the mire; therein is their reft, joy, and repofe. Albertus reporteth that in *some places of Germany* a Sow hath been found to bear young eighf years; and in other till they were fifteen years old; but after fifteen year it was never feen that a Sow brought forth young Pigs. If the Sow be fat, she is always the lefle prone to conceive with young, whether he be young or old. When firft of all they begin to seek the Boar, they leap upon other Swine, and in proclafs caft forth a certain purgation called Arqa, which is the fame in a Sow which *Hippomantes* is in a Mare, then they also leave their herd-fellows, which kinde of behavior or action, the Latin call by a peculiar Verb Subare, and that is applied to Harlots and wanton Women, by *Hora*;
We in English call it Boaring, because the never retheth to chew her desire to come to a Boar, and therefore when an old Woman lusteth after a man, being past lust by all natural possibility, she is call'd Anus subans. And the Bealt is so delighted with this pleasure of carnal Copulation, that many times the falletth asleep in that action, and if the male be young or duff, then will the female leap upon him and provoke him; yea in her rage she fetteth many times upon men and women, Fliny, especially if that they do wear any white Garments, or if their Apron and privy place be wetted and moistened with Vinegar. They have their proper voices and cries for this time of their Boarings, which the Boar or male utensil endareth prettily.

They are filled at one Copulation, and yet for their better safeguard, and to preserve them from abortion, it is good to suffer the Boar to cover her twice or thrice; and moreover, if the conceive not at the first, then may the safety be permitted three or four times together, and it is observed that except her ears hang down flagging, and carelessly, she is not filled but rejecteth the feed, but if her ears fall downward, and so hang all the time that the Boar is upon her, then is it a most certain token that she is filled, and hath conceived with young.

After four months (as we have said) the Sow farroweth her Pigs, that is to say, in the fifth month, as it were in the seventeenth week: For so is this beast enabled by nature to bear twice in the year, and yet to fuck her young ones two months together. And there is no clow-footed beast that beareth many at a time except the Sow, except in her age, for then the beginntoth lose her opus of purgation, and so many times miscarryeth, and many times bear but one. Yet this is marvelous that she beareth many, so the engendereth them perfect without blindness, lameness, or any such other diffirere, because as we have said before, that in some places you shall see Swine whole hoofed like a Horse, yet most commonly and naturally their feet are cloven, and therefore is the wonder accounted the greater of their manifold multiplication: and the reason thereof may arise from the multitude and great quantity of their food, for the humor cannot be so well avoided and dispersed in so little a body as Swine have, as in Mares and Cowes, and therefore that humour turned to multiply nature and natural kinde, and so it cometh to pass, that by overmuch humour turned into a natural feed, it breedeth much young, and for little humor it bringeth forth a few Pigs and thofe also are not only perfect, but also she is sufficiently furnished with milk to nourish them, till they be able to feed themselves. For as a fat ground or soil is to the plants that growth on it, even so is a fat Sow to a fruitful Sow, which the hath brought forth.

Their ordinary number which they bring forth and can nourish is twelve, or sixteen at the most. The number which a Sow beareth, and very rare it is to see sixteen brought up by one Sow. Howbeit it hath been seen that a Sow hath brought forth twenty, but far more often seven, eight, or ten. There is a story in Fufius of a Sow that brought forth thirty at a time, his words be thefe: The Sow of Anes Latium did bring forth thirty white Pigs at one time, wherefore the Latins were much troubled about the signification of this monstrous fairrow, at laft they received an answer that their City should be thirty years in building, and being so they called it Alba, in remembrance of the thirty white Pigs. And Fliny affirneth, that the images of those Pigs and the Sow their dam, were to be seen in his days in public places, and the body of the Dam or Sow preferred in Salt by the Priests of Alba, to be shewed to all such as desired to be certified of the truth of that story.

But to return to the number of young Pigs which are ordinary and without miracle bred in their dams belly, which I finde to be so many as the Sow hath dugs for, so many the may well nourish and give suck unto, and not more, and it needeth a special work of God which hath made this tame beast so fruitful, for the better recompence to man for her meat and cudtody. By the first farrow it may be gathered how fruitful the she will be, but the second and third do most commonly exceed the first, and the last in old age is inferior in number to the first.

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The History of Four-footed Beasts.

When the young one cometh forth of the dams belly wounded or imperfect, by reason of any harm therein received, (it is called Mutacereum) and many times Swine-gender Monsters, which cometh to pass ofter in the little beasts then in the great, because of the multitude of cels appointed for the receipt of the feed, by reason whereof, sometimes there are two heads to one body, sometimes two bodies and one head, sometime three legs, sometime two before and one behind, were the Pigs without ears, which were farrowed at that time that Dionysius the Tyrant went to war against Domitian, for all their parts was perfect but their ears, as it were to teach how insidiously against all good counsel, the Tyrant undertook that voyage, such are commonly found to be bred among them, also now and then of an unapproachable fmainess like Dwarfs, which cannot live, having no mouth nor ears, called by the Latinis Aparcelli. If a Sow great with Pig do eat abundantly of Acorns, it causeth her to call her farrow and to suffer abortion; and if the grow lat, then is the less fruitful in Milk.

Now for the choice of a Pig to keep for flore, it must be chosen from a lufby and strong dam bred in the Winter time, (as fome say) for fuch as are bred in the heat of Summer are of little value, because they prove tender, small, and overmoft, and yet alfo if they be bred in the cold Winter they are small, by reason of extreme cold, and their dames forfake them through want of milk: and more over because they through hunger pinch and bite their dugs, fo as they are very unprofitable to be nourifhed and preferred in the Winter time, rather they are fit to be killed and eaten young.

But this is to be obferved for reconciliation of both opinions, namely, that in hot Countries fix Hogs are preferred that be bred in the Winter, but in cold, fuch as are bred in March or April: within ten days after their farrowings they grow to have teeth, and the Sow ever offereth her foremoft Dug to the Pig, that cometh first out of her belly, and the residue take their fortune as it falleth, one to one, and another to another, for it leemeth the regardeth the firft by a natural instinct, not fo much to prefer it, as that by the example thereof the residue may be in vited to the like fucking by imitation, yet every one (as Teuton faith) keepeth him to his first choice. And if any of them be taken away from his Dug that is killed or fold, that dug prefently dryeth, and the milk currench backward, and fo until all be gone, one excepted and then it is nourifhed with no more then was ordained at the beginning for it. If the old Sow want milk at any time, the suppofe must be made by giving the young ones fried or parched corn, for raw corn or drink procureth loofenes; and it is bef for them to be fucked in the place where their Dam usually abideth.

For weaning them it is not good to let more then five or six fuck of her at one time, for although every one fuck but his own Dug, yet by the multitude, the milk is dryed up: After two months old they may fafely be defjoined from their Dam and weaned, fo as every year the Sow may breed eight months, and give fuck four: it is bef for them to feed afunder from their dams, till they have utterly been fotted to fuck. And thus much for the procreation and nourifhment of old and young Swine.

This beall lovethe fociety, and to live in herds or flocks together, and therefore the Ancients have invented Hog-keepers, whom they call Swine-herds, wherein there was wont to be confidered these instructions; firft be accustomed to the found of his horn, for by that he called them abroad out of their foldsto their feedings, for they never fuffered above twelve together at the trough or parcel of meat. It becometh a Swine-herd (faith Callimnnea) to be vigilant, diligent, industrious, and wife, for he muft carry in his head the state of all that he nourifheth, both old and young, barren and fruitful; and confider the time of their farrowings, whether they be near at hand, or far off, that fo none may be boil through the want of his obfervation; being farrowed, he muft confider and look upon them to fee which are fit for flore, and which are not, what are their natures and probabilities; how much milk their dam is able to afford them, and how many she is to bring up, especiollty to regard that every Sow bring up no more then her own Pigs; for Swine being out of the flye do mingle one with another, and lose their own young ones, and when the lyeth down to give them fuck, the lendeth her paps as well to ftrangers as to her own, and therefore heren muft the care and wit of the herdman appear, for if there be many, he muft shut up every Sow with her young; and if that cannot be, then with a little Pitch or Tar let him give feveral marks to the feveral farrows, that fo his memory may not be confounded. Another reme dy to avoid the confufion of young Pigs one another, is fo to frame the threshold of the flye, that the Pigs may not be able to go in and out; for the Sow can more easily go over, and so she may be caled of their company, and they safely included at home, and so thall no ftranger break into them; but every one in their own neft expect the return of their dam, which ought not to exceed the number of eight; for although the fecundity of Swine be great, yet it is better to kill off two or three, if their number be above eight, then to permit them to fuck their dam; for this multitude of fuckers do quickly draw away all nourifhment from the dam; and when they are but eight at the molt, regard muft be had that the Sow be well fed with ford Barly, or fuch like, left through a covetous pinching of the beall, learneth to overthrow and deftruction. Another point of a good Swineherd, is to fweep oftentimes the flye, for although fuch be the nature of the Beall, that it defileth all things, and will be wallowing in the mire, yet will he alo be very defirous of a clean lodging, and delight much in the fame; and when they be shut up, they muft not be enclosed like other bealls altogether, for one of them will

The office and first institution of Swine-herds.
Of the Swine.

throng and ly upon another, but there must be several porches and hatches to fever and dintingulsh
their lodgings, so as the great with Pig may lie in one place, and the other ready to be delivered by
themselves, free from all incursion and violence. These divisions or separations ought to be some 3,
or 4 foot high, so as they may not be able to leap over to one another, and not covered, to the in-
tent that every Swineherd both man and boy may freely look over to them, and tell them if any
chance to be miffing, or else help a poor Pig when it is overlaid by his dam.

Whenever the Swineherd clenfeth the fly, then let him call in land or some other drying thing
to it, that all the moisture and wetness may be drank up. The dam ought not to be permitted
for the first ten days to go forth of the stable, except to drink, and afterward let her go abroad
in some adjacent piture, not far off, that so by her often return she may the better give fick to
her young ones. When the little ones are a fortnight or three weeks old, they desire to follow
their parent, whereas they must be shut up from their mother, and feed alone in her absence, that
they may better endure it afterward when they shall be weaned. They must be fed in the Summer
time in the morning, before the heat be strong, and in the heat of the day led into some wetty or
shadowy place, that so they may be freed from extremity till the cool of the day return again, where-
in they must be suffered to feed. In the Winter time they are not to be led abroad till the frost
and ice be thawed and dissolved. Ten Boars are sufficient for an hundred Sows; and although some
keep five or six hundred in a herd, as we may read in Scripture of the great herds of Swan, into
which our Saviour Christ permitted the Devils to enter, yet is it not safe or wholesome to keep above
an hundred together, for a less flock or herd requireth less colt, charge, and attendance. There
is a speech of Tertullian Sows, tending to the commendation of the country or nourishing of Swan,
for thus he writhe: 

Agricultura ab initio fuit studium, non de prvnis scilicet maxime causarum, quod in
mognti quoque perisset. Qui enim erat non est communit, quis unus non fuit studium coli, quis fui
babi? 

quis non audierit parae suberat, quae novitiam? quae jacu, quae quidem? 

whereas the country or nourishing of Swan is not so great as it was

The females, therefore to gel them is in the old Moon, or as we say in the wane of the Moon, but Festial
prescribed, that an Ox and a Boar should be gelid in the second quarter, and first day there-
of, and Aristotle is of opinion that it skilfull not what age a Boar be when he is gelid, but it is
clear by the best experienced among these beasts, there are two times of geling them; one in the
Spring, and the other in the Autumn, and this is to be done after a double manner; First,
by making two incisions or wounds upon his ftones, out of which holes the stones are to be pressed
forth.

The second way is more perillous, yet more cleanly; for first of all at one wound or inci-
dition they take out one stone, then that being forth, with their knife they cut the small skin which
parteth the stones in the cor, and so press forth the second stone at the first wound, afterward
applying to it ordinary medicines, such as we will describe in the treatise of their diseases.

And the opinion of Varro is, that it is good to lib them at half a year old, or at a year old, or at
three or four year old, for their better fattering; but best at a year, and not under half a year. When
the stones are taken forth of an old Boar, suppose two, or three, or four year old, they are called by
the Latinus Palmas, because with them they polished and smooched garments.

The female also is gel'd or played, (although the often bore Pigs) whereof they open the side
(neer his loin) and take away from her Arios, and receptacles of the Boars feed, which being seen
up again, in short time is enclosed in fat; this they do by hanging them up by their fore-legs, and
first of all they which do it most commodiously, must cause them to fall two days before; and then
having cut it, they few up and close fast again the wound or incision, and this is done in the same place
of the female, that the stones are to be taken out in the male (as Arist. writeth) but rather it ap-
peareth by good examination and proof, that it is to be cut out on the right, against the bone
(called Or fascum.) 

And the only cause of this Sow-gelidng is, for their better growth and fat-
ing; which in some Countries they use, being forced thereunto by their penury and want of
food; but whereas is plenty of food, there they never know it: and the inventers hereof were the
Grecians, whose custom was to cut out the whole matrix. And thus much for libbing, gelidng,
and fplaying of Swan.

This beast is a moit unpure and unclean beast, and ravingen; and therefore we use (not improper-
lv) to call abacne and filthy men or women, by the name of Swine or Sows. They which have fore-
heads, eye-lids, lips, mouth, or neck, like Swine, are accounted footsíl, wicked, and wrathful: all their
lenses (their smelling excepted) are dull, because they have no Articles in their hearts, but have
thick blood; and some say, that the acuteness and ripeness of the soul, blandeth not in the
thickness of the blood, but in the cover and skin of the body, and those beasts which have

Y y 3 The nature of this beast

Adamsantium, F. Rex.
When certain Pirates in the Tyrrhena sea, had entred a Haven, and went on land, they came to a Swines flie, and drew out thereof divers Swine, and fo carried them on Shipboard, and looing their Anchers and tacklings, do depart and fail away. The Swineherds seeing the Pirates commit this robbery, and not being able to deliver and refte their Cattle, because they wanted both company and strength, suffered the Theeves in silence to fliep and carry away their Cattle; at laft, when they saw the Theeves rowing out of the Port, and lanching into the deep, then they lift up their voices, and with their accustomed cries or calls, called upon their Swine to come to their meat; as soon as the Swine heard the fame, they presently gat to the right file of the Veffel or Bark, and there flocking together, the fliep being unequally ballanced or loaded, overturned all into the Sea, and fo the Pirates were jufly drowned in reward of the theft, and the bole Swine swam fafely back again to their Malters and Keepers.

The nature of this Beast is to delight in the moft filthy and noifome places, for no other caufe (as I think) but because of their dull leners. Their voice is called Gruminitz grunting; So dide fus paccentius wunitia gruminitz; which is a terible voice to one that is not accustomed thereunto, (for even the Elephants are afraid thereof) especially when one of them is hurt or hanged falt, or is heft in his head. The patience of the refidue is as it were in commpcion condoling his mife, run to him and cry with him, and this voice is very common in Swine at all hands to cry, except he be carried with his head upwards towards heaven, and then (it is affirmed) he never cryth, the reafon whereof is given by Apoxnifian: because it is alway accustomed to look downward, and therefore when it is forced to look upwards it is suddenly appaled and afraid, held with admiration of the goodly face above him in the heavens, like one altonishd, holdeth his peace (fome fay that then the artery of his voice is prefled) and fo he cannot cry aloud. There is a fifth in the river Acholus which grunteth like a hog, whereof Juuentif Iiekaketh, faying: Et quam remigibus gruminitz Elephants porti. And this voice of Swine is by Caticus attributed to drunken men. The milk of Swine is very thick, and therefore cannot make what like a Sheeps, howbeit it suddenly coagulateth and congealeth together.

Among divers males or Boars when one of them is conqueror, the refidue give obedience and yeeld unto him, and the chief time of their fight or discord is in their luft, or other occasions of food, or strangenes, at which time it is not safe for any man to come near them, for fear of danger from both parties, and especially thofe which wear white garments. And Strabo reporteth in general of all the Belgian Swine, that they were fo fierce, strong, and wrathful, that it was as much danger to come near them as to angry Wolves. Nature hath made a great league betwixt Swine and Crocodiles, for there is no beast that may fo freely feed by the banks fides of Nile, as the Swinemay, without all hurt by the Crocodile. Other Serpents, especially the smaller Serpents, are oftimes devoured by Swine. Arifioth faith, that when many of them are together they fear not the Wolf, and yet they never devour any Wolf, but only with their fearing and gruntinge noise fear them away. When a Wolf geteth a Swine, he devoureth him, and before he can eat him draggeth him by the ears to fome water to cool his teeth in his fleth (which above measure burn in devouring his fleshe.) It hath been fen that a Lion was afraid of a Sow, for at the fetting up of his bristles he ran away.

It is reported that Swine will follow a man all the day long which hath eaten the brain of a Crow in his pottage: and Nydias affirmeth, that Dogs will run away from him that hath pulled off a tick from a Swines back. The people of Noffynauem did engender Man with Woman publicly like Swine; and Strabo writing against Women faith, that fome of them are derived from one beast, and fome from another, and namely a Woman defecnded of a Sow fitteth at home, and doth neither good nor harm: but Simondes writeth otherwife, and namely that a Woman born of a Sow fetteth at home fuffering all things to be impure, unclean, and out of order, without decking, drefling, or ornament, and fo fye growth fat in her unwafted garments. And there are many fictions of the transforming into Swine. Homer fignifieth that the companions of Ulyfser were all by Circe turned into Swine, which is interpreted in this manner, Circe to signifie unreasonable pleafure, Ulyfser to signifie the foul, and his companions the inferior affections thereof, and fo were the companions of Ulyfser turned into Swine by Circe. When unreasonable pleafures do overcome our affections and make us like Swine in following our appetites: and therefore it was the counfell of Soventic, that no man should at banquet eat more then sufficient, and thofe which could not abftain from them, should forbear their company that perfwaded them to eat when they were not hungry, and to drink when they were not thirsty, and therefore he fupposeth that it was faid in jeft that Circe turned men into Swine. When as Ulyfser by his owne abftinence and Mercury his counfell, was delivered and faved from that moft favage transformation, which caufed Herae thus to write;
And from this came the original proverb of Porcellus Aquanius for a tender and delicate person, used to to fuides, that all penury is death unto him. Sweet favours as we have shewed already, are very hurtful to Swine, especially the sweet oy of Marjoram. Whereupon came the proverb Nil cum amoratino suf; and Lucretius speaks hereof in this fort;

Deniq; amaranstin furitat sus, & timet omne Unguentum: nam fertigna sube acro venenost.

And for this caufe Tullius Cicero saith, Uti alabafrone puter ungenti plena; that is, a box of Alabaster full of ointments is displeasing to this Beast, for as the Scaredes or Horse fie foraketh sweet places to light and sit upon Horfe dung, even so doth Swine. There be many of the antients that have de. Callus, livered merrily Animus sus pro sale, that the Swines soul is in their body but in head of fat to keep the flesh from stinking, even as for no other purpose many among men seem to live and retain soul in body. They are very clamorous, and therefore are used for talking and pratling fellows, whereupon the Greek Poet Lucianus translated by Erafmus alludeth, when he faith in this manner, under Alla Mucelles, alia porce; is loquitur;

Sucula; bus, & capra mibi periere Menelles, & merces horum nomine poena tibi eft. Nee mibi cum Obyrada quicquam esf fuitae neguis, Nee fueris ullobus bus cito Thermopilis.

And to conclude, in Latin they say Sus Minervum. when an unlearned dunce goeth about to teach his better or a more learned man, then doth the Hog teach Pilules, or as we fay in English, the foul Sow teach the fair Lady to fpin.

There are in Swine many prefaces and foretokens of foul weather, as Swineherds have observed: as firft if they lie wallowing in the mire, or if they feed more greedily then they were accustomed, or gather together in their mouths, hay, furflew, or straw, as Aretus writeth; or if they leap and dance, or frisk in any unwonted fort: and for their copulation, in years that will prove moist, they will ever be boring, but in dryer years they are leffe lubidious.

The greatest harm that cometh by Swine is in rooting and turning up of the earth, and this they do in Corn fields, for which we have shewed that the Ophiurn made a law to beat out the teeth of such Swine: for this caufe Homer writeth that Ixion threatened Ulyfles, because his companions eat up all his corn, to knock out their teeth: yet sometimes the husbandmen admit them of purpose, both into their land before it be plowed, and alfo into their vineyards. It is faid that the Egyptians forbear to sacrifice them, because they tread in their Corn in their fields after it is swelt out of the earth, fo as the Birds cannot gather it up again, as we have shewed before. The Jews and the Egyptians accounted this Beast molt unclean. The Jews, not as the vain Gentiles imagined, because they worshipp’d it, for that it taught men to plow the earth, but for the Law of God. And the Egyptians hold it a profane thing, and therefore they had an antient law, that no Swineherd fhould come into their Temple, or that any Man fhould give him his Daughter in Marriage. It is very certain that they were wont to be used in facrifices. The faid Egyptians never Sacrificed them to the Moon and to Bacchus, and at other times it was unlawful, either to offer them, or to eat them: but it feemeth by many Authors, that their firft facrifices were of Swine, for we read of antient customs in Herodius, that at their marriage feaft they offered and Sacrificed a Swow to Venus, and at other times, especially in Harvest, they did fo to Ceres. The Latins do hold a Swine very grateful and facred to Jupiter, because as they believed that a Swow did firft of all lend her paps to him, and therefore all of them worship a Swow, and abtain from her flefh. Likewise in Myfia and Phoenicia, there were Temples of Jupiter, wherein it was forbidden to facrifice or kill Swine by a publick Law, like as it was amongst the Jews. When the Kings of Sparta were firft of all choft into that royal place, they were permitted to execute the Priests office, and to the intent that they might never want facrifices, there was a priviledge granted them to take a Pig of every Sow: and when they Sacrificed to Jupiter a Swine, it muft be after or at a Triumph: they were also Sacrifed to Neptune, because they were impetuous and ranging Beasts; and a Boar was holy to Mars, according to this saying of Pomponius in Aetiusana, Mars sibi sacrurum, & unquem redere, bidenta verre. And there was a custom among the Athenians, when a Man had slain an hundred enemies, he was permitted to offer up to Mars, some part of a Man at Looms, and afterward they grew out of liking of this vain custom, and in Head thereof Sacrificed a Barrow or gelded Hog, and when they houfed their army, they did it with Hogs, Sheep or Bulls, and nothing else, and they compassed it about three times with pomp and stately procession, and at last flew and offered them to Mars. They were wont to Sacrifice a Hog for a Man that had recovered his wits after he had been mad, and also they Sacrificed Swine to Silvanus, according to these Verfes;

Cedere Silvano porum quadrante lavi:

And again;

Tellurum porco Silvannae lalit pliament.
Their Pagan God Terminus, had an Ewe and a young Sow offered to him (as Ovid writeth) although by the laws of Names, all sacrifices of living things were forbidden unto him. To Ceres and Bacchus, we have swelled already how they were offered, and the reason of their sacrificing was, because they were hurtful to all green Corn and Vines.

Prima Ceres avidi gaviala est sanguine porci,
Ultima justa merita cede noscentis aetas,
Nam liberae non teneris latentia sucia,
Eruta setigera comparit ore suis.

And again in another place he writeth thus;

Prima putax bohia Sus menisfie morti,
Eve vit livers, frena, intercessit animi.

The time of their sacrificing to Ceres was in April, wherein the Priests with Lamps and Torches, and apparelled in white garments did first of all kill a female Swine, and then offer her; and sometime this was a Sow with a farrow, because thereby in a mystery they prayed for the fruitfulnes and fecundity of the earth; and for thefe and such like causes we read of titles put upon them, as Parce praeceps, for the Sow that was slain before the reaping, and Parce praed, for the Sow that was offered at a Funeral for the safety of all the family, wherein the dead man lived. They also sacrificed a barren Sow to Proserpine, because she never bore children, and to Juno in the Calends of every month: and thus much for their sacrificing.

Now we are come to the use of Swine and their several parts: first of all it is certain that there is no Beast lesse profitable being alive then a Hog, and yet at his latter end he payeth his Master for his keeping. Ceres said well, Sin quid habet praetor ofam, cui quidem non puressest, animam ipsum pro jace desampe effis Chrypsiou. A Hog hath in him besides his meat, and that therefore the soul thereof was given to it in feald of fat to keep it from finking: for indeed in Lions, Dogs, Bears, Horses, and Elephants, all their virtue lyeth in their minds, and their flesh is unprofitable and good for nothing, but the Swine hath no gifts at all in the minde, but in the body, the life thereof keeping the flesh and body from putrefaction. And there is no beast that God hath ordained for domestical provision of food and meat to man, except Hares and Conies, that is so fruitful as Swine are. God (as we have touched already) Levit. 11; Deut. 14, forbade his people of Israel to eat thereof, because it was an unclean Beast not chewing the cud; and furthermore the observance of Precisius is memorable, that whereas the Egyptians did worship with divine worship, both Oxen, Kine, and Sheep, and would not eat of their flesh or kill them in sacrifice, yet did eat, and kill, and sacrifice Swine.

The Jews were permitted and commanded to eat Oxen and Sheep, and abstinence from the flesh of Swine; thus manifesting how different his ways and thoughts are from the ways and thoughts of men. The Lord doth not this for policy, but to try the obedience of his people, placeeth therein one part of his worship, and therefore by his Prophets, Eze. 45. and 66. calleth the eating of Swines flesh abomination, and threatened them thereunto a certain unavoidable judgement and damnation. The woman and her seven lads which were apprehended by King Antiochus, and he tempted to eat Swines flesh which they refused to do (being against the law of their God) are remembered as most worthy Martyrs of his Church, that endured, cutting off their hands and feet, pulling out their tongue, and seething in a boiling Caldron with other exquisit torment; incident to such death, as is recorded by Jann. 2. Maccab. 6. We read that Heliodorus did abstinence from Swines flesh, because he was a Platonian, and they forbade him to eat it. The women of Bessaca in Africa, do never touch of Cowes flesh or Swines flesh.

The Arabian Scyrians never eat hereof, and Swine cannot live in their Countries. (Ctesistr and Aelianus affirme) that in India there are no Swine, either tame or wild, and that the Indians do as much forbear to eat of Swines flesh, in defection thereof, as they do of Mans flesh.

Now concerning the flesh of Swine, many opinions are held about the goodnes and evil thereof, yet Hippocrates writeth, that Porcine carnes prava sunt quom quiferint crudores & ambito, magis animo choleram generant, & turbationem faciunt, Soli carnes optime sunt omnium carnium; that is, The flesh of a Boar being raw or roasted, is worst of all other, because it engendereth Choler and wildly windy matter in the flomach; but the flesh of a Sow is the best of all flesh, with this proviso, that it neither exceed in fatnes, leannes, or age.

There is a merry and witty answer of a memorable Noble man to an old Gentlewoman (if not a Lady) who displeased Bacon at the Noble mans table, and said it was a curous, unpleasing meat. The Lord understanding a privity Emphasis in that speech against himself, (for his name was written with those Letters and syllables) answered her: you say truth, if the Bacon be a piece of an old Sow (as peradventure he seemed to be at that time.)

The bett opinion about the concocitive quality of this flesh is, that then it is best when it is in middle age, neither a Pig, nor an old Hog, for a Pig is over moist, like the Dam which is the most fat of all other earthy Beasts; and therefore cannot but engender much filage: and for this cause
caufe the fatterl be reprov'd for a good diet, for that it cannot digeft well through over much humidity.

And the old Swine are moft hard of Concoction, (yea though they be forchered or fngifled at the fire) becaufe thereby is increafed in their flefh much acroimony and sharpnes, which in the fomach of men turneth into Choler: for they bite all the veflles reaching to the fomach, making a derivation of all thofe ill humors into the belly and other parts.

I do not like their opinion, which think that it is better cold then hot, for fear of inflammation; this rule is good in the flefh of Goats (which are exceeding hot) but in Swine, where there is no predominancy but of moiflure, it is better to eat them hot then cold, even as hot Milk is more wholefome then cold. Hippocrates doth preffcribe the eating of Swines flefh in the ficknefs of the Spleen; and Celsus Aurelianus forbidde them the fame in the Paffie or Falling ficknefs.

Galen is of opinion that Caro porcina potentiffime nutrit; nourifheth moft strongly, and potently; whereof he giveth an inftance for a reafon taken from Combatants, or Wreftlers, if the day before they wretche or flipte, they feed on an equal quantity of any other flefh, they feel themfelves weak and feeble in comparison of that which is gathered from Swines flefh: and this (he faith) may be tried in Laborers, Mioners, Diggers, and Husbandmen; which retain their ftrength as well (if not better) by eating of Swines flefh or Bacon as any other meat: For as Beef in thicknes and folidity of fubfance to the eyes appearance, excelleth Pork or Bacon, fo Pork and Bacon excelleth and is preferred before Beef, for a clammy nourifhing humor. And this comparison betwixt Pork and Beef, Galen amplifheth farther in these words, Of Swines flefh, thofe are belt for men in their middle and ripe age, which are of Hogs of an answerable age, and to other which are but growing to a ripenes and perfection, Pigs, Sheares, and young growing Swine, are moft nourifhable. And on the contrary, young growing Oxen are moft nourifhable to men of perfect years and ftrength, becaufe an Ox is of a far more dry temperament then a Hog.

A Goat is lefle dry then an Ox, and yet compared to a Man or a Swine, it excelleth both of them; for there is a great reafemblance or fimilitude betwixt a Mans flefh and Swines flefh, which fome have proved in cafe, for they have eaten of both at one Table, and could finde no difference in one from the other: for fome evil Inn-keepers and Hoafs have so deceived men, which continued a great while, not deforyed or punifhed, until at laft the finger of a man was mixed therewith, and being found, the Authors received their reward. Swines flefh alfo is lefle excemtional then Pigs flefh, and therefore more nutritive, for the moifler that the flefh is, the sooner it is digerated, and the vertue of it avoided, and old Swine notwithstanding their primitive and natural moiflure, yet grow very dry, and their flefh is worth of all, becaufe in nature humidity helpeth the concocition thereon.

All Swines flefh being concocted engendereth many good humors, yet withal they contain a kind of glutinous humor, which stoppeth the liver and reins, efpecially in thofe which by nature are apt to this infirmity. And although fome are of opinion, that the wilde Boar is more nourifhable then the tame Swine, becaufe of his laborious courfe of life, and getting his prey; yet it appeareth that the tame Swine by their refty life, and easy gathering of their meats, are made more fit for nourifhment of man, for they are more moifl: and Swines flefh without convenient moiflure (which is many times wanting in wilde Boars) is poyfon to the fomach, and yet for a man that hath propounded to himself a thin extenuating diet, I would with him to forbear both the one and the other, except he ufe exercife, and then he may eat the ears, or the cheeks, or the feet, or the halter, if they be welled or drefled: provided they be not freth, but fauced or powdered: And it is no marvel that Swines flefh should fo well agree with ours, for it is apparent that they live in dirt, and love to muddie in the fame.

And if any man ask, how it commeth to paffe, that Swine which both feed and live fo filthily, should be fo nourifhable to the nature of man; fome make anfwer, that by reafon of their good conftitution of body, they turn ill nutriment to a good flefh: for as men which be of a found, perfect, and healthy disposition or temperature, are not hurt by a little evil meat, which is hard of digestion; even fo is it with well conftituted and tempered Swine, by continual feeding upon evil things, they grow not only to no harm, but alfo to a good etate, haufe nature in procefs of time draweth good out of evil: But if men which have moifl fomachs, do eat of Swines flefh, then do they suffer thereby great harm, for as water powered on wet ground increafeth the dirt; fo moiflness put upon a moifl fomach, increafeth more feeblenes: but if a man of a dry and moifl fomach do eat thereof, it is like rain falling into a dry ground, which begetteth and engendereth many wholesome fruits and hearts. And if a Swine be fatti with dried figs or nuts it is much more wholefome.

With Wine all Swines flefh is moft nourifhable, and therefore the Univerfity of Salerium, prefcribed that in their veftes to the King of England, and alfo they commended the loines and guts:

Ille pororum bona sunt, malo sunt reliquorum.

And Fiera depretieth the eating of Hogs-flefh in this manner:

Suntibus comos fit causa doméstica ore, Grataferat tuba mofa hyermis aprum.
And whereas *Hippocrates* commended Swines flesh for Champions and Combatants; it is certain, that *Bills* the Champion through eating of Swines flesh, fell to such a height of choleric, that he cast it upwards and downwards.

When the womb of a Woman is ulcerated, let her abstinence from all Swines flesh, especially the elder and the youngest. It is not good for any man to taint or eat this flesh in the Summer time, or any hot weather, for then only it is allowed when extreme froths have tempered it for mans stomach, and the stomach for it: the flesh of welle Swine is most of all hurtful to them that live at ease, without exercize, because that they are immoderately given to sleep. Some are of opinion that a few which is killed immediately after the Boar hath covered her, is not to wholesome as other: *Heliogabalus* observed this custom, to eat one day nothing but Pheasant Hens, another day, nothing but Pullen, and the third day nothing but Pork.

There was in antient time a dish of meat called *Trojanum*, the Trojan Hog, in imitation of the Trojan Horfe, for as that was stuffed within with many armed men, so was this with many several meats, and whole Beasts, as Lambs, Birds, Capons, and such like, to serve the appetites of the moist strange belly-gods, and Architects of gluttony: and therefore *Cicero* in his oration, wherein he perfwaded the Senators and people to the law *Fames*, reproveth this immoderate riot in banquets, *In opponendo mensis porcum Trojanum*: and indeed it wanted not effect, for they forbade both *Porcum Trojanam*, and *Callum Aprugnum*.

There was another Raven-monfter-dish (called *Pipes*) wherein were included many Beasts, Fowles, Eggges, and other things which were distributed whole to the guests: and no marvell, for this Beast was as great as a Hog, and yet gilded over with silver. And *Hippocrates*, in his Epistle to *Lyncus*, speaking of the banquet of *Caranus*, faith thus, *Aquatim es nobis etiam porcus dimidia parte diligenter affus fit*, *Et dimidia altera parte tanquam ex aqua molliter elixit*, *Mira etiam coquus industria tua paratur, ut qua parte jugulatus esset*, *Et cum modo variis deliciis refertus ejus vener non apparet*. There was brought to us a Hog, whereof the one half was well rofted, and the other half or side well sod, and this was so indifferently prepared by the Cook, that it did not appear where the Hog was flain or receiv'd his deadly wound, nor yet how his belly came to be stuffed with divers and sundry excellent and delicate things. The *Roman* had a fashion to divide and distribute a Hog, which appeareth in their *Veres of Martial*.

*Vobisvum*.

*Uli tibi faciete bona Saturnalia porcus*,
*Inter fumantem illice porcini apres.*

And of the eating of a fucking Pig, *Martial* also writeth in this manner;

*Latiti meropafum gigra mibi matris aliumnum*.
*Porcin, & Aetulo de fuis drues edat.*

I might add many other things concerning the eating and dressing of Swines flesh, both young and old, but I will passe it over, leaving that learning to every Cook, and Kitchin-bōy.

Concerning Bacon, that which is cold by the *Latius, Perna*, I might add many things, neither improper, nor impertinent, and I cannot tell whether it should be a fault to omit it in this place. The word *Perna* after *Varro*, feemeth to be derived from *Pede*, but in my opinion, it is more connoctant to reason, that it is derived from the Greek word *Perna*, which is the ribs and hips of the Hog hanged up and salted, called by *Martial Petajo*, and by *Plautus Ophthalmia*, *Horeum*, *Scembrium* and *Laridum*:

*Palladius*.

*Quanta pecos poscit venutes, quanto labes larido.*

The time of the making of Bacon, is in the Winter season, and all the cold weather, and of this *Martial* writeth very much in one place;

*Museum est, propria, claros ne differ amitos*.
*Nam mihi cum vetula sit petasone nihil.*

And again,

*Etpulbam dubio de petasone venas.*

—*Cretana mihi fiet, vel mappa licebit*.
*De memphis laitis, de petasone venari.*

*Strabo* in his time commended the Bacon of the Gauls, or of *France*, affirming that it was not inferior to the *African* or *Lycian*, an old City of Spain (called *Fempelin*) near *Aquitania*, was also famous for
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for Bacon. They first of all killed their hogs, and then burned or scalded off all their hair, and after a little fation did flit them aflunder in the middle, laying them upon falt in some tub or deep trough, and there covering them all over with falt, with the skin uppermoft, and fo heap flipt upon flipt, till all be falted, and then againe they oftentimes the fame, that every part and side, might receive his falt, that is, after five daies, laying them undermoft which were uppermoft, and thofe uppermoft which were undermoft. Then after twelve daies fafting, they took all out of the tub or trough, rubbing off from it all the falt, and fo hanged it up two daies in the winde, and the third day they all to anoint it with oyl, and did hang it up two daies more in the wind; and afterward take it down again, and hang it or lay it up in the larder, where all the meat is preferred, still looking warily unto it, to prefervie it from Mee and Wormes: And thus much fhall iuftece at this time for the flefh of Hogs, both Pork and Bacon.

The milk of a Sow is fat and thick, very apt to congeal, and needeth not any runnet to turn it; it breeding little whay, and therefore it is not fit for the stomach, except to procure vomiting, and because it hath been often proved, that they which drink or eat Sow milk fall into Scors and Prophes, (which difeafe the Aflatts hate above all other) therefore the Egyptians added this to all the residue of their reafons, to condemn a Sow for an unclean and filthy beaffe. And this was peculiarly the faying of Manethon.

With the skins of Swine which the Grecians did call Phorine, they made fhoo-leather, but now a dayes by reafon of the tenderness and loofenas thereof, they use it not, but leave it to the Saddlers, and to them that cover Books, for which caufe it is much better then either Sheeple or Goate skins, for it hath a deeper grain, and doth not so easilie fall off. Out of the parings of their skins they make a kind of glue, which is preferred before Tauracolum, and which for fmalldime they call Chermolium. The fat of Swine is very precious to liquee fhooes and boots therewithall. The Amber that is in common use groweth rough, rude, impolifhed, and without clearneffe, but after that is fod in the greafe of a Sow that giveth suck, it getheth that nitour and fhining beauty, which we finde to be in it.

Some mix the blood of Hogs with thofe medicines that they caft into Waters to take fihes, and the Hunters in fome Countries where they would make Wolves and Foxes, do make a train with a Hog's liver fob, cut in pieces and anointed over with hone, and fo anointing their shoes with Swines greafe, draw after them a dead Cat, which will caufe the beaffe to follow after very fpeedily. The hairs of Swine are used by Cobbler and Shoemakers, and alfo with them every Boy knoweth how to make their Nofe bleed. The dung is very sharp, and yet it is juftly condemning by Columella for no use, no not to fatten the earth, and Vines alfo are burned therewithall, except they be diligently wafterd, or reft five years without furring.

In Primus time they thuded to enlarge and make their Lettice grow broad, and not clofe together, Thesphrafin, which they did by fitting a litte the flall, and thrusting gently into it some Hogs dung. But for trees there is more especial ufe of it, for it is used to ripen fruit and make the trees more plentiful. The Pomegranats and Almonds are sweeter hereby, and the Nuts eafily caufed to fall out of the fhell. Likewise, if Fennel be unfavorly by laying to the root thereof either Hogs dung, or Pigeons dung, it may be cured; and when any Apple tree is affected and razed with Worms, by taking of Swines dung, mixed and made loft like mortar with the urine of a man layed down into the root, it is recovered, and the Wormes driven away: and if there be any rents or ftripec visible upon trees, fo as they are endangered to be loft thereby, they are cured by applying unto the ftripeces and wounds this dung of Swine.

When the Apple trees are loofe, pour upon their roots the flate of Swine, and it fhall eitcbiff and settle them, and wherefore there are Swine kept, there it is not good to keep or lodge Hores, for their fhell, breath, and voice, is hateful to all magnanimous and perfect Spirited Hores. And thus much in this place concerning the ufe of the feveral parts of Swine, whereunto I may add our English experiments, that if Swine be fuffered to come into Orchards, and dig up and about the roots of the Apple trees, keeping the ground bare under them, and open with their noft, the benefit that will arise thereby to your increafe of fruit will be very ineflimable. And here to fave my felf of a labor about our English Hors, I will describe their ufe all out of Mr. Taffers hufbandy, in his owne words, as followeth: and firft of all for their breeding in the Spring of the year he wrieth in general;

Let Lent well kept offend not thee,  
For March and April breeders be.

And of September he wrieth thus:

To gather some maft it fhall stand thee upon,  
With fervants and children yet maft be all gone.  
Some lea amonge battes well your thy Fwine,  
For fears of a mishap keep Aoconnor fro kine.  
For roosting of flipture ring Hogs have need,  
Which being well ringed, the better doth feed.  
Though young with their elders will likly keep beft,  
Yet fcare not to ringe both great and the reft.

Take feldome thy Swine, while sucke time doth left,  
For divers misfortunes that happen too falt.  
Or if vou do fancy, whole care of the Hog,  
Give ear to ill neighbor, and ear to hit Dog.  
Keep hog I advise thee from medow and Carne,  
For out alowd crying, that ere he was borne.  
Such lowlefs fo haunting both often and long,  
If dog let him chewing he doth thee no wrong,

And
And again in October husbandry he writeth:

Though plenty of Acorns, the Porklings is fat,
Not taken in feaon may perish by that,
If falling or swellling get once in the throat,
Then left thy porking a Crown to a Great.

What ever thing is fat, is again if it fail,
Thou wert left the thing and the fameths withall.
The fatter, the better, to sell or to kill,
But not to continue, make proof if you will.

In November he writeth again:

Let Hog once fat, lose none of that;
When maff is gone, Hog falleth anon,
Still fat up some, till Shrovetide come,
Now Porks and fonce bears tucke in a houfe.

Thus far of our English husbandry about Swine. Now followeth their diseas in particular.

Of the diseases of Swine.

Emlock is the bane of Panthers, Swine, Wolves, and all other beafts that live upon devouring of flesh, for the Hunters mix it with flesh, and so spread or call the flesh so paylown abroad in bits or morlills to be devoured by them. The root of the white Chameleon mixed with fryed Barly flour. Water and oil is also payson to Swine. The black Ellebor worketh the same effect upon Hories, Oxen, and Swine, and therefore when the beafts do eat the white, they forbeare the black with all wearifomenefs. Likewise Henbane worketh many painful convulsions in their bellies; therefore when they perceive that they have eaten thereof, they run to the waters and gather Snails or Sea-crabs, by vertue whereof they escape death, and are again reforted to their health. The hearb Goofefoot is venemous to Swine, and alfo to Bees, and therefore they will never light upon it, or touch it. The black Night-shade is present deftuction unto them, and they abftain from Harts tongue, and the great bur, by fome certain infall of nature. If they be bitten by any Serpents, Sea-crots, or Snails, are the moft prent remedy that nature hath taught them. The Swine of Scythia by the relation of Pliny and Arifotle are not hurt with any payson except Scorpions, and therefore fo soon as ever they are flung by a Scorpion, they die if they drink. And thus much for the payson of Swine. Againit the cold (of which theea beafts ate moft important:) the best remedy is to make them warm flies, for if it be once taken, it will cleave fatter to them, then any good thing, and the nature of this beaft is, never to eat if once he feel himself sick, and therefore the diligent Maifer or keeper of Swine, must vigilant regard the beginnings of their diseas, which cannot be more evidently demonstrated, then by forbearing of their meat.

Of the Meafels.

The Meafels are called in Greek Μυνωρία, Chalaza; in Latin, Gransines; for that they are like hailstones spread in the flesh, and especially in the leaner part of a Hog, and this diseafe, as Arifotle writeth, is proper to this Beaff, for no other in the world is troubled therewith: for this cause the Grecians call a Meafily Hog, Chalaza, and it maketh their flesh very loofe and foft. The Germans call this diseafe Finnen, and Pfinnen; the Italians, Gr omn; the French, Sarfens, because the spots appear at the root of the tongue like white feds, and therefore it is ufal in the buying of Hogs in all Nations to pull out their tongue and look for the Meafels, for if there appear but one upon his tongue, it is certain that all the whole body is infected. And yet the Butchers do all affirm that the cleaneft hog of all, hath three of thefe, but they never hurt the swine or his flesh, and the Swine may be full of them, and yet none appear upon his tongue, but then his voice will be altered and not be was wont.

These abound moft of all in such Hogs as have flefthy legs and shoulders very moift, and if they be not over plentiful, they make the flesh the fweeter; but if they abound, it tafteth like fock-fiff or meat over-watered. If there be no appearance of thefe upon their tongue, then the chap-man or buyer pulleth off a brifle from the back, and if blood follow, it is certain that the beaft is infected, and alfo fuch cannot well ftand upon their hinder legs. Their call is very round. For remedy hereof divers days before their killing, they put into their waft or will some athes, especially of Hafel trees. But in France and Germany it is not lawful to fell fuch a Hog, and therefore the poor people do only eat them. Howbeit they cannot but engender evil humors and naughty bloud in the wheath.

The roots of the bramble called Ramme, beaten to powder and caff into the holes, where Swine use to bath themselves, do keep them clear from many of thefe diseases, and for this caufe alfo in antient time they gave them Horfe-fleff fodden, and Toads fodden in water, to drink the broth of them. The Bur pulled out of the earth without Iron, is good alfo for them, if it be cramped and put into milk, and so given them in their waft. They give their Hogs here in England red-lead, red-
Oker, and in some places, red loam or earth. And Pliny faith, that he or the which gathereth the aforefaid Burre, must say this charm:

Hec est herba Argemon
Quam Minerum repetit,
Sibua bu remedium
Qui de illa gaudeatur.

At this day there is great praise of Maiden-hair for the recovery of Swine, also holy Thistle, and the root of Gumbo and Harts-tongue.

Of Leanneffe or pining.

Sometimes the whole herd of Swine falleth into leanneffe, and so forlaken their meat, yea althouglh they be brought forth into the fields to feed, yet as if they were drunk or weary, they lie down and sleep all the day long. For cure whereof, they must be closely shut up into a warm place, and made to fast one whole day from meat and water, and then give them the roots of wild Cucumber beaten to powder, and mixed with water, let them drink it, and afterward give them Beans pulle, or any dry meat to eat, and lastly warm water to procure vomit, as in men, whereby their stomacks are emptied of all things both good and bad: And this remedy is prescribed against all uncertain diseaSES, the cause whereof cannot be discerned; and some in such cases do cut off the tops of the tails, or their ears, for there is no other use of letting these beasts blood but in their veins.

Of the Pestilence.

These beasts are also subject to the Pestilence, by reason of earth-quakes and sudden infections in the air, and in such affection the beast hath sometime certain bunches or swellings about the neck, then let them be separated, and give them to drink in water the roots of Daffadill:

Quattuor agros suisses annuale sise
As far, quod amitt, obtius tempesto pestis.

Some give them Night-shade of the wood, which hath great flacks like cherry twigs, the leaves to be eaten by them against all their hot diseases, and also burned snails, or Pepper-wort of the Garden, or Latuca xantva cut in pieces, sodden in water, and put into their meat.

Of the Ague.

In ancient time (Varro faith) that when a man bought a Hog, he covenanted with the seller, that it was free from sickness, from danger, that he might buy it lawfully, that it had no maungie or Ague.

The Signs of an Ague in this beast are these.

When they stop suddenly, standing still, and turning their heads about, fall down as it were by a Megrim, then you must diligently mark their heads which way they turn them, that you may let them blood on the contrary ear, and likewise under their tail, some two fingers from their buttocks, where you shall finde a large vein fitted for that purpose, which first of all we must beat with a rod or piece of wood, that by the often striking it may be made to swell, and afterwards open the said vein with a knife; the blood being taken away, their tail must be bound up with Oifer or Elm twigs, and then the Swine must be kept in the house a day or two, being fed with Barly meal, and receiving warm water to drink as much as they will.

Of the Cramp.

When Swines fall from a great heat into a sudden cold, which hapneth when in their travel they suddenly lie down through wearineffe, they fall to have the Cramp, by a painfull convulsion of their members, and the best remedy thereof, is for to drive them up and down, till they wax warm again, and as hot as they were before, and then let them be kept warm still, and cool at great leisure, as a horse doth by walking, otherwise they perish unrecoverably, like Calves which never live after they once have the Cramp.
The History of Four-footed Beasts.

of Lice.

They are many times so inflected and annoyed with Lice, that their skin is eaten and gnawed through thereby; for remedy whereof, some annoy them with a confection made of Cream, Butter, and a great deal of Salt: Others again annoy them, after they have washed them all over with the Lees of wine, and in England commonly the Country people use Staves-aker, red Oaker, and grease.

of the Lethargy.

By reason that they are much given to sleep in the Summer time, they fall into Lethargies, and die of the same: the remedy whereof is, to keep them from sleep, and to wake them whenever you finde them asleep.

of the Head-aches.

This diſeafe is called by the Grecians, Scotomia, and Kroara, and by Albertus, Frateris. Here, with all Swine are many times infected, and their ears fall down, their eyes are also dejecked, by reason of many cold humours gathered together in their heads, whereof they die in multitudes, as they do of the pellitence, and this sickneffe is fatal unto them, if they be not holpen within three or four daies. The remedy whereof (if there be any at all) is to hold Wine to their nostrils, first making them to smell thereof, and then rubbing it hard with it, and somne give them also the roots of white Thistles, cut small and beaten into their meat, but if it fall out that in this pain they lose one of their eyes, it is a sign that the beast will die by and by, as Pliny and Arifiole write.

of the Gargarism.

This diſeafe is called by the Latines, Ranculo, and by the Grecians, Branchos, which is a swelling about their chaps, joyned with Fever and Head-ach, spreading it self all over the throat, like as the Squinancy doth in a man, and many times it beggeteth that also in the Swine, which may be known by the often moving of their feet, and then they die within three daies, for the beast cannot eat being so affected, and the diſeafe creepeth by little and little to the Liver, which when it hath touched it, the beast dieth, because it purrithe and as it passeth. For remedy hereof, give unto the beast those things which a man receiveth against the Squinney, and also let him blood in the root of his tongue, (I mean in the vein under the tongue) bathing his throat with a great deal of hot water mixed with Brimftone and Salt.

This diſeafe in Hogs is not known from that which is called Struma, or the Kings evil at the first appearance, as Arifiole and Pliny write: the beginning of this diſeafe is in the Almonds, or kernels of the throat, and it is cauſed through the corruption of water which they drink; for the cure whereof, they let them bloud, as in the former diſeafe, and they give them the Yarrow with the broadleſt leaves. There is a Hearb called Herba impia, all hoary, and outwardly it looketh like Rosemary, some fay it is cauſed because no beast will touch it, this being beaten in pieces betwixt two tiles or stones, groweth marvellous hot, the juice thereof being mixed in milk and Wine, and so given unto the Swine to drink, cureth them of this diſeafe, and if they drink it before they be affected therewith, they never fall into it, and the like is attributed to the hearb Trinity, and Viola Matius, likewise the blew flowers of Violets are commendèd for this purpose by Dioscorides.

of the Kernels.

Here are little bunches rising in the throat, which are to be cured by letting bloud in the shoulder, and unto this diſeafe belongeth that which the Germans call Rangen, and the Italians, Eldor, which is not contagious, but very dangerous, for within two daies the beast doth die thereof, if it be not prevented: This evil groweth in the lower part or chap of the Swines mouth, where it doth not swell, but waxing white, hardeneth like a piece of horn, through pain whereof the beast cannot eat, for it is in the space betwixt the fore and the hinder teeth; the remedy is to open the Swines mouth as wide as one can, by thrusting into it a round bat, then thrust a sharp needle through the same fore, and lifting it up from the gum, they cut it off with a sharp knife; and this remedy helpeth many if it be taken in time: Some give unto them the roots of a kind of Gentian to drink, as a special medicine, which the Germans for that cauſe call Rangenerate; but the most sure way is the cutting it off: and like unto this there is such another growing in the upper chap of the mouth, and to be cured by the same remedy: the cauſe of both doth anfwer from eating of their meat over hot, and therefore the good Swineheard must labour to avoid that muffie; The muffie of this is described by Virgil:

Hinc canibus blandis rabies venit, & quasit ager
Tuffi ambula saepe, ac fauciibus adgit absint.
Of the Swine.

Of the pain in their Lungs.

For all manner of pain in their Lungs, which come by the most part for want of drink, are to have Lung-wort stamped and given them to drink in water, or else to have it tyed under their tongues two or three days together, or that which is most probable, because it is dangerous to take it inwardly, to make a hole in the ear, and to thrull it into the same, tying it fast for falling out; and the same vertue hath the white Hellebor. But the diseases of the Lungs are not very dangerous, and therefore the Butchers say, that you shall seldom finde a Swine with found Lungs or Livers; sometimes it falleth out that in the Lights of this Beath there will be apparent certain white spots as big as halfa Walnut, but without danger to the Beath, sometimes the Lights cleave to the ribs and fides of the Beath, for remdy whereof you must give them the fame medicines, that you give unto Oxen in the fame disease. Sometimes there appear certain blathers in the Liver of water, which are called water-gals; sometimes this is troubled with vomiting, and then it is good to give them in the morning, tyed peace mingled with duff of Ivory, and bruised Salt falling, before they go to their patures.

Of the diseases in the Spleen.

By reason that this is a devouring Beath, and through want of water, it is many times sick of the Spleen, for the cure whereof you must give them Prunes of Tamarisk preffed into water, to be drunk by them when they are a thirt: this disease cometh for the most part in the Summer, when they eat of sweet and green fruits, according to this verfe;

Strata jacent passim sua quaq: fab arbore poma.

The vertue of thefe Prunes of Tamarisk is also very profitable against the diseases of the Milt, and therefore it is to be given to Men as well as to Beasts, for if they do but drink out of pots and cups made out of the wood of the tree Tamarisk, they are easily cleared from all diseases of the Spleen; and therefore in some Countries of this great tree they make Hog troughes and mangers, for the safegard of their Beasts, and where they grow not great, they make pots and cups. And if a Hog do eat of this Tamarisk, but nine dayes together, at his death he fhall be found to be without a Spleen, (as Marcellus writeth.) When they become loose in their bellies, which happeneth to them in the Spring time by eating of green Herbs, they either fall to be lean, or else to die. When they cannot easily make water, by reafon of some floppage, or sharpfens of Urine, they may be eafed by giving unto them purge-feed. And thus much for the diseases of Swine. For confluon whereof I will add hereunto the length of a Swines life, according to Artifale and Pliny, if it be not cut of by ficknes or violent death, for in their dayes they observed that Swine did live ordinarily to fifteen years, and some of them to twenty: And thus much for the nature of Swine in general.

The medicines of the Hog.

The best remedy for the bitings of venomous Serpents is certainly believed to be this, to take Aetius. some little creatures, as Pigs, Cocks, Kids, or Lambs and eatt them in pieces, applying them whiles they are hot to the wound as soon as it is made, for they will not only expell away the poyfon, but also make the wound both whole and found. For the curing of Horses which are troubled with the inflammation of the Lungs; Take a fucking Pig and kill him neer unto the fick Horfe, that you may inflantly pour the blood thereof into his fawes, and it will prove a very quick and speedy remedy. The panche of a fucking Pig being taken out and mingled with the yolk which fliketh to the inner parts of the skin, and mollified bothe together, doth very much eale the pain of the teeth being poured into the ear, on which fide the grief falleth.

The liquor of Swines flesh being boiled, doth very much help againft the Bittrellis, the fame is also a very good antidote againft poyfon, and very much helpeith tho he which are troubled with the Gout. Cheefe made of Cowes milk being very old, fo that it can scarce be eaten for taffte, being in the liquor or decoction of Swines flesh which is old and falt, and afterwards throughly tempered, doth very much mollifie the flines of the joynts, being well applied thereunto.

The Indians use to wash the wounds of the Elephants which they have taken firft with hot water, afterwards if they fee them to be somewhat deep, they anointed them with Butter: then do they affwage the inflammation thereof, by rubbing of Swines flesh upon them, being hot and moist with the fresh bloud influming from the fame. For the healing of the wounds of Elephants, Butter is chiefly commended, for it doth easily expell the iron lyrage hid therein, but for the curing of the Ulcers, there is nothing comparable to the flesh of Swine. The bloud of Swine is moist, and not very hot, being in temper moist like unto mans bloud, therefore whosoever faith that the bloud of men is profitable for any diseases, he may firft approve the fame in Swines bloud: but if it shew not the fame, it may in a manner fhev the like action.
For although it be somewhat inferior unto man's blood, yet at the least it is like unto it; by knowledge whereof, we hope we shall bring by the use thereof, more full and ample profit unto men. For although it do not fully answer to our expectation, notwithstanding there is no such great need that we should prover men blood. For the encouraging of a feeble and dimmished Horfe, Luminatis reporteth, the flesh of Swine being hot, mingled in wine, and given in drink, to be exceeding good and profitable. There also addeth by Swine another excellent medicine against divers perilous diseases, which is this, to kill a young gelded Boar Pig, having red hairs, and being of a very good strength, receiving the fresh blood in a pot, and to stir it up and down a great while together with a flock made of red Juniper, casting out the clots of the blood, being gathered while it is flirring.

Then to call the scrapings of the same Juniper, and stir the berries of the Juniper in the same to the quantity of seven and twenty, but in the stirrings of the same, let the clots be full cast out. Afterwards mingle with the same these herbs following. Agrimony, Rue, Rheu, Scotch, Betony, Piumernel Succory, Parsely, of each a handful. But if the measure of the blood exceed three pints, put unto it two ounces of Treacle: but if it shall be bigger, for the quantity of the blood you shall diminish the measure of the Treacle. (But all things ought to be so prepared that they may be put to the blood coming hot from the Boar.) These being mixed all together, you must draw forth a dropping liquor, which you must dry in the sun, being diligently kept in a glasse-vessel for eight days together, which you must do once every year, for it will last twenty years. This medicine is manifestly known to be a great preservative against these diseases following, namely the Plague, impostumes in the head, fides, or ribs, as also all diseases whatsoever in the Lungs, the inflammation of the Milt, corrupt or putrified blood, the Ague, swellings in the body, shaking of the heart, the Dropifie, heat in the body above nature, evil humors, but the principal-left and chiefest vertue thereof is in curing all poisons, and such as are troubled with a noyisme or pestilent Fever.

Let him therefore who is troubled with any of the aforesaid diseases, drink every morning a spoonful, or four or five drops of the same liquor, and sweat upon the same, and it will in very short time perfectly cure him of his pain. Some also do use Almonds pounded or beaten in the blood against the Plague, the liquor being extracted forth by the force of fire. A young Pig being killed with a knife having his blood put upon that part of the body of any one which is troubled with warts being as yet hot come from him, will presently dry them, and being after washed, will quite expell them away. The blood of a Sow which hath once pigged being anointed upon women, cureth many diseases in them.

The brains of a Boar or Sow being anointed upon the fores or Carcuncles of the privy members, doth very effectually cure them, the same effect also hath the blood of a Hog. The dugs of a woman anointed round about with the blood of a Sow, will decrease leffe and leffe. A young Pig being cut in pieces, and the blood thereof anointed upon a Woman's dugs, will make them that they shall not encrease.

Concerning the grease of Swine, it is termed diversely of all the Authors, for the Greeks call it Steir Chalines, and Ocuungia, for the imitation of the Latin word Arsungia; but Marcellus also applyeth Arsungia to the fat of other creatures, which among the ancient Authors I do not finde: for in our time those which in Latin, do call that fat Arsungia, which increaseth more solid between the skin and the flesh, in a Hog, a Man, a Brock or Badger, a Dor-mouse, a Mountain-mouse, and such like.

The fat of Swine they commonly call Lard which growtheth betwixt the skin and the flesh, in expressing the virtues of this, we will first of all shew how it is to be applied to cures outwardly, and then how it is to be received inwardly; next unto Butter, it hath the chiefest commendations among the antients, and therefore they invented to keep it long, which they did by casting some salt among it, neither is the reason of the force of it obscure or uncertain, for as it feedeth upon many wholesome herbs which are medicinable, so doth it yield from them many vertuous operations; and besides the physicke of it, it was a custom for new married wives when they first of all entred into their husbands house, to anoint the parts thereof with Swines grease in token of their fruitfulnes while they were alive, and remainder of their good works when they should be dead.

The Apothecaries for preparation of certain Ointments, do geld a male fucking Pig, especially such a one as is red, and take from his reins or belly certain fat, which the Germans call Schafer, and the French, Qin, that is, Unguentum the husbandmen use Swines grease to anoint the axle trees of their Carts and carriages, and for want thereof they take purifiled Butter, and in some Countries the gum that runneth out of Pine trees, and Fir trees, with the scum of Butter mingled together: and this composition taketh away icabs and tetterers in Men:but it is to be remembered that this greaze must be fresh, and not salted, for of salt grease there is no use, but to skowre those things that are exulcated.

The antients deemed that this is the best Greaze which was taken from the reins of the Hog washed in rain water, the veins being pulled out of it, and afterwards boiled in a new earthen pot, and so preferred. The fat of Swine is not so hot and dry as the fat of other beastts, the chief use of it is to moilten, to fatten, to purge, and to fcurter, and herein it is most excellent when it hath been washed in Wine, for the fairest greaze so mixed with Wine, is profitable to anoint those
that have the Plurifie, and mingled with ashes and Pitch, eath inflamations, festuлаes, and tumors, and the fame virtue is ascribed to the fat of Foxes, except that their fat is hotter then the Swines, and leffe moist: likewise ashes of Vines mingled with talle grease of Hogs, cureth the wounds of Scorpions and Dogs, and with the spume of Nitre, it hath the fame virtue against the bitings of Dogs. It is used also against the French disease (called the French pox) for they say if the knees of a Man be anointed therewith, and he stand gaping over it, it will draw a filthy matter out of his stomach, and make him vomit.

By Serenus it is precribed, to be anointed upon the knees, against the stains of the Neck. Mingled with Quicksilver and Brimstone, it is sufficient against the itch and scabs. This Lard being fow with the fat, and applied to the body, doth mightily expell corruptions that cleave to the skin. The fat of Swine with Butter and Oyl of Roffes, is inftilled into the broken skins of the brain for the cure of them.

Likewise Bugloss plucked up by the root, and the roots cut off, and curiously washed, braten and pounded into a Ball, and mixed with Swines greafe, is good to be laid to any incurable wound. It is also profitable for the wounded Nerves of the body, beaten together with Wormes of the earth, according to thefe Verfes of Serenus:

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Terra lumbros in hirta tritos,
Quam venus & tani fortis amarina uabet.

When bones are broke, if they be anointed with the fow greafe of Swine, and so bound up fat together, after they be well fat and closed, grow wonderful fat, fure and solid again: Serenus writeth thus of it;

Si cui forte lapis teneros violantes artis,
Necis adips vitulis, & trias chamaeoffon.

By the fat (the meaneth the fat of Swine) because preiently after he maketh mention of the dung of Swine to be good for the fame cure. Being mingled with Pitch, it tattereth all bunches and fellons. The hardnes of the brethts, Ruptures, Convulsions and Cramps, and with white Hellibor, it clofeth up cliffs and chinks in the flefh and maketh the hard skin to be foint again. It is very profitable against inflamations of Ulcers, especially the fat of the Boar Pig, mixed with liquid gum.

Women do alfo ufe the fat of a Sow that never bore Pig to cleare their skin, and to mix it with Pitch, and one third part of Afles greafe againft the scabs. The fame mingled with White Lead, and the spume of filver maketh the fears of the body to be of the fame colour with the refidue; and with Sulphur, it taketh away the fplot in the Nails, mingled with the powder of Acorns: if the greafe be falt, it fointneth the hardnes of the flefh. Rue mingled with Swines fowet or Buls greafe, taketh away fplot and freckles out of the face, and it is alfo profitable againft the Kings evil, being mixed with the powder of a Sea Oylter fhell, and being anointed in a Bath, it taketh away the itch and blifters. Featherfew and fow Swines greafe, is also precribed againft the Kings evil. This fame alone or with Snow, eath the pain of burnings in the flefh, and when there is an Ulcer, by reafon of the burning, mix it with tofted Barly, and the white of an Egge, according to thefe Verfes;

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Combustis ignis,
Hordea vel fruges, atq. ost candida jungera,
Adit adips perca (mitra eft nem forma medea)
Funge etiandiuus as sit lora vulncre fuccu.
Quedv. recentis uti piscet, adnecis simplex
Matet, & en faeci gratis et medicamine cura.

Freshe greafe is very profitable for those members that are furbeted or riven of their skin, and likewise to anoint them that are weary with long journeys. The afhes of womens hair burned in a fhell, and mingled with the fat of Swine, are laid to eafe the pain of St. Antonies fire, and to fanch blood, and to cure Ring-worms.

The gall of a Swine, or of a Boar, and the liftles with the fat, fillfeth up the Kibes; and the flalls of Cabiges with the roots burned, and mingled with Swines greafe being applied to the fides, do cure the dayly pains thereof. And thus far of the ufe of this greafe for the bodies of men.

Now also it followeth in a word to touch the ufe thereof for the bodies of Beasts. When the horns of Oxen or Kine are broken, they take a little Lint, Salt, Vinegar, and Oyl, and lay them upon the broken horn, powring in the liquid, and binding the reft close on the outside, and this they renew three dayes togethe; the fourth day they take the like quantity of Swines greafe, and liquid Pitch, and with a smooth rind or bark of pine they bind it to close, and fo it is fattened again. When the hoof or ankles of an Ox are hurt with the plough fhare, then take hard Pitch, Swines greafe and Sulphur, roul them upall together in unwashed wool, and with hot burning Iron melt them upon the wound or horn.

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The History of Four-footed Beasts.

The ears of Dogs in the Summer time are exulcerated by flies, into which forc'd it is good to infill liquid Pitch sod with Swines greafe, and this medicine also is good to deliver Beasts from the ticks, for they fall off as many as touch it. When Lambs or Kids are troubled with the Sheep pox, some use to anoint them with Swines greafe and the rutt of Iron, that is two parts of Swines greafe, and one part of rutt, and so warm them together. Also for the scabs upon Horses' heels, that are called the scratcches, which come for the mokt part in the Winter time, they cure them in this manner: They take the fat of Swine, and melt it on the fire, and pour it into cold water, which afterwards they take it out and beat it well together, at last they mingle it with Brim- Stone beaten small, and so anoint the place therewith three days together, and the third day they own the scabs, and so continue anointing till it be cured.

When a Horse cannot hold his Neck right, it is good to anoint him with Oyl, Wine, Hony, and Hogs-greafe; the manner of some Leeches is, when they have made a fupputation by Oxen in burning, they fift of all wash it with hale Urine, and afterwards mingle an equal quantity of Pitch and Hogs greafe together, wherewithal they anoint and cure the fore.

Sometime the blood of Oxen falleth down into their feet, wherein it congealeth and breaketh forth into scabs, then muft the place fift of all be scraped with a knife, and the scabs cut away, afterwards with cloaths wet in Vinegar, Salt, and Oyl, moistened and pressed hard, and laft of all by an equal quantity of Hogs greafe, and Goats sweeter for both together, it will be cured by laying it unto it. And thus much for the remedies of Swines greafe towards Beasts. The hukes of Beans being beaten small to powder, and mixed with Swines greafe, is very profitable against the pain of the hips and the nerves.

Some Physicianstake the greafe of Swine, the fat of Geefe, the fwer of Bulls, and the Oefpus or swet of Sheep, and anoint therewithal Gowyf legs, but if the pain remove not, then do they add unto it Wax, Mirdle, Gum and Pitch, and some use it mixed with old Oyl, with the bone Sarco- physeis, Chicks-foyl better in Wine with Lime or athes. This Swines greafe beaten in water with Cumin, is preferibed by Simeon Letbi againft the Gowt. It remediateth the falling of the hair, and the pain in the heads of Women, mingled with one fourth part of gals, and the like virtue it hath with wilde Roifes, Linguulae and Hippomcrius with Nitre and Vinegar. When the corners of one's eyes are troubled with Worms, by anointing them with the fat of a Sow with Pig, beating them together both within and without, you shall draw all the Wormes out of his eyes.

When one hath pain in his ears whereby matter iflueth forth, let him beat the oldft Lard he can in a Morter, and rake the juice thereof in fine wool, then let him put that wool into his ear, making it to work through warm water, and then infuife a little more of the juice of that Lard, and to fhall he work a great cure in short time. And generally the fat of Hone, Hens, Swine, and Foxes, are prepared for all the pains in the ears.

If there arise any bunch in the neck or throat, feasthe Lard and Wine together, and fo by gargari- fhting that Liquor, it fhall be dispierfed, according to the Verfes of Serenus;

\[\text{Corvus geminus molucbuerunt styxine papes,} \\
\text{Istc longum puritir nervos medicina fictur.}\]

And it is no marvel that the vertue of this fhould go from the knees to the Nerves, feeing that Pliny affirneth, that from the anointing of the knees the favour goeth into the fomach: there is fo great affinity or operation of Rue upon the bones, that in antient time they were wont to cure burtnefts by anointing the Codis with wilde Rue and Swines greafe.

Also this Greafe with rutt of Iron, is good againft all the imperfections in the feat. Butter, Goofe greafe, and Hogs greafe, are indifferentely used for this infermity. Also this is used to keep Women from abortments that are subject thereunto, being applied like an eye falve. In the diseases of the Matrix, especially Ulcers, they fift of all dip Spunge or Wool in warm water, and so cleanse the places infected, and afterwards cure it with Rozen and Swines greafe mingled together, and of- ten using it in the day and night by way of Oyment; but if the exulceration be vehement, after the washing they put Hony unto the former confection, and some make a perfume with Goats Horn, Gals, Swine's greafe, and Gum of Cedars. And Fermerius faith, that Lard cut small and beat in a Morter of foyle like palle, in a Limbeck of Glaffe, rendereth a white water, which maketh the hair yellow, and also the face comely. If a man be poiuned with Helmock, he cannot avoid it better, then by drinking Salt, Wine, and freth Greafe. A decoction hereof is good against the poulon of Buarefris, and againftquickliver. The fetewe of a Sow fed with green Herbs, is profitable to them that are fick of a conumption of the Lungs, according to this Verfe of Serenus;

\[\text{Prociis. & vetris seki pliis fumpfa suffi.}\]

This may also be given them in Wine, either raw or decocted, or else in pis to be swallowed down whole if it be not salted, and the fift day after they precribe them to drink out of an Egge- shell Liquid Pitch, binding their fides, breast, and shoulder bones very hard. It is also used for an old Cough after it is decocted, the weight of a Goat being put into three cups of Wine with some Hony. It is given also to them that have the flux, especially old Lard, Hony, and Wine, being beaten together.
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together till they be all as sticke as hoary, whereof the quantity of a Hasil-nut, is to be drunk out of Water. Also parcells of Swines greafe, Butter, and Honie, being put down into a Horse throat, cureth him of an old Cough; and finally a piece of this Greafe being old, moistened in old Wine, is profitable to a Horse that hath been overheated in his journey. When Calves be troubled with belly Wormes, take one part of Swines greafe, and mingle it with three parts of Hysof, afterwards thrust it down into the throats of the Calves, and it shall expell the Wormes.

When the tongue and chops wax black by a peculiar sickness of the mouth, which the Phyfians call Morbus Epidemius, it is most wholesome to rub the tongue with the inner side of the rines of Bacon, and so draw out an extreme heat: and it is said if a man be deeply infected, whole tongue is thus rubbed; the said Bacon being eaten by any Dog, will procure his death. The fat of Wolves and the marrow of Swine is good to anoint bleaf-eyes withal. By swallowing down the marrow of Swine, the appetite to carnal copulation is encreased.

The ashes or powder of Hogs briftles which are taken out of Plaisterers Pencils, wherewithal they rub wans, and mixed with Swines greafe, doth ease the pain of burnings, and also layeth the bleeding of wounds, and the falling down of the fest being first of all washed in Wine and dryed Pitch mingles therewithal. The powder of the cheek-bones of Swine, is a moft preuent remedy for broken bones, and alfo for ulcers in the legs and thins. The fat of a Boar is commended againft Serpents, and is alfo the liver of a Bore Pig when the Fibres are taken from it, if the weight of two pence be drunk in wine.

The brain of a Sow toasted at the fire, and laid to a Carbuncle. either difperfeth or emptieth it. Likewife the blood and brains of a Boar or a Sow, or Boar Pig being mixed with Honie, doth cure the Carbuncles in the yard, and the brains alone, openeth the gums of children, to let out their teeth, as Serden writeth;

Aet teneris cerebrum gingivis illin poro.

There are naturally in the head of a Hog two little bones that have holes in them, one in the right part, and another in the left. Now if it happen that a man finde these bones by chance, either one or both of them, let him lay them up safe; and whensoever he is troubled with the Head-ach, let him use them, hanging them about his neck by a filken thread, that is to fay, if the head aches on the right side, let him hang the right bone, and if on the left, the lefl bone: These things I report upon the credit of Marcofttus. Galen also writeth, that if the pole of the Swines ear be hanged about ones neck, it will preserve him from all Cough afterwards.

They were wont, as Doforides writeth, to feethe a Gudgen in a Swines belly, by the eating whereof, they flayed the falling down of the fest. If a man eat the lungs of a Boar, and a fow fadden and falling, they will prefervc him from drunkenness all that day; and likewife the faid lungs doth keep the foles of the feet from inflammation which are caufed by ftraithe fhoes. It alfo healeth the pufhes, clifts, and breaking of the skin, and kines of the feet, by laying to it a Boars gall, and a Swines lungs.

If a man drink the Liver of a Sow in Wine, it fayeth his life from the bittes of venemous Beasts. Also the liver of a Boar burned with Juniper-wood, cureth all the faults in the feetecr; and drunk in Wine without Salt after it is fod, fayeth the loofefees of the belly. The gall of Swine is not very vehement, for as the whole body is waterfif, fo alfo is that; neither is there any beaft herein com parable unto it, (except the wilde) and that is enemy to Ulcers, ripening the fore, fattering the evil humors, and refilling the bittes of venemous Beasts. Also the gall of Boars layed to bruited Articles, doth procure unto them wonderful eafe. One fhall take away an old fcurfe very eafily by the gall of a Sow, which fawrrow if it be mingled with the juice of the hearb Sicelamine, and there withal to rub the head well in a Bath. To keep hair from growing upon the browes when it is once plucked off; Take the gall and fat of a Boar, and put them into a smooth thick earthen pot, and of the sharpel Vinegar and oyf of Almonds four ounces a piece, pour that into it, and then binde the mouth of the pot clofe with a thick linen cloth, fo letting them stand seven dayes, afterwards open them again, and you fhall finde upon the top a certain fume like gold, wherewithal anoint thofe places, which you would have remain bald, after that you have beaten it together in a morter: likewife the gall of a Barrow Hog or Boar Pig, doth fatter Apollemes and banches in any part of the body. The gall of a Hog dried in an Oven, and laid upon a Carbuncle, as much as will cover it, it cleaveth fai to the fore, and draweth out the rooth and core thereof.

It is likewife good againft the Ulcers of the ears, except the Ulcer be of long continuance, and then it is good to use a sharper gall, such as is a Sheeps, an Oxes, a Bears or a Goats, they mingle herewithal sometimes oyf of Rofes; but for old wounds in the ears, it is good to take one part of bell Honie, and two parts of the sharpel Vinegar, and fo let them boil in the fire three walymes, afterwards let them fan off from the fire, until it leave fecting or boyling, and then put Nitre unto it, fo long till you know by the Vapour that the Nitre is fetted, then fette it again upon a gentle fire, fo as it boyleth not over, and layeth put into this the gall of a Boar, or of a Goat, and then fette it the third time, taking it from the fire, when it is lake-warm, infuflte it into the ears, and this gall must not be the gall of a Sow, except of such as never bare Pig. Also this gall being dried, doth
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doth cure the Haemorrhoids and kibes. There are also certain flisters or clits in the hoofs of Horses, which are cured in one nights space, by applying unto them the gall of a Barrow hog, mingled with the yolkes of Eggs.

The blather of Swine will provoke urine, and of a Boar Pig fod, roasted or boyled, and so eaten and drunk, caufeth a man to contain his urine, which never could before. When the head of a Man is exuclerated and runneth, take the bladder of a Barrow-bog, with the Urine, and caft the same into the fat cut small, afterwards mingle it with Salt, that it may appear all white, then binde it up falt, and dig a hole in the Garden about a cubit deep, wherein bury and cover the said gall, and let it rest forty or fifty days in the earth, till the matter therein contained be purified, then take it out and melt it in a dith, and keep the ointment that arifeth of it. Then walfe the head all over with lye, unto the intent that it may not be offended through the Acromy thereof, mingle it with new wine or with water, and then when it is dry after such washing, anoint it with the said ointment, and fo will the noxious and unclean hairs fall every one off, and new pure ones arife in their place, and you muft be very carefulfull to keep the head from cold.

They were wont to give the flones of Swine against the Falling ticknes, but when they were first dryed, and afterwards beaten to powder, and given to the fick party in Swines milk, so he was commanded to abatian from wine many days before, and after he received it for many dayes together. In Satyrs they take the flones out of a young Hog when they geld him, and scour them at the fire fo long, till they may be crufted to pieces, and this they prefiere to be drunk in Wine against the Colick.

Some give the powder of Boars flones to men and women, to increafe copulation and conception. The Magicians or wife men of the East prefiere to drink for the incontinency of urine, the powder of a Boar Pig's flones out of sweet wine, and then to make water in a Dogs kennel, which while he is doing, to speak to himselfe the words; Ne ipse utram factam in foco cubile; but I will leave this superltition, as not worthy to be Englished. Some take the bladder of a Sow burned to powder, and drunk for this infirmity, and some a certain liquorish poyfon, which dropeth from the Navel of a Boar Pig, immediately after it is farrowed.

Bacon beaten together, and made like meal, is good against a continual Cough, or flayeth bleeding at the mouth. Bacon broath is also mingled with other medicines against the Gowe, and they make an emplaifer of Bacon to scatter gravelly matter in the bladder. The bones of Bacon about the hips are kept to cleene and rub teeth, and by burning of them, not only the loofe teeth in men are faltned, but also the wormses in the teeth of beaf's are killed. If a Horfe be troubled with the Glanders or any fluch liquid matter running out at his mouth and nose, then let the broath whereof in Bacon and Swines feet hath been fold, be mixed with hone, and fo strained afterwaerd, let it be beaten well together with Eggges, and so infalud into the left Noifril of the Horfe, Gagnarius prefierebath an Emplaifer to be made of Cheefe, and the feet of Swine against the shrinking up of the finewes.

The ankle bone of a Sow being burned untill it be white, and bruised and taken in drink, doth cure the swellings of the neck, and pains of long continuance. The ankle bone of a Sow burned and bruised, and given to drink only in Water, is a remedy against the Colick and stone. The ankle bone of a Sow doth drive away those swellings which arife in the stomack, and doth ease the pains of the head.

The ashes of the ankle bone of a Sow or Boar, doth cure Corns, clefts, or other riffs in the skin, and the hardnes of the skin that is in the botom of the feet. It is also shewed, that if the bone shall be hung about the neck of thofe that are troubled with quarrain agues, that then they shall be far better, but of what bone he speakeyth, it is uncertain, but as he remembreth it is the next bone before the fat of the ankle bone.

The bones that are taken from the hoofs of Swes, burned and beaten to powder, are very good to rub and cleene the teeth: Alfo the bones next to the ribs of Bacon, being burned, are very good to fatten the teeth. The bones that are taken from the hoofs of hogs, and burned to powder, are ufed to cleene the teeth, and it is very good alfo to fatten the teeth. The ashes which are made of a Harts horne, or of the hoof of a Hog, are very good to cleene or rub the teeth. The bones which are taken from the hoof of a hog burned and beaten to powder and sifted, and a little Spickard added thereto, doth make the teeth very white, by often rubbing them therewith. The ashes of the hoofs of a Boar or Sow, put in drink, doth flay the incontinency of Urine, and alfo the Bloudy flux. Take as much Mercurial foddon, as ones hand can hold, sod in two pintes of Water unto one pint, and drink the fame with Hony and Sale, and the powder of a Hogs hoof, and it shall loofe the belly.

The milk of a Sow drunk with sweet Wine, helpeith women in travell; and the famine being drunk alone reftoreth milk in Women's brefts; it is also good againft the Bloudy flux and Tiffick. The flones of Swine beaten to powder, and drunk in Swines milk, are good againft the Falling ticknes. The wife men were wont to prefiere the left foot or leg of a Camazlion to be bound unto the feet against the Gowe.

There are afo many ufe of the dung of Swine, and first of all it being mixed with Vinegar, is good againft the bitings of venemous beafts, and Alinn maketh an Empaiifer thereof, againft the bitings of a Crocodile. It is to be applyed fingle against the flinginge of Scorpions, and alfo the biting
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...biring of any other reptile creature. If a Serpent bite an Ox or a Horse, or any other Four-footed Beast, take the talk of Nigella, and beat it into a pinte of old wine, so as all the juice may go out thereof, then infue it into the Nostrils of the Bealt, and lay Swines dung to the fore, so also it may be applied unto men, whereunto some do add Hony Amick, and the Urine of a man, and so it is to be applied warm, it being also warmed in a shell, and dryed to powder, mixed with Oyl, and layd to the body, eafeth outward pains. It it likewise profitable against burnings, itch, scabs, and blisters, and trembling of the body, according to thele Verfes of Serenus:

\[Sercorius ex porco cinereum confundito lymphi:\]
\[Sic pavidum corpus, dextra paflente fouert.\]

This is also commended against hard bunches in the body, hardnes of the skin, clifts and chinks in the fieth, freckles, lice, and nits, and also the breaking of the finews;

\[Stci forte lapis teneros violerit armus,\]
\[Non pudet uterum proterre produce porce.\]

It is also good to flay bleedings at the Nofe, if it be layed to the Nostrils warm, and to flay the bleedings of Beasts, if it be given them in Wine; the fame being mixed and covered with Hony, is annointed upon Horfes for the Quinie, or swellings of the throat. If the breasts of a Woman do swell after her delivery of childe, it is good to anoint them with water, and the dung of Hogs, also the powder thereof mixed with Oyl, is profitable for the secrecies of men and women. If a man have received any hurt by bruises, so as his bloud flayeth in his body, or suffer Convulsion of the Nerves through Cramps, those evils are cured by the dung of a Boar gathered in the Spring time, dryed and sod in Vinegar, and some of the later Phaffians prescrib it to be drunk in Water, and they say that Nero the Emperor was wont to use that medicine, when he would try the strength of his body, in a running Chariot: also the powder of the fame being drunk in Vinegar, is profitable for the Rupture and inward bruises, and warmd in Wine against all manner of fluxes and Tificks. For the pains of the Loins and all other things which need mollifying, rub them fift of all with Deers greatfe, and then sprinkle them with old Wine mixed with the powder of Swines dung.

The Urine of a Swine is also good againft all bunches and Apostemations being layed to in wool. 

The urine of a Boar Pig dryed in the fmoak, and drunk with Sweet Wine, the quantity of a Bean, is profitable against the Falling evil; against the whitenefs of the eyes, and the fione in the reins and bladder. And thus much of the Swine in general.

Of the Wilde B O A R.

T his Beast is termed by no other name then the common Swine among the Hebrews, namely, Chaiyr, as you may fee in Pial 80, where the Prophet speake of Chaiyr de fliou; that is, the Boar out of the wood. The Grecians call him Capros and Syagros, and Clunis; although fome take Clunis for a Boar of an exceeding great stature. Aristophane fayth, that there are fome of this kinde which
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which are called Μοινα, which word by St. Cyril upon the Prophet Hosea is interpreted a wilde Affe, but I rather incline to their opinion which say, that Χλονις, Μοινα, and Χαυλιδουν are Poetical words for cruell Boars. Αριεθαλε is of opinion, these Boars being gelt when they are young, grow greater and more fierce, whereunto Homer also yeeldeth as he is thus tranflated:

\[\text{Nurtit exustum Sylvia borentibus aprum}
\]

But this is to be underwond of such Boars, as by accident geld themselves by rubbing upon any tree. The French call this Beall, Sanglier and Porc Sanglier; the Italian, Ginghiale and Ginghiare, and Porco: The Spaniards, Puerco Sybyrjata, and Puzco monter, and Σαλαδι; the Germans, Wild Schwarz; the Hyrtius, Veprez: and the Latinis, Αψερ, for Porco signifieth the tame Swine, and Αψερ the wilde. The reaoning of this Latin name Αψερ, is derived from Αψερ, because he liveth among the sharpe thorns and woods, but I rather think, that Αψερ is derived from Κατοις the greek word, or else Αψερ is from ιατρος, from fierce, and wilde, by changing one letter into another.

The Epithets of this Beall are many, both in Greek and Latin, such as these are; sharp, wilde, Arcadian, Atalantean, troublest, bloudy, toothered, hard, Ermanthian, cruel, outrageus, fierce, strong, gnathing, lightning, yellow, raging, Acorn-gatherer, quick, rough, rough-haired, horrible, Monstous Myson, Megacran, threatening, wood-wanderer, cruel, Seleucian, brittle better, foaming, strict, filthy, Terean, Thyran, fearful, wary-faced, treulent, devourer, violent, Umbrian, wound-maker, impetuous, mountain-liver, armed on both sides, and such like.

But of these Epithets there are only three, Ermysthean, Caldonian, and Myfian, which do offer unto us peculiar stories, according as we finde them in the Poets, which we will prefix by way of moral discourse before we enter into the natural story of this beall. First of all, Ermystheus was a hill of Arcadis, wherein was a wilde Boar, that continually did defend down and depopulate their Corn-fields; Hercules coming that way, and hearing of that mischief, did kill the said Boar, and carried him upon his back to Eurystheus, whereat Eurystheus was so much afraid, that he went and hid himself in a brazen vessell, whereof Virgill speaketh thus:

\[\text{Placrit silvam, & Lernam transrectit arcu.}\]

And of this Ermysthean Boar Martial speaketh;

\[\text{Quantus erat Caldon, aut Ermysthe taur.}\]

Of the Caldonian Boar there is this story in Homer; When Oenous the Prince of Aetolia sacrificed the first fruits of his Courtnery to the Gods, he forgot Diana, wherewithal she was very angry, and sent among the people a savage Boar, which destroyed both the Courtrey and Inhabitants: against whom the Caldonians and Plenomanus went forth in hunting, and first of all that wounded the wilde Beast was Melleager, the son of Oenous; for reward whereof, he received his head and his skin, which he beftowed on Atalanta a Virgin of Arcadia, with whom he was in love, and which did accompany him in hunting; wherewithal the sons of Thebass, which were the Ulces of Melleager, were greatly offended (for they were the brothers to his mother Althbe) those men lay in wait to destroy him, whereof when he was advertised, he killed some of them, and put the residue to flight. For which cause the Plenumani made war against the Caldonians: in the beginning of which war Melleager fell out with his Mother, because she did not help her Countrery. At last when the City was almost taken, by the persuasion of his wife Cleopatra, he went out to fight with his enemies, where in valiant manner he flew many of them, others he put to flight, who in chace running away, fell down uppon steep rocks and perihed. Then Althbe the mother of Melleager, began to rage against her son, and flung into the fire the torch which the Fates had given unto her to lengthen his days; so when she saw her son was dead, the repentted and flew her self, and afterwards was cast into the very self same burning fire with him. In the hunting of this Boar Attean the companion of Jaten to Colbeis was slain. This Boar is also called a Melogran and Ataliamon Boar, of whom Mertial writeth thus;

\[\text{Qui Diomedes metauendus Setiger agit}
\]

And again in another place;

\[\text{Latte mero posfam pigra mibi moris alumnam}
\]

It is said that this Boar had teeth of a cubit long, and the manner of his hunting was expressef in the pinnacle of the Temple of Tegea, for which caufe he is called the Tegean Boar. Upon the one side of the Boar against his middle, were painted Atalanta, Melleager, Thebass, Thalamon, Peleus, Polux, and Jebus the companion of all Hercules travails. Probus and Cometes, the sons of Thestines and brethren of
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of Albes, on the other side of the Boar flood Ancus wounded, and Epechus sustaining his hunting spear; next unto him flour Castor and Amphirion, the son of Oeneum. After them Hippothus, the son of Cerion, Agamedes the son of Symphilus, and lastly Pyritis. The teeth of this Boar were taken away by Augustus after the time that he had overcome Anthony; which he hung up in the Temple of Bocchus, standing in the Gardens of the Emperor. And thus much for the Calidian Boar.

Now concerning the Myfian Boar, I finde this story recorded of him: When Adriasus the Phrygian, who was of the Kings blood, had unawares killed his brother, he fled to Saris, and after his exposition dwelt with Crefus. It happened at that time that there was a wide Boar came out of Olismus, and waited a great part of the Country of Myfia: the people oppressed with many loaves, and terrified with the presence of such a Beast, besought the King to send his own Son Antiyor with much company to hunt and kill the Boar. The King was afraid thereof, because in his dream he saw a vifion, his Son perishing by an iron spear; yet at last he was persuaded, and committed the garded of his body to Adriasus. When they came to the wide Beait, Adriasus bent his spear at the Boar, and while he call it to kill him, the son of Crefus came betwixt them, and so was slain with the spear, according to the dream of his Father. Adriasus seeing this misfortune (that his hands which should have defended the young Prince, had taken away his life) fell into extreme passion and sorrow for the same, and although the King knowing his innocence, forgave him the fact, yet he flew himself at the Funeral of Antiyor, and so was burned with him in the same fire. And thus much for the Myfian Boar.

Now we will proceed to the particular story of the wide Boar, and first of all of the Countries breeding Boars. The Spaniards say, that in the new found world, there are wide Boares much lefle than ours, which have tails so short, that one would think they had been cut off, they differ also in their feet, for their hinder feet are not cloven, but stand upon one claw, and their forefeet are cloven like common Swines. Their fleth also is more sweet and wholesome than common Swine's fleth, whereof Peter Martyr giveth reason in his Ocean Decades, because they feed under Palm trees, near the Sea-shore, and in Marshes.

Olaus Magnus writeth, that in divers places of Scandinavia, they hunt wide Boars which are twelve foot long. The wide Boars of India according to Pliny have teeth, which in their compass contain a Cubit, and besides their teeth growing out of their chaps, they have two horns on their head like Calves horns. In the Islands Moder, there are abundance of wide Boars, Likewise in Helevisia, and especially in those parts that joyn upon the Alpes, where they would much more abound, but that the Magistrates give liberty to every man to kill and destroy them. There are no Boars in Africa, except in Ethiopia, where their Boars have all horns, and of those it was that Lycaon the Countryman law in a publick spectacle at Rome;

Et nivos lepares, & omn fine cornibus apros.

that is, Hares white like Swine, and Boars that have horns. It is a wonderful thing that there are no Boars in Creet, and no leffe admirable that the Boars of Macedon are dum and have no voice; and thus much concerning the Countries of Boars.

Now concerning their Colour, it is observed, that wide Boars for the most part are of a black and brown colour, especially at the top of their hair, and somewhat yellow underneath, and yet Pausanias writeth, that he hath seen Boars all white; howbeit that is not ordinary. Their bloud is sharp and black like black wine, and such as will be thick, their eyes like to the eyes of wrathful beasts, as Wolves and Lyons. Their tusks are most admirable, for with them while they are alive, they cut like sharp knives, but when they are dead, they have loft that cutting property, the reason of it is in the heat of the tooth, for it is certainly affirmed by Hunters of wide Boars that when the Beait falleth first on the earth down before the Dogs and Hunters, if one pull off a bristle from his back, and lay it upon the tusk, the heat thereof will make it shrink up and turn together like a hot iron, and if Dogs do chance to touch them, they burn their hairs from their back, whereby the ardent and fiery nature of this Beait is manifest, as an everlasting monument of the work of God, and yet notwithstanding all their wrath they have no gall, (as Pliny writeth) their head and face are their strongest parts, and therefore upon them they receive the Hunters blowses as upon a bocket.

Their tears which they fend forth of their eyes are very sweet, and of all other things they cannot abide their own urine, for it is thought to be so hot that it burneth them, and they can never run away in flight till they have emptied their bellies thereof. The place of their abode is for the most part in the Marshes and Woods: for the Sesthians did hunt Hars and wide Boars in the Marshes, but Roes and wide Affes in the plain fields. Sometimes they hide themselves among Fern, which they have gathered together in the fields, and they dig holes and ditches for themselves, wherein they rest: And this is observed, that they love not so much to wallow in the mire, as the tame and domesticall Swine, although they be of a hot and fiery nature. Their voice is like the voice of common Swine, but the females is somewhat more thrill. They live for the most part solitary and alone, and not in beards as the other do, and feed upon such meats as the vulgar Swine. Toactus faith, that there is a kind of green Corn in Germany, which is armed with very sharp iilks and points at both ends like Barley, this the people do seethe and eat like pease.

Now forasmuch as wide Boars are destroyers of their Corn, they sow that grain near the Woods
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woods sides where the Boars abide, whereby they defend and safeguard their better Corn. Bores do also eat the worms of the earth, which they dig out with their noses; and in Pomphilia and the mountains of Citha, they do eat Salamanders without hurt or danger to themselves, and yet if men chance to eat of their flesh which have so devoured them, they die afterwards through the poyson: whereby it manifestly appeareth, that there is danger in eating wilde Hogs flesh. Hemlock and Henbane is also poyson to Swine, which they never eat but unawares, and having eaten it, presently they lose their strength in their hinder parts, whereby they are fain to draw them after them, and in that manner they crawl to the water sides, where they gather together Smalls and Sea-crabs, by eating whereof they are restored to their former health. Ivy is also a medicine for the diseases of Boars, and old age maketh them altogether unfit to be preferred. Therefore in ancient time when they kept Boars in Parks, whereof Pulvinus Hirpinus was the first builder, Lucius Lucullus and Quintus Hortensius the immediate followers, I say they never kept Boars past four year old, because after that time they waxed lean and pined away.

Now concerning their generation or copulation to engender, it is certain that they do not couple often in the year, as the tame Swine, but only once, and that in the beginning of Winter, or the middle, so that they may bring forth in the Spring time of the year; and they choose the most unused, narrow, hollow, and steep places to couple in. The male abideth with the female thirty days together, and the female beareth her young ones, both for the number and the time answerable to the vulgar Swine. When the Boar is in copulation before-hand, while he worketh the Sow, he carrieth a mouth as white as any Horfe, which as in the Horfe it rileth through vehement hirring, so in the Boar it rileth through vehement heat and fervor. In the time of their lust they are very sharp, eager, and cruel, fighting with all males that come in their presence, and therefore they arm their bodies by bowling in the durt, and also by rubbing them against trees, that so they may be hard to withstand one another. This fight of Boars is thus described of Virgil:

Per situm tum Leas Aper, tum paffima Piggia,
Spiritus demetque labellum exuit Sue,
Et pedibus subitus terras, fricat aere cofas,
Altis hinc aq; ibique humeras ad vulnera durat.

The fight of Boars.

Being inflamed with venerable rage, he sall ethether upright the bristles of his neck, that you would take them to be the sharp fins of Dolphins; then chempeth he with his mouth, grathet and grafeth his teeth one against another, and breatheth forth his boylng spirit, not only at his eyes, but at his foaming white mouth, he defirgeth notthing but copulation, and if his female endure him quietly, then doth he satisfie his luft, and kill all his anger; but if the refue, then doth he either conftrain her against her will, or elle layeth her dead upon the earth. Sometimes they force a tame Sow, and then the Pigs so begotten are called Hibride, that is, by way of contumely, Baitards: And it is to be observed, that never any wilde beast being tamed, doth engender by copulation, except he be begotten young, only wilde Boars do quickly mingle with vulgar Swine. The female of this kinde hath no teeth standing out of her mouth like the male, except very short ones, and therefore the refidue are more like a faw then the teeth of a Boar, for it is a general rule;

Non identes exerti quibus ferrati.

Concerning the disposition of Boars in generall, it is brutish, stubborn, and yet courageous; wrathfull and furious, because their blood is full of fibres, and miniftrith unto them sudden matter of anger; neither are there any beafts so cloathed with hair as Lions and Boars; wherefore both of them are of like fierce and angry nature, yet we have shewed in the story of the Harr, how they were drawn from their meat and dens by the voice of Muffick. It is said, that they are not capable of any discipline or instruction, and yet Scatiger affirmeth, that he saw a Bore that belonged to the Lord of Salufment, of an exceeding great stature, tamed by his master, who at the founding of the horns, would come running like a Dog to hunting, and go abroad with his master among the Dogs, contending with the most swift in race to attain the prey.

They naturally defire to bury their own footsteps in wet miry places, that they may not be found out by the Hunters; and as the rage of the Boars is greatest in the time of their luft, fo is in the Sowes after their farrowing; and therefore it was an excellent speech of Cynareis unto Cyrus, that Swine when they see the Hunter, although they be many, yet run away with their Pigs; but if the Hunter follow one of the young ones, then doth the Dam turn again, and with all her force endeavour to destroy him that would deprive her of her young ones. Before the Boars do fight, they go and wett their teeth, but while they are in contention, if it happen that a Wolf cometh in fight, then they forfake their mutuall combat, and all of them joynt together to drive away the Wolf. The Beare dareth not to enter upon the wilde Boar, except behinde him, and unawares. Hefod faith, that Vulsan pictured upon the shield of Hercules, the images and shapes of many wilde beafts fighting one with another, neither of both yeelding to other, till both of them fell down dead, which caufe αλεθιον to make this Emblem of a Vulture standing by to fee their contention, and
and suffered them to kill one another without parting, whereby afterwards they enjoyed their dead carcases:

*Dom favis virent in mutua vulnera telis,*
*Unique leonerae, dente timendum aper,*
*Accurit vulse seditatum, et prandia captat,*
*Gloria victoris, prada future sua est.*

It is reported that Boars will swim single and alone like fishes, and some of them two together like Wolves, and many times in flocks and heards like Roes, for such is their ardent nature and desire of meat, that they fear not the highest Mountains, nor the deepest waters. Now concerning the fleth of wilde Boars, although we have spoken abundantly in the former discourse of Swine, yet must we add something in this place: For although generally the fleth of tame Swine is visous and cold, yet the fleth of the wilde is more temperate and nourishable, and of lighter conception and stronger nourishment. Therefore those which had a Timpany were preferred to eat Boars fleth and wilde Sowes, for it drieth, strengtheneth, and moveth; and men that are vexed with Saint Anthonies fire, are forbidden to eat all falt meats, and leavened bread, yet permitted to eat of Boars fleth. It is reported, that *Publius Strutius Radius,* was the very first among all the Romans that did set at his Table a whole Boar, most delicately dreFFed and stuffed with variety of divers comly dishes; which Boar by *Varro* is called *Aper Millionius,* that is, *Mille librarum,* of a thousand pound worth; against which intolerable gluttony and cott; *Vesalius* made these Verles;

---Quanta est guia quefli notor
Point Aperos, animal poper convivio natum.

*Apitius* in the beginning of his eighth book, prescribeth the manner how to dresse the fleth of wilde Boars, whereithall if any be delighted, let him read that book; for it is not my purpose in this Treatise, to blot any paper with any long instruction for Cooks and Belly-gods, neither were it any part of this natural History, nor yet agreeable to my calling or enterprise: and therefore I will only add this observation of *Cruithet,* that Boars fleth fline lax in powdering tubs, doth change both colour and taste, at that time of the year where in the living Boars doe rage upon their females: And thus much shall suffice to have spoken of Boars fleth.

Now in the next place we will proceed to talk concerning the hunting of Boars, which is not only a pastime for Lords and Princes, but also a necessary labour for meaner men; for as the harm that cometh by Boars is exceeding great, and so much the greater by how much he is poorer that doth fulfill it, so the utility to learn the means of destroying this beast is more cominducible, becaufe the common proverb is more true in this then in the vulgar Swine, that they never so good till they are dead.

It is reported of *Diocletian,* when he was Agent for the *Romans in France,* there came an old Woman called *Dryas* unto him, and reproved him for his covetousneffe, telling him that he was over-sparing, and parfimonious; to whom he anfwered in jeft, *When I am Emperor I will be more liberal:* *Dryas* replied unto him, *Noli jocare Diocletiam, nam imperator eri cum Aperum occidere.* That is, *Jelt not, O Diocletian:* for thou shalt be Emperor when thou haft killed Aper; (that was a Boar as he thought) and therefore he gave himself to the hunting of Boars, never sparing any time that was offered unto him, always expecting the event of that speech; whereof he was frustrated until he killed *Arius Aper,* the Governor of the Judgement Hall, and then afterwards being Emperor, he knew that the woman did not mean a Boar, but a man. Now therefore the hunting of Boars, and the manner of their taking is many ways, either by violence in chafe, or by policy in ditches and traps, or else by impoyoned baits. The best time of their hunting is in the middle of Winter, as some fay; but I think the Winter is the worst time, because then they are strongest, and seeing all Swine are impatient of heat, the Summer will quickly end their life, if then they be chafed. It behoveth therefore the Hunter of Boars to be very warie, and therefore the Ancients ordained that such a one should wear a rough garment of a brown colour, and likenfike that his Horfe should be of a yellow and fery colour, and that the Boar-spear fhould be frong and sharp, for this beast is armed with a very strong head and skin, and besides they cover themselves with dried durt as it were with a Coat of male to blunt the weapon, and therefore he runneth willingly either without dread or fear upon the Hunters. In which encounter if he receiveth not a deadly wound; he overthoweth his adversary, except he fall flat on the ground, for the Boars teeth cannot cut upward, but downward; therefore if the Hunter be a foot-man, he must feat himself neer some tree, and then alfo provide that if he misse the Boar, he may easily climb into the boughs, and fo fave himfelf; but if the Swine that is raised be a female, she will all to tear and bite the Hunter with her teeth if the get him within her clutches: wherefore, for the more speedy ending of the hunting, it is good to raffe the beast early in the morning, before he hath made water, for the burning of his bladder doth quickly make him weary.

But if the Boar have either made water before, or got liberty and reft in the chafe to eafe himself, then will his taking be very difficult and tedious, such is the nature of this courageous beast that he never ceafeth running till he be weary, and being wearie diffembleth the fame by

* Aa a  

fitting
firing upon his buttocks, and offereth combate to his Hunter, and yet he is not wont to strike a man, until he be wounded first by him. When the Boar is first raised out of the Wood, he snuffeth in the wind, lifting up his nose to smell what is with him, and what is against him.

The hunting Spear must be very sharp and broad, branching forth into certain forks or horns, so as by no means the Boar shall break through them upon the Hunter, and when he bendeth the same before the beast, he must stand with one leg before another like a Wrestler, holding his left hand upon the middle of the Spear to direct the same, and the right hand behind, to thrust it forward with violence, having his eye intent upon the beast, and if it be a Boar to wound him in the middle of his forehead between his eye-lids, or else upon the shoulder, for in both those places the wound is deadly; but if he chance to hit him on the cheek, the greatest harm that he doth him, is that he maketh him unfit to use his tusks: of this he must be very careful that if the Boar leap upon him, he like wise must give back and draw out his sword; and if he chance to be overturned, then to lie down in some hollow place where the Boar cannot come at him with his teeth.

Now concerning the instruction of Dogs, and the choice of such Hounds as are appointed for the hunting of Boars, you must note, that every Dog is not fit for the same, but great maitives, such as are used for the baiting of Bears. For the Boar first of all terrifieth the Dog with his voice, and if he be not ready to fight but to run away, then are the Hunters in worse case then at the beginning. Therefore they must be sure to have them well instructed before they give the onset, and be likewise at hand to encourage them. When they come first of all to the place wherein they conjecture the Boar is lodgd, if there be no appearance either by his footsteps, or by the wounds of his teeth upon the trees and boughs, then let them let loose one of the best Hounds, and calling about the Wood, follow with the residue whether the crie goeth.

The Dog preseth into the thickest bushes where commonly the Boar lodgeth, and when he hath found the beast he standeth still and bayeth, then must the Hunter come and take up that Dog, for the Boar will not stir very easily out of his lodging, and go and set up his nets and toys in all the by-places, whereby it is likely the beast will pale, and these must he hang to some trees, for polites in the earth will not suffice, always making the inside of them very light, that the beast may suspect no harm. The nets being thus set up, let him return again to his Dogs, loosing them all; and every Hunter arming himself with darts and a Boars Spear, to let the most skillfull follow the Dogs close to exhort them and set them on, the residue follow one after another a good distance, scattering themselves into sundry angles, for their better safeguard and end of their sport; for if they should come all together, the Boar might light upon them, and wound some of them, for upon whomsoever he falleth in his rage he hursteth them: furthermore when the Dogs begin to come neer to his lodging, then must they be set on more eagerly, and so heartned that they be no wayes appalled at the rasing of the Boar, for his manner is to make force at the foremost Dog that is neerest to him, so must he be followed in chase even unto the nets, but if the nets stand upon a hide-hill, or a steep rock, then when he is infared he will get out with no difficulty; but if it stand upon plain ground, the toys will hold him till the Hunters come, who must presently take care to wound him with darts and spears before they meddle with him, compelling him round about very warily, so that he nor they hurt any of the Dogs, and especially they must wound him in the face or shoulders, where the wounds are mortal, as I have said before; but if it happen that the beast geteth loose when he feeleth the blows, the Hunters must not start away, but the strongest of them to meet him with his spear, setting his body as we have formerly expressed, having an especial eye to the beasts head, which way so ever he windeth and turneth the same, for such is the nature of the Boar, sometimes he catcheth the spear out of the Hunters hands, or else recolleveth the force back again upon the imiter, for by both these means the Hunter is overcome and overthroweth: Wheneuer this hapneth, then is there but one means to save the Hunters life, which is this: another of his companions must come and charge the Boar, making as though he would wound him with his dart, but not casting it for fear of hurting the Hunter under his feet. When the Boar feeth this, he forfaketh the first man, and rufheth upon the second, who must look to defend himself with all dexterity, composing his body, and ordering his weapons, according to artificill Boar-hunting, and in the mean season the vanquished Hunter must arise again, taking firft hold upon his spear, and with all courage setting upon the adversary beast, to wound him either in the shoulders or in the head, for it is no credit to escape with life, except he kill and overcome the Boar.

When he feeleth himself thus wounded that he cannot live, if it were not for the crosses and forks upon the Boar-spear, he would presse in upon the vanquisher to take revenge for his death: For so great is the fervent wrath of this beast, that he spareth not to kill and wound, although he feel upon him the pangs of death: and what place soever he biteth either upon Dog or man, the heat of his teeth inflincketh a dangerous inflaming wound: and for this cause if he doth but touch the hair of Dogs, he burneth it off: but if it be a female that is rased, (for there is as great a rage in females as in males, though not so great power) then must the Hunter take heed he never fall to the ground, for as the male hursteth not but when a man flandeath or lieth high, so the female hursteth not but when a man falleth or lieth low: therefore if the Hunter chance to fall, he must raise himself with all speed, using no leffe dexterity and courage against the female, then he doth against the male.
Of the Swine.

There is also another manner of hunting wilde Swine, which is this. First of all they set up their netts in all passage, through which it is likely the beast will go, then do the men and Dogs with a gallant crie, filling the woods and fields, raise them out of their lodgings. In the mean season setting some valiant Hunters to keep the nets. When the beast perceiveth that he is hunted after, up he tarrett, looking about him like an evil spirit, where he may devour, but being terrified with the crie of men, and pursu'd by a multitude of greedy Dogs, forth he runneth in some of his usuall ways, carefully looking behind him, to avoid the train that followeth, until he fall fift enclosed into the Hunters nets, then cometh the keeper of the nets, and woundeth him with his Boar-spear, as I said before: but if it fortune that he fall out of the nets, or never cometh to them, then must they prosecute him, both men and Dogs, until they have wearied him, for such is the heat of his body, that he cannot long stand, and although he shall lodge himself in some Marith or Woods where the Hunters can have no use of their nets, yet must they not be afraid to approach unto him, and with such hunting instruments as they have, shew the magnitude and courage of their minde, by attaining their game by the strenth of hand, when they are deprived from the help of Art: And to conclude, the same devises, diligence, labour, prosecution, and observations, are to be used in the hunting of the Boar, which are prescribed for the hunting of the Hart. It feldom falleth out that the Pigs of wilde Swine are taken, for they run and hide themselves among the leaves, and in the Woods, feldom parting from their parents untill their death, and as we have said already, the dams fight for their young ones most irefully. For it is not with these as with the vulgar Swine, that they beat away their young ones from following them, but because they conceive but feldom, they suffer their Pigs to accompany them a whole year: And thus much for the violent and horible hunting of Boars. Now followeth the artificiall devises and policies which have been invented for the same purpose, whereby to take them without pursuit of Dogs: And firth of all, the same engines which we have precribed for taking of the Hart, are also in use for taking of the Boar, and that is to make a multitude of nets and lines in the way, and hug the nets with bushes and boughs, at the place where Boars make their abode, they low in some plain fields a kind of fatting corn which Hogs love, and about that field they make a high and strong hedge, of the boughs of trees in the one part, whereby of these they leave a great gap, yet not sloegether down to the ground. At the time of the year when the grain waxeth ripe, the Boars gather thereinto in great number: now right over against the said gap on the other side, there is another little low place of the hedge left over, which the Swine may easily leap. When the watch-man Hunter seeth the field full, he cometh alone and unarmed to the first gap, and therein he flaneth lewring and making a terrible noise to affright the Swine: now on the other side where the hedge is left low, there is also made a vast and deep ditch, the Hogs being terrifird with the presence and noise of the Hunter, and seeing him in the place of their entrance, run to and fro to seek another escape, and finding none, but that low place of the hedge before the ditch, over they preffe headlong as fast as they can, and so fall into the trench one upon another. Again, near Rome there be divers that watch in the woods, and in the night time when the Moon shineth, set up certain Iron instruments through which there glistereth fire, unto which the Boars and wilde Swine will approach, or at the leafwise fland still and gaze upon them, and in the mean season the Hunters which stand in secret come and kill them with their darts: and so to conclude, in Armenia, there are certain black venemous fitches, which the inhabitants take and mixe with meat and call them abroad where Boars and wilde Swine do haunt, by eating whereof as also Hemlock and Henbane, they are quickly poisoned, and die: And thus much we have shewed out of Xenophon and other authors, the severall ways of hunting and taking of wilde Swine.

Now forasmuch as the hunting thereof hath been often shewed to be dangerous both to men and Dogs, I will a little add some histories concerning the death of them, which have been killed by Boars. For if that cometh not to paffe which Martial writeth:

**Thumse glandes Aper populatur, & illic multa,**  
**Impiger Abole fana secunda feras,**  
**Quem menus intravice splendens supplice culter,**  
**Prada jaces sufrim invistis focis.**

I say, if the Boar be not killed by men, the Hunter is constrained many times to say with Lydia in the same Poet,

**Fulmine frumentis apri sum dente perpendicular.**

Aulus reports of one Leopoldus, that he loved the wife of Thrasyllus; now to the intent that he might possess her, he took her husband abroad with him to the hunting of a Boar, that under colour thereof he might kill him, and say the Boar flew him: Being abroad, the nets raised, and the Dogs loosed, there appeared unto them a Boar of a monstrous shape, wonderfull fat, with horrible hair, a skin fet with flaming bristles, rough upon the back, and his mouth continually foaming out a abundance of froath, and the found of his gnashing teeth ringing like the rating of armor, having fire-burning eyes, a despitful look, a violent force, and every way fervent, he flew the noblest Dogs which first set upon him, not slaying till they came to him, but he fought out for them, breaking their cheeks and

**Men that have perished by Boars in hunting.**
and legs asunder, even as a Dog will do some small bones; then he trod down the nets in disdain, patting by them that offered him the first encounter, and yet remembering his own vigor and strength, turning back again upon them, first overthrowing them, and grinding them betwixt his teeth like Apples, at length he meets with Toraslius, and first teareth his cloth from his back, and then likewise tore his body in pieces, and this man I remember in the first place to be killed by this monster-Boar, whether he was a beast or a man. Martial in his book of spectacles remembereth a story of Diana, who killing of a wilde Sow with Pig, the young ones leaped out of her belly, and this I thought good to remember here, although it be somewhat out of place;

Inter Casarte discrimina seu Diana,
   Finesset grandum cum levius bella fecum,
   Excultit partus misere de vincere materi.
   O Lucia feror, hoc peperisse fuit?

Ancrum the father of Appenor was killed by the Calidonian Boar, as we have said already. Carmon was slain by a Boar in the mountain Itonius. There was one Attus a Syrian, and another an Arcadian, and both these were slain by Boars, as Plutarch writeth in the life of Settorius. It is reported of one Attus a Phrygian, that as he kept his Sheep he did constantly sing fongs in commendation of the mother of the Gods, for which cause the loved him, honoured him, and often appeared unto him; whereupon Jupiter fell to be offended, and therefore sent a Boar to kill Attus. Rea after his death lamented him, and caused him to be buried honourably. The Phrygians in his remembrance did every day in the spring time lament and bewail him.

Adonis also, the Leman of Venus, is assigned of the Poets to be killed by a Boar: and yet Macrobius faith, that it is an allegory of the Sun and the Winter, for Adonis signifies the Sun, and the Boar the Winter: for as the Boar is a rough and sharp beast, living in moist, cold, and places covered with frost, and doth properly live upon winter fruits, as Acorns, so he is the fitter emblem for Winter, that is, a devourer of the Sun heat and warmth, both which fall away by death from all living creatures. When Teutras a King of Myra went to hunt in the mountain Toraslius, he started a huge great Boar, which he and his guard followed and hunted unto the Temple of Diana Orthosia, whereinto the Boar entred for sanctuary.

The poor beast seeing the Hunters at hand, cryed out with the voice of a man: Perce o res peculi Deo, O King spare Dionae Boar: But the king being nothing at all moved therewith, flew him in the Temple; which wickednesse the Goddes could not endure, and therefore first of all he restored the Boar to life, and afterwards afflicteth the King with madness, who was therefore driven into the Mountains, and there lived like a beast.

When Ly Jesse his mother knew hereof, she went to him into the Woods, and carried Gyrannus the Prophet, who instructed him to pacifie the Gods by a sacrifice of Oxen, which when it was performed, the King recovered again his right minde; and so his mother in remembrance thereof, built there a Chappell to Diana, and set thereupon the picture of a Boar in Gold, with a man mouth. There was also a cuftome in ancient times for champions and their fathers brethren and kindred to swear by a Boar cut in pieces. And thus much for the natural and morall story of the Boar, which I will conclude with those veres of Horace, describing the prodigious habitation of Boers in the waters, and Delphins in the Woods, as if one had changed with another;

Delphinum silvis appingit, floribus aprum,
Quo variare omitt temp prodigialiter mutat.

The Medicines of the wilde Swine.

There are declared a M. things concerning the remedies of Goats, but a larger and more ample power shall be shewn of a wilde beast of the same kind. Also the fame regard shall be had concerning the remedies of a tame Sow and a wilde Boar, yea, of all other tame and wilde beasts, that is, that the same or things like to either of them may be ended, differing only according to more or less, because the same parts of wilde beasts living, are lesse moist and cold then those that are tame. That which we repeat here concerning the common remedies of a Boar and Sow tamed, in fome of the parts of them, to wit, the blood, the brain, the cheek-bone, the lungs or lights, the liver, the gall, the ankle bone, the hoof, the dung, and urine, is not in the Sow repeated before.

The brains of a Boar taken with blood, is very much commended against the bitings of Serpents. Again, the brains and blood of a Boar, doth help those that fear the coming of Carbuncles. The lard and fat of a Boar being sodden and bound fast together, doth with a wonderfull celerity make firm those bones that are broken. The fat of a Boar mingled with Hony and Rozin, is very much commended against the bitings of Serpents.

The fat of a wilde Boar mingled with the fat of the lungs or lights, doth very much profit those which have their feet broken or bruised by any mischance. The fat of a Boar being mixed with Oyl of Roses, is very good for those that are troubled with blisters or pusseths, it being anointed thereupon. The brains of a Boar is very profitable for Carbuncles, and the pairs of a mans yard. The brains of a Boar being bruised very small in Hony, and put thereto, doth wonder-
Of the Swine.

The brains of a Boar fodder and drunk in wine, doth cear all the pains and griefs. There are more things spoken concerning the remedies of the brain in the medicines of the Sow. The ashes of the cheek-bone of a Boar doth cure those ulcers which do encrave bigger by little and little.

Alfo the fame thing doth make firm thofe bones that are broken. The lungs or lights of a Boar mixed with hony, and put upon the feet after the manner of a mollifying emplaiter, they fhall be freed from all exulcations. Dispoifides alfo doth commend the lungs or lights of Sowes, Lambs, and Bears. The liver of a Boar being new killed and fired by a fire, and beaten to powder, and fo being taken in wine, is an efpicall remedy againft the bitings of Serpents and Dogs. The liver of a Boar being old, and drunken in wine with Rue, is very much commended againft the bitings of Serpents. The Fibres of the liver of a Boar, and thofe efpicallly which are nearest to the entrance of the gall and liver, being taken in Vinaegar or rather wine, is much profitable against the bitings of Serpents.

The liver of a Boar is good to revive thofe whole spirits are drofly. The liver of a Boar doth much profit, being topped in the ears, for thofe that are troubled with Apollumies or any running foles therein. The liver of a Boar being new killed and drunken in wine is very effectuall against the loofenelfe of the belly. There are certain little bones in the liver of a Boar, as there is in a common or vulgar Sow, or at leaft wife like unto little bones, and they are alfo white, which being fodder and taken in wine, are very effectuall against the difeafe of the Stone. Thou fhalt read many more things concerning the remedies of the liver of a Boar in the medicines of the Sow. The gall of a Boar is very much commended for Wennes or swellings in the neck.

The gall of a Boar being mangled with Rooff and Wax, doth cure thofe ulcers which do encrave bigger and bigger. The gall of a Boar, and Lambs milk, being mangled together, and dropped in the ears, is very profitable for all pains therein. The body of a man being anointed with the gall of a Boar, doth thire him up to eternal copulation. The gall of a Boar being mangled with fewet, and applied upon every joynt of the body, doth immediately cure all pains of the Gout. We have declared alfo many things in the medicines of the Sow, concerning the remedies of the gall of a Boar. The bones of a Boar being eaten is very good against the Falling fickneffe, or the bones of a Boar being taken in Mares milk or water, is alfo very effectuall against the fame difeafe. The hoofs of a Boar being burned to ashes, and sprinkled upon drink, and fo taken, doth very much help thofe that cannot eafily make water.

The hooves of a Boar being burned and beaten to powder, and given in drink, is very effectual againft the stopping of urine. The hooves of a Boar or Sow being burned, and given to drink in wine, is very much commended for thofe that cannot hold their urine in their flEEP. The dung of a Sow (which liveth in the Woods) being dried and drunk in water and wine, doth take the voiding of blood, and doth efpecially old pains of the fides: And again being taken in Vinegar, it doth take all ruptures and convulsions, and alfo being mangled with the fyrup of Rofes, it doth remedy or help thofe places which are out of joynt.

The dung of a Boar being new made, and bor, is a speciall remedy against the flux of blood which suffeth forth of the Nofe. The dung of a Boar being mingled in wine, and applied after the form of an emplaiter, doth presently draw away and make found any thing which cleaveth to the body. It being alfo brined and fodder with hony, and afterwards kneaded like Dough, and doth applied to the joynts, doth eafe all pains that arifie therein.

An emplaiter made of the dung of a Boar, is very profitable against all venemous bitings, for it draweth forth the poison. All other ulcers are filled up and cleaned with the dung of a Boar, except thofe which arife in the thighs. The dung of a Boar dried and beaten to powder, and sprinkled upon drink, doth cure all pains of the fides. Again, it being dried and beaten to powder, and administered in wine, doth not only cure the pain in the Spleen, but alfo the pain in the hudneys. The dung of a Boar being burned to the ashes, and given to drink in wine, doth eafe all pains in the knees and legs. The dung of a Boar new made and anointed upon thofe places that are out of joynt, is very profitable for them. The dung of a field-boar mixed with brimstone, and taken in wine, and strained Pitch, is very commendable for pains in the hips. The dung of a Boar being mingled with wine, and afterwards strained, and given to drink, about the measure of two little cupples at a time, doth speedily help thofe which are troubled with the Sciatica.

Alfo being fodder in Vinegar and Hony, doth mitigate all pains that rife in the feet or ankles. The dung of a Boar burned to ashes, and sprinkled upon wineLuke-warm, and fo given to drink, doth help all thofe that are troubled with the bloody-fix. The eft of the remedies which concern the dung of a Boar, thou fhalt find in the medicines of the Sow. The urine of a Boar mingled with Hony and water, and fo taken, is a speciall remedy for thofe that are troubled with the Falling fickneffe.

Again, the urine of a Boar being taken in sweet Vinegar, doth drive out thofe things which are dryed in the bladder. The urine of a Boar being kept in a glaffe, doth cure all diseases and pains in the ears, but it is efpicallly profitable for thofe which cannot hear. The urine of a Boar being kept in a glaffe, and made Luke-warm, and dropped into the ears, is a speciall remedy for all Apollumies that are therein. The urine of a Boar which is kept long, is far more profitable, if fo be that it be kept a vessel of glaffe. Again, the urine of a Boar being dryed in fmoak, and moifened with Hony, and fo powered into the ears, doth cure the deafneffe of the ears.
The History of Four-footed Beasts.

The urine of a Boar, and Oyl of Cypresse, each of them being equally mingled, and made lukewarm, is also good for the same disease.

The urine of a wilde Boar also is of the same force and vertue. The bladder of a wilde Boar doth stay the incontinency of the urine, if it be eaten, roasted, or boiled. The blater of a Goat being burned to powder, and given to drink in water and wine, is very good and profitable for those which cannot make water easily. The urine of a Boar being drunken, doth help those that are troubled with the stone in the bladder, but it is more effectual if it be first of all mingled with the dung. The Bladder of a Boar moistened with the urine, and hung up till the waterish humor cometh forth, and then boiled and given to those which are truculent with the Strangury, is very profitable and good for them.

The Bladder of a Boar being dried and given in drink, is very profitable for those which are troubled with pains in the bladder and wringings of the guts. The urine of a tame Boar hung up in the smoak in the bladder of a Sow, and mixed with drink, is very profitable for those that are troubled with the Strangury. The urine of a Boar, or at least wise the bladder being given in drink, hath cured those which have been troubled with the Hydrophyse as some do say. The urine of a Boar being taken in drink, is very good for those that are troubled with the Stone.

Now forasmuch also as Hunters are hurt by some, I thought it good to let down what remedies is fit for them. Therefore the wounds made of them are dangerous, because they are not only deep, but also large and great, and it is also impossible to bring them to a glutination with medicines, for the lips of the wounds which is made by contusion, are cut off and burned. They use a mutual gnashing and biting of their teeth together, as it were against a whetstone, to take revenge upon those which pursue and follow them. Therefore they cause a certain scab to grow upon the lips of the wound, wherefore it is meet to use a suppurative and not a glutinatious manner of cure in them. It is meet to use in running and moist ulcers, not hot things, but cold, both in Winter and Summer. For it is an easie matter for a Boar to hurt a Horse in the insides of his knee, in the time of his hunting, which doth breed to a waterish ulcer, and there doth also follow a swelling. To this cold things are to be applied, and it is to be cured by anointing it with a medicine which is called Diadochalcum, or the head of a Dog, being burned about the tongue, and beaten into powder, and so to be applied after the manner of a Cataplasm. And thus much concerning the medicines of the Boar.

Of the TATUS, or Guiana Beast.

This is a four-footed strange Beast, which Helvetius faith, he found in Turfania, among the Mountains and Apothecaries. It is brought for the most part out of the new-found world, and not of Guinea, and therefore may be fairly conveyed into these parts, because it is naturally covered with a hard shell, divided and interlined like the fins of fishes, outwardly seeming buckled to the back like Coast-armour, within which the beast draweth up his body, as a Hedge-hog doth within his prickled skin; and therefore I take it to be a Brasillian Hedge-hog. It is not much greater then a little Pig, and by the snout, ears, legs, and feet thereof, it seemeth to be of that kind, saving that the snout is a little broader, and shorter than a Pig, and the tail very long like a Lizards or Rats, and the same covered all over with a crust or shell. The gaping of the mouth is wider then a Swine; and one of these being brought into France, did live upon the eating of seeds, and fruits of the Gardens, but it appeareth by that picture, or rather the skin stuffed, which Adrianus Marcellus the Apothecary
Of the Tiger.

The word Tigris is an Armenian word, which signifies both a swift Arrow, and a great River, and it should seem that the name of the River Tigris was therefore so called, because of the swiftness thereof; and it seemeth to be derived from the Hebrew word Gir and Grier, which signifies a Dart. [165] Munster also in his Dictionary of three languages, doth interpret Tigris for a Tiger. In the 4. of Job the word Lātik by the Septuagints is translated Μύρμηλαος, and by S. Jerom, Tigris. The Jews call the same beast Pharadez, which the Greeks call Tigris; and all the people of Europe, to whom this beast is a stranger, call it after the Greek name, as the Italians, Tigre and Tigris, the French Un Tigre, and the Germans Tigrilier.

Now concerning the name of the River Tigris, which because it joineth in affinity with this beast, Tigru.
beast, it is necessary that I should say something in this place, because that we finde in holy Scripture that it is one of the four Rivers which runneth through Paradise, which according to Josephus, maketh many compasses and windings in the world, and at last faileth into the Red sea; and they further say, that there is no River of the world that runneth so swiftly as this: And therefore Tigre is vocatur, id est Sagaris, quod jactatur vel flagitium velociitate aquae: That is, it is called a Tiger, a Dare, or Arrow, because it runneth as fast as an Arrow flyeth; and for this cause we finde in Thucydides, that a River in Sicilia was called Actis, that is, Spiculum, a Dare.

Some of the Poets do derive the name of the River Tigre from this Tiger the wilde beast, whereupon these Histories are told. They say, that when Bacchus was distraffed, and put out of his ways by Juno, as he wandered to and fro in the world, he came to the River Sylax (which was the first name of this water) and being there deifiour to pass over, but found no means to accomplish it, Jupiter in commemoration of his elate did fend unto him a Tiger, who did willingly take him upon his back, and carry him over; Afterward Bacchus called that swift River by the name of that swift beast, Tiger. Others do report the tale thus. When Dionysius fell in love with the Nymph Alcmena, whom by no means either by promises, interteats or rewards he could allure unto him, at last he turned himself into a Tiger, and so oppreffing the Nymph through fear, did carry her over that River, and there begot upon her his son Medus, who when he came to age, remembering the fact of his father and mother, called the name of the River Tigre, because of his Fathers transformation. But to leave this matter as not worth the flanding upon, whether the River was called after the name of the beast, or the beast after the name of the River, or rather both of them after the name of the dart or swift Arrow, we will proceed to the natural flory of the Tigre, commending that to the Readers judgement which is effential to this flory, containing in it necessaey learning, and garnished with all probability.

First of all therefor, Tigers like Lyons are bred in the East, South, and hot Countries, because their generation defirith abundance of heat, such as are in India, and near the Red sea, and the people called Afrage, or Beftung, which dwell beyond the River Ganges, are much troubled and annoyed with Tigers. Likewise the Praftants, the Hyracians, and the Armenians. Apollinius with his companions travelling betwixt Hyphen and Ganges, saw many Tigers. In Berigeza and Debinabades, which is beyond the Mediterraneas Region of the East, there are abundance of Tigres, and all other wilde beasts, as Arriamus wrieth. In Hispanicola, Cimbe, and Guanafa, Peter Martyr faith, by the relation of a Spaniard inhabiting there, that there are many Lyons and Tigers.

Countries breeding Tigres.

Quantity of Tigres.

The several parts.

It was needes to speak of their crooked claws, their sharp teeth, and divided feet, their long tail, agility of body, and wildenes of nature which getheth all their food by hunting. It hath been fallify believed, that all Tigers be females, and that there are no males among them, and that they engender in copulation with the winde; whereupon Camerarius made this witty riddle in his rhetorical exercises:

A fluvis idem, fluvis vel dictur ex me,
Junctis, sum vento, vento velociter ipsi,
Et mihi dat ventus natus, nee quærra maritis.

Oppianus.

It were needless to speake of their crooked claws, their sharp teeth, and divided feet, their long tail, agility of body, and wildenes of nature which getheth all their food by hunting. It hath been fallify believed, that all Tigers be females, and that there are no males among them, and that they engender in copulation with the winde; whereupon Camerarius made this witty riddle in his rhetorical exercises:

The Epithets.

The Epithets of these beasts are these: Armenia Tigres, sharp, Gangeticam, Hyracian, fierce, cruel,
cruel, and wicked, untamed, spotted, divers coloured, ftraked, bitter, ravenous, African, greedy, Ca-
frian, Carcian, Caucasian, Indian, Parthian, Marfian, straight-footed, mad, illefe, fearful, strong,
foaming, and violent, with many fuch others, as are eafe to be found in every Author. The voice
of this beast is called Ranking, according to this verfe:

Tigrides indomite rancant, reginanc; Leones.

Now because that they are Strangers in Europe, as we have faid already, never breeding in that part
of the world, and as feldom seen, we muft be contained to make but a fhort ftorie of it, becaufe
there are not many divers things concerning the nature of it, and in the Physick none at all. For
Their food, the manner of their food, they prey upon all the greateft beafls, and feldom upon the smaller, as
Oxen, Harts, and Sheep, but Hares and Conies they let alone.

It is reported by Plutarch, of a tame Tiger that was brought up with a Kid, the faid Kid was kil-
led and laid before him to eat, but he refufed it two days together, and the third day oppreffed
with extremity of hunger, by her ranking and crying voice the made fitnes to her Keeper for other meat,who caft unto her a cat,which presently it pulled in pieces and devoured it. The like ftorie unto
this we have fhevik already in the Panther. Generfly the nature of this beast, is according to the
Epithites of it, fharp, untamed, cruel, and ravenous, never fo tamed, but fometines they re-
turn to their former natures; yet the Indians do every year give unto their King named Ti-
gers and Panthers, and fo it commeth to pafs, that fometines the Tiger kiffeth his Keeper as Seneca
writeth.

In the time of their luft they are very raging and furious, according to thefe Verfes of Virgil:

Per fylum tum Seum aper, tum preffima Tigre,
Hic male cum Libye flos erratur in agris.

They ingender as Lions do, and therefore I marvel how the fable firft came up, that they were all
females & had no males among them, and that the females conceived with young by the Weft wind.
We have fhewn already in the ftorie of the Dogs, that the Indian Dog is engendered of a Tiger and
a Dog, and fo also the Hircanian Dogs: Whereby it is apparent, that they do not only conceive among
themselves, but also in a mingled race. The male is feldom taken, becaufe at the fight of
a man he runneth away, and leaveth the female alone with her young ones, for he hath no care
of the whelps, and for this occafion I think that the fables firft came up that there were no males
among the Tigers. The female bringeth forth many at once like a Bitch, which the nourifheth in
her den very carefully, loving them, and defending them like a Lioness from the Hunters, whereby
she is many times enfnaired and taken. It is reported by Plutarch, that when they hear the found of
Bels and Timbrels, they grow into fuch a rage and madness, that they tear their own flefh from
their backs.

For the taking of Tigers, the Indians near the River Ganges have a certain herb growing like Bu-
glofs, which they take and prefs the jucey out of it, this they preferve befide them, and in ftil
fent calm nights, they pour the fame down at the mouth of the Tigers den, by vertue whereof it
is faid the Tigers are continually encaflod, not daring to come out over it through fome fecret oppo-
fition in nature, but fmalt and dye, howling in their caves through intolerable hunger. So great is
the fwiiftnefs of this beast, as we have fhewn already, that fome have dreamed it was conceived by
the wind. For as the fwiifteft Horses, and namely the Horses of Darfium, are likewife fabled to be
begotten by the Northern winde, fo the Tigers by the Weft winde.

They are never taken but in defence of their young ones, neither is there any beafl
that liveth upon preying fo fwiift as they: Solam Tigrim Indus infaflerabilem effe dicitur, quantum fugi-
endi celeritate, quae ventos square dicitur, & confpeditu ausfugit. Only the Tiger, the Indians fay can
never be conquered, becaufe when he is hunted he runneth away out of fight as falt as the winde. For
this caufe they diligently fearch out the caves and dens of the Tigers where their young ones are
lodged, and then upon fome fwiift Horses they take and carry them away: when the female Tiger
returnd and fheweth her den empty, in rage fhe followeth after them by the foot, whom fhe quick-
ly overtaketh, by reafon of her celerity.

The Hunter feeing her at hand, cafteth down one of her Whelps: the defireful angry beafl knowing
that he can carry but one at once, firft taketh up that in her mouth, without letting upon the
Hunter, contented with that one, returneth with it to her lodging; having laid it up safe, back again
she returned like the wind, to purifie the Hunter for the refidue, who muft likewife fit her down ano-
ther, if he have not got into his fhip, for except the hunter be near the water fide, and have a fhip rea-
dy, the will fetch them all from him, one by one, or else it will coft him his life: therefore en-
terprife is undertaken in vain upon the fwiifteft Horses in the world, except the waters come be-
twixt the Hunter and the Tiger: And the manner of this beafl is, when the feeth that her young
ones are fhipped away, and she for ever deprived of seeing or having them again, the makeith fo
great lamentation upon the Sea fhore howling, braying and ranchorke, that many times the dyeth in
the fame place, but if the recover all her young ones again from the Hunters, the departeth with un-
speakable joy, without taking any revenge for their offered injury.

For
For this occasion, the Hunters do devise certain round spheres of glass, wherein they picture their young ones very apparent to be seen by the dam, one of these they call down before her at her approach, the looking upon it, is deluded, and thinketh that her young ones are inclosed therein, and the rather; because through the roundness thereof it is apt to ravel and stir at every touch, this the drivelth along backwards to her den, and there breaketh it with her feet & nails; and so feeth the that is deceived, returneth back again after the Hunters for her true Whelps; whereof they in the season are safely harbored in some house, or else gone on some shipboard. It is reported by Johannes Leditus a Spaniard, this excellent story of a male and female Tiger. In the Island Darline, standing in the Occidental Ocean of the New-found World, some eight days sail from Hispaniæ, it fell out (faith he) in the year of our Lord 1514, that the said Island was annoyed with two Tigers, a male and a female, for half a year together, so that there was no night free, but they left some of their cattel, either a Horse, or an Ox, or a Cow, or a Mare, or a Hog, and Swine, and in the time that their young ones did suck, it was not safe for men to go abroad in the daytime, much less in the night; but they devoured, if they did not first of all meet with another beast: At length the Countrie thus oppressed, necessity constrained them to devise a remedy, and to try some means to mitigate their calamities, wherefore they sought out all the ways and paths of the Tigers to and from their dens, so that they might take vengeance upon the ravens for the loss of so much blood: At the last they found a common beaten way, this they cut affunder and digged deep into a large dungeon; having made the dungeon, they flrewed upon the top of it little ficks and leaves, so covering it to dissemble that which was underneath, then came the heedles Tigers that way, and fell down into the ditch upon such sharp Iron flakes, and pointed instruments as they had there set, with his roaring he filled all the places thereabout, and the Mountain founded with the echo of his roaring voice.

The people came upon him, and calling great and huge stones upon his back killed him, but first of all, he broke into a thousand pieces, both the stones, Weapons, and Spears, that were cast against him; and so great was his fury, that when he was half dead, and the blood run out of his body, he terrified the islanders by beholding and looking upon him. The male Tiger being thus killed, they followed the footsteps into the Mountains where the female was lodged, and there in her absence took two of her young ones, yet afterward changing their minds, carried them back again, putting upon them two brazen collars and chains, and making them fast in the female den, so that when they had forced till they were greater, they might be with pleasure and safety conveyed into Spain. At last when the time appointed was come that they should be taken forth to be sent away, the people went to the den, wherein they found neither young nor old, but their collars faftened in the same place that they had left them, whereby it was conceived that the envious mother had killed and torn her young ones in pieces, rather then they should fall into the hands of the hunters; so that this beauteous love of hers, ended in horrible cruelty, and for this occasion is it that Meles thus speaketh in Ovid;

Hoc ego f patiar, summe de Tigride natam, 
Tum ferrum & foquas gisære in corde widæs.

And for this cause it was fainied, not without singular wit by the Poets, that such persons as fatifie the fulness of their wrath in extremity of revenge, are transformed into Tigers. The same Poet compareth the wrath of Perseus standing between two advantages unto a Tiger betwixt two presys or herds of cattel, being in doubt whether of them to devour, in this manner;

Tigris ut auditis diversa vale durum, 
Extimulata fame, mugitibus armamentum, 
Nefcit utra patium ruas, & Vere ardet utros;
Sic dubius Perseus dextra lavave feraru.

In ancient times these Tigers were dedicated to Bacchus, as all spotted beasts were, and that the said Tigers did draw his Charriot whilest he did hold the rains; and therefore Ovid saith thus;

Bacchus in currum quem summum tesserat uir, 
Tigrius adjunctis auræ lata datat.

And Horace in this manner;

Hae te merente Bacche pater tua
Vexere Tigres inciditij jugum collt trabantem.

Tigers, notwithstanding their great mindes and untamable wildenes, have been taken, and brought in publike spectacle by men, and the first of all that ever brought them to Rome, was Augustus, when Quintus Tabore, and Fabius Maximus were Consuls, at the dedication of the Theater of Marcelius; the which Tigers were sent unto him out of India, for presents (as Dio writeth.) Afterwards Claudius presented four to the people; and lastly Helagogalus causeth his chariots to be drawn with Tigers, whereunto Martial alluded when he said;
Of the **UNICORN**.

**W**e are now come to the history of a Beast, whereof divers people in every age of the world have made great question, because of the rare vertues thereof; therefore it behoveth us to use some diligence in comparing together the several testimonies that are spoken of this beast, for the better satisfaction of such as are now alive, and clearing of the point for them that shall be born hereafter, whether there be a Unicorn; for that is the main question to be resolved.

Now the vertues of the horn, of which we will make a particular discoursse by itself, have been the occasion of this question, and that which doth give the most evident testimony unto all men that have ever seen it or used it, hath bred all the controversy; and if there had not been divulged in it any extraordinary powers and vertues, we should as easily believe that there was a Unicorn in the world, as we do believe there is an Elephant although not bred in Europe. To begin therefore with this discoursse, by the Unicorn we do understand a peculiar beast, which hath naturally but one horn, and that a very rich one, that groweth out of the middle of the forehead, for we have shewed in other parts of the history, that there are divers beasts, that have but one horn, and namely some Oxen in India have but one horn, and some have three, and whole hoofs. Likewise the Bulls of **Aonia**, are said to have whole hoofs and one horn, growing out of the middle of their fore-heads.

Likewise in the City *Zella* of **Ethiopia**, there are Kine of a purple colour, as Ludovicus Ramaeus writeth, which have but one horn growing out of their heads, and that turneth up towards their backs. Caesar was of opinion that the Elk had but one horn, but we have shewed the contrary. It is said that Persiotes had a Ram with one horn, but that was bred by way of prodigy, and not naturally. Simon Sebti writeth, that the Musk-cat hath also one horn growing out of the fore-head, but we have shewed already that no man is of that opinion befide himself. Elinas writeth, that there be Birds in **Ethiopia** having one horn on their fore-heads, and therefore are called *Unicorns*: and Albertus faith, there is a fish called *Monoceros*, and hath also one horn. Now our discoursse of the Unicorn is of none of these beasts, for there is not any vertue attributed to their horns, and
and therefore the vulgar sort of Infidels people which scarcely believe any herb but such as they see in their own Gardens, or any beast but such as is in their own flocks, or any knowledge but such as is bred in their own brains, or any birds which are not hatched in their own nests, have never made question of thefe, but of the true Unicorn, whereof there were more proofs in the world, because of the noblenefs of his horn, they have ever been in doubt: by which diftraction it appereath unto me that there is some secret enemy in the inward degenerate nature of man, which continually blindeth the eyes of God his people, from beholding and believing the greatnes of God his works.

But to the purpofe, that there is such a beast, the Scripture it felf witneffeth, for David thus speakeith in the 52. Psalm: Et erigetur cornu meum tangamus Monoceros. That is, my horn fhall be lifted up like the horn of a Unicorn; whereupon all Divines that ever wrote, have not only collected that there is a Unicorn, but also affirm the fimilitude to be between the Kingdom of David and the horn of the Unicorn, that as the horn of the Unicorn is wholefome to all beasts and creatures, fo fhould the Kingdom of David be in the generation of Chrift: And we do think that Da- vid would compare the vertue of his Kingdom, and the powerful redemption of the world unto a thing that is not, or is uncertain or fantafical, God forbid that ever any man fhould do diffigure the holy Ghofl. For this caufe alfo we read in Suidas, that good men which worship God and follow his laws are compared to Unicorns, whose greater parts as their whole bodies are unprofitable and unaatable, yet their horn maketh them excellent: io in good men, although their liefthy parts be good for nothing, and fall down to the earth, yet their grace and piety exalthe their fouls to the heavens.

We have shewed already in the f Rory of the Rhinocerot, that Reem in Hebrew signifies a Unicorn, although Musfer be of another opinion, yet the Septuagint in the tranflation of Deut. 33. do tranflate it a Unicorn, for the Rhinocerot hath not one horn, but two. Rabbi Solomon, Da- vid Kimbi, and Sandius do always take Reem and Karas for a Unicorn, and they derive Reem from Rom, which signifies Altitudinem, height, because the horn of the Unicorn is lifted up on high. Hereunto the Arabians agree, which call it Barkron; and the Perfians, Bark; the Chaldeans, Rema- ns. In the 39. of Job, the Lord speaketh in this manner to Job: Nonquid acquisit Monoceros ut fer- viat tibi, aut ut moweret juncta prefpe tua? Nonquid ligabii Monoceratam fune pro falco faciendo, aut complanabit gibus bullium potf te? That is to fay, will the Unicorn reft and serve thee, or tarry befide thy catches? Canst thou binde the Unicorn with a halter to thy plough to make furrows, or will he make plain the clots of the Valleys? Likewise in the prophets of Efa. the 34. chap. and in many other places of Scripture, whereby God himfelf must needs be traduced, if there be no Unicorn in the world.

Besides the Arabians, as And Belus, writeth, call this bear Alcherceden, and fay that it hath one horn in the fore-head which is good againft pyrons. The Grecians call it Monokerat, from whence Pliny and all the ancient Grammarians do call it Monoceros, yet the divines both elder and later do name it by a more learned proper Latin word Unicorns. The Italiani, Alcorno, Unicorno, Licono, Lecorno; the French, Licorne; the Spaniards, Unicornos; the Germans, Einhorn; and the Ilyrians, Gedornozec. And thus much for the name. All our European Authors which write of beasts, do make of the Unicorn divers kinds, especially Pliny, Lucius Secundus, Varro, Plinius Venetus, Eneas Sylvius, Abaton Magnus, out of whose words we muft gather the bell description that we can of the Unicorn. The Arabic Indians (faith Pliny,) are manie certain wildbeaft which is very curf, unaatable, having one horn, which in the head refemblith a Hart, in the feet an Ele-phant, in the tail a Boar, and in the residue of the body a Horse; the horn of his faith, is about two cubits long, and the voice like the lowing of an Ox, somewhat more shrill, and they deny that this beast is ever taken alive. Elhans writeth hereof in this manner, there are (faith he) certain Mountains in the midit of India, unto the which the paffage is very difficult, whereare are abundance of wildbeaft, and among other Unicorns, which the Indians call Carucarum, who in their ripe age are as big as a Horfe, and their mane and hairs are yellow, excelling in the celerity of their feet and bodies, having feet cleven cloke like an Elephants, the tail of a Boar, and one black horn growing out betwixt their eye-brows, not smooth, but rough all over with wrinkles, and the fame groweth to a mofl sharp point, these things (faith Elhans,) by comparing of whose words with Pliny, it is apperant they decribe in these words but one and the same beaft, and fo also doth Philby; where- by I gather, that it is no other beaft then the wild Afs, or at the leaft the wild Afs somewhat neareft to the Unicorn of all others, for they agree in these things; first, in that both of them have one horn in the middle of the fore-head; secondly, in that both of them are bred in India; thirdly, in that they are both about the bignef of a Horfe; fourthly, in their celerity and solitary life; fifthy and laftly, in their exceeding strength and unaatable natures; but herein they differ both in their feet and colours, for the feet of the wilde Afs are whole and not cleven like the Unicorns, and their colour white in their body, and purple on their head; and Elhans faith, that the horn also differeth in colour from the Unicorns, for the middle of it is only black, the root of it white, and the top of it purple, which Bellowius doth interpret, that the superficies or upper face of the horn is all purple, the inner part white, and the inward part or middle black; but of this Indian wilde Afs we have spoken already, and therefore I will add nothing in this place but the words of Philo- stratus in the life of Apollonius, who writeth in this manner:

There
There are many wilde Asses which are taken in the Fens, near the River Hipphais, in whose forehead there is one horn, wherewith they fight like Bulls, and the Indians of that horn make pots, affirming that whosoever dranketh in one of those pots, shall never take diseaue that day, and if they be wounded, shall feel no pain, or falsely pafs through the fire without burning, nor yet be poufioned in their drink, and therefore such cups are only in the possession of their Kings, neither is it lawful for any man except the King, to hunt that Beall, and therefore they say that Apollinius looked up on one of those Bealls, and considered his nature with singular admiration.

Now there was one Damus in his company, who asked him whether he did believe that the vulgar report of the unicorn's horns were true or no, Apollinius made this answer: "Adhucce si bujas regione immanitatem regione effe intelleges, qui enim minl aut alteri culquem poallum ilia sese potes dare, nemo verissime eiusmodi pugnet, sed ad cromulum ilios bibere, nemo enim ut puto illum colomnababor qui in tali poallum etiam inebriabit. That is to say, I would believe that report, if I found in this Country a King that were immortal and could never dye, for if a man would give me such a cup, or any other man, do not you think that I would believe he drank in the same cup? and who should blame a man if he drank in such a cup till he were drunk? for it were lawful to use that horn unto fertilising: whereby we may gather the minde of that wise man concerning the Asses horn, and the Unicorns; namely, that they may give one some eafe against accidental diseases, although they cannot prolong a mans life the space of one day: these things said he. There be Bealls (faith Arifiole) as the Oryx and Indian Afs, which are armed with one horn, and the cloven footed Oryx is no other then the whole footed As, for in the middle of their fore-head they have one horn, by which both sides of their head are armed, Corn mediumiasi iter commane utrig. extremos fit. Because the middle is equally distant from both the extremes; and the hoof of this Beall may well be faid to be cloven and whole, becaufe the horn is of the substance of the hoof, and the hoof of the substance of the horn, and therefore the horn is whole, and the hoof cloven; for the cleaving either of the horn or of the hoof cometh through the defect of nature, and therefore God hath given to Horfes and Asses whole hoofs, because there is greatest use of their legs, but unto Unicorns a whole and entire horn, that as the eafe of men is procured by the helpes of Horfes, fo the health of them is procured by the horn of the Unicorn. Thefe things (faith Arifiole.) And Strabo also writeth, that there are Horses in India, which have Harts heads, with one horn, of which horn their Princes make cups, out of which they drink their drink against poyzon: and therefore by this which hath been said it appeareth unto me, that either the Indian Afs is a Unicorn, or differeth from it only in colour; and the objection of the hoofs is answered by Arifiole. Unto this dircourse I will add the travails of Ludovici Koman, wherein he saw two Unicorns at Melba in Arabia, where Mahomet Temple and Sepulcher is. There are preferred (faith he) within the walls and Cloysters of that Temple two Unicorns, which by way of miracle they bring forth to the people, and truly not without caufe, for the fight is worthy admiration.

Now their description is on this sort: One of them and the elder was about the nature of a Colt of two years and a half old, having a horn growing out of his fore-head of two cubits length, and the other was much lefs, for it was but a year old, and like a Colt of that age, whole horn was some two fpan long, or the like lengths. The colour of the horn was like a Wefled coloured Horfe, the head like the head of a Harte, the neck not long, and the mane growing all on one side. The legs flender and lean, like the legs of a Hinde, the hoofs of the fore-feet were cloven like a Goats feet, and the hinder-legs are all hairy and fhaggy with the outide; the Bealls although they were wide, yet by Art or superflition, they seemed to be tempered with no great wildenes; it was faid that the King of Ethipia, did fend them to the Sultan of Mecca, with whom he is contrained to observe perpetual amity. Now these Unicorns are of another kinde, then the Unicorns of Piny and Albus, because their Unicorn hath a whole hoof, and this cloven, but this objection was answered before: and although Piny and Arifiole do acknowledge no other Unicorn then the Oryx, whose horn is black, as hard as Iron, and sharp at the point, yet it is clear that there is another Unicorn besides that.

Now Paulus Venalbus faith, that in the Kingdom of Baffman, which is subj ect to the great Cham, that there are Unicorns somewhat leffer then Elephants, having hair like Oxen, heads like Boars, feet like Elephants, one horn in the middle of their fore-heads, and a sharp thorny tongue, whereby they deftrouy both man and Beall: and besides he addeth, that they muddle in the dirt like Swine. Now if it were not for the horn in the middle of the fore-head, I would take this Beall for a Rhinocerot, but because the horn of the Rhinocerot growth out of the nose, I deem this to be a second kinde of Unicorn; for there is no man that shall read this story, but will think that the learned Author had reason to discern between the eyes and the fore-head, and therefore there can be no exception taken to my observation.

Nicolaus Venalbus an Earl faith, that in Majmon or Seriis, that is, the Mountains betwixt India and Cathay, (as Arifiole Sylvius wrote) there is a certain Beall having a Swines head, an Oxen tail, the body of an Elephant (whom it doth not only equal in stature, but also it liveth in continual variance with them) and one horn in the fore-head: now this if the Reader shall think it different from the former, I do make the third kinde of the Unicorn; and I trull that there is no wise man that will be offended at it: for as we have fowed already in many stories, that many Bealls have not only their divisions, but sub-divisions, into sub-alternal kindes, as many Dogs, many Deer, many.
many Horsest, many Mice, many Panthers, and such like, why should there not also be many Unicorns? And if the Reader be not pleased with this, let him either shew me better reason, (which I know he shall never be able to do) or else be silent, left the uttering of his dislike, bewray envy and ignorance.

Now although the parts of the Unicorn be in some measure described, and also their Countries, namely, India and Ethiopia, yet for as much as all is not said as may be said, I will add the residue in this place: And first of all there are two Kingdoms in India, one called Nymt, and the other Lambror or Lambri; both there are flourished with Unicorns: And Alfinus Cadamannus in his fifty Chapter of his Book of Navigation, writeth that there is a certain Region of the New-found World, wherein are found live Unicorns; and toward the East, and South, under the Equinoctial there is a living creature (with one horn which is coocked, and not great) having the head of a Dragon, and a beard upon his chin, his neck long, and stretched out like a Serpent, the residue of his body like to a Harts, faying that his feet, colour, and mouth are like a Lions: and this also (if not a fable or rather a Monfer) may be a fourth kind of Unicorn; and concerning the horns of Unicorns, now we must perform our promfe, which is to relate the true history of them, as it is found in the best Writers. This therefore growing out of the fore-head betwixt the eye-lids is neither light nor hollow, nor yet smooth like other horns, but hard as Iron, rough as any file, revolvo in many plights, sharper than any dart, straight and not crooked, and every where black except at the point.

There are two of thefe at Venice in the Treasury of S. Mark's Church, as Brusfevius writeth, one at Argentament, which is wreathed about with divers Spires. There are also two in the Treasury of the King of Polonia, all of them as long as a man in his stature. In the year 1520. there was found the horn of a Unicorn in the River Arula, near Briga in Helvetia, the upper face or outside whereof was a dark yellow, it was two cubits in length, but had upon it no plights or wreathings. It was very odoriferous (especially when any part of it was set on fire) fo that it smelled like musk: asfoon as it was found, it was carried to a Nunnery called Campus tagus, but afterwards by the Governor of Helvetia it was recovered back again, because it was found within his territory. Now the vertues of this horn are already recited before, and yet I will for the better justifying of that which I have said concerning the Unicorns horn, add the testimony of our learned men which did write thereof to Gelfuer, whose letters according as I finde them recorded in his work, fo I have here inferred and tranlated word for word. And first of all the anwer of Nicolai Gerbelin unto his Epife, concerning the Unicorns horn at Argentamentum, is this which followeth, for, faith he, The horn which thofe Noblemen have in the secrets of the great Temple, I have often seen and handled with my hands; It is of the length of a tall man, if fo be that you shall thereunto add the point thereof: for there was a certain evil disposed perfon among them, who had learn'd (I know not of whom) that the point or top of the fame horn would be a prefent remedy both against all poyfon, and alfo against the Plague or Pestilence: Wherefore that sacrilegious thief pluck'd off the higher part or top from the residue, being in length three or four fingers.

For which wicked offence, both he himself was call'd out of that company, and not any ever afterwards of that family might be receiv'd into this society by an Ordinance gravely and maturely raifed. This pulling off the top brought a notable deformity to that mofl fpentand gift. The whole horn from that which ticketh to the fore-head of this beaft, even unto the top of the horn is altogether firm or fold, not gaping with chops, chinks or crevices, with a little greater thickness than a tile is usually among us. For I have of times combin'd almost the whole horn in my right hand. From the root unto the point it is even as wax candles are rowled together most elegantly fevered and raifed up in little lines.

The weight of this horn is of so great a massinefs, that a man would hardly believe it, and it hath been often wonder'd at, that a beaft of fo little a figure could bear fo heavy and weighty a burden. I could never smell any sweetnefs at all therein. The colour thereof is like unto old Ivory, in the midst betwixt white and yellow. But you shall never have a better pattern of this, then where it is fold in little pieces or fragments by the Oylmen. For the colour of our horn is life unto them. But by whom this was given unto that fame Temple I am altogether ignorant.

Another certain friend of mine, being a man worthy to be believed, declar'd unto me, that he saw at Paris with the Chancellour, being Lord of Fruis, a piece of a Unicorns horn, to the quantity of a cubic, wreathed in tops or spires, about the thickness of an indifferent Flaffe (the compafs thereof extending to the quantity of fix fingers) being within and without of a muddy colour, with a solid substance, the fragments whereof would boil in the Wine, although they were never burned, having very little or no smell at all therein.

When Johnes Ferreri of Piemont had read thefe things, he wrote unto me, that in the Temple of Denis, near unto Paris, there was a Unicorns horn fix foot long, wherein all thofe things which are written by Gerbelin in our Chronicles were verifi'd, both the weight and the colour: but that in biginefs it exceeded the horn at the City of Argentorate, being also hollow almost a foot from that part which ticketh unto the fore-head of the Beaf, this he saw himself in the Temple of S. Denis, and handled the horn with his hands as long as he would. I hear that in the former year (which was from the year of our Lord 1553.) when Vereilla was overthrow'd by the French, there was brought from that treafure unto the King of France, a very great Unicorns horn, the price
price whereof was valued at fourcore thousand Duckets. Paulus Pisonius describeth an Unicorn in this manner: That he is a Beast, in shape much like a young Horse, of a dully colour, with a maned neck, a hairy beard, and a fore-head armed with a horn of the quantity of two cubits, being separated with pale tops or spires, which is reported by the smoothness and ivory whiteness thereof, to have the wonderful power of diffolving and speedy expelling of all venom or poyson whatsoever.

For his being put into the water, driveth away the poyson; he may drink without harm, if any venomous Beast shall drink therein before him. This cannot be taken from the Beast being alive, forasmuch as he cannot posibly be taken by any deceit: yet it is usually seen that the horn is found in the Desiers, as it happeneth in Harts, who cast off their old horn through the inconveniences of old age, which they leave unto the Hunters, Nature renewing another unto them.

The horn of this Beast being put upon the Table of Kings, and set amongst their junkets and banquets, doth bewray the venom if there be any such therein, by a certain sweat which cometh over it. Concerning these horns, there were two feen, which were two cubits in length, of the thickness of a mans arm, the first at Venice, which the Senate afterwards sent for a gift unto Solyman the Turkishe Emperour: the other being almost of the same quantity, and placed in a silver pillar, with a short or cutted point, which Clement the Pope or Bishop of Rome, being come unto Marsfelt, brought unto France the King for an excellent gift. Furthermore concerning the virtue of such a gift, I will not speak more of this Beast, than that which divulged fame doth perwade the believers.

Peter Bellinum writeth, that he knew the tooth of some certain Beast in time past, fold for the horn of a Unicorn, (what Beast may be signified by this speech I know not, neither any of the French men which do live amongst us) and so a small piece of the fame being adulterated, fold sometimes for 300. Duckets. But if the horn shall be true and not counterfeit, it doth notwithstanding seem to be of that creature which the Ancients called by the name of a Unicorn, especially Athenar, who only ascribeth to the same this wonderful force against poyson and most grievous diseases, for he maketh not this horn white, as ours doth feem, but outwardly red, inwardly white, and in the midst or secrecte part only black.

But it cannot be denied, that this our Unicorns horn was taken from some living wilde Beast. For there are found in Europe, to the number of twenty of these horns pure, and so many broken; two of which are shewn in the treasury of Saint Marks Church at Venice, (I heard that the other was of late sent unto the Emperor of the Turks for a gift by the Venetians) both of them about the length of six cubits: the one part which is lowell being thicker, and the other thinner, that which is thicker, exceedeth not the thickness of three inches jutf, which is also attributed unto the horn of the Indian Afs, but the other notes of the fame are wanting.

I do also know, that which the King of England poiffeth to be wreathed in spires, even as that accounted in the Church of S.Dennis, then which they suppose none greater in the world, and I never saw any thing in any creatures more worthy praise, then this horn. The substance is made by nature, not Art, wherein all the marks are found which the true horn requireth. And forsoomuch as it is somewhat hollow (as the measure of a foot which goeth out of the head, and the bone growing from the same isocomprehended) I conjecture that it never falleth, as neither the horns of a Musk-cat, a wilde Goat, and an Ibex do: but the horns of these beasts do yearly fall off, namely, the Buck, the Hart, Field-goat, and Cemelopard. It is of so great a length, that the tallest man can scarcely touch the top thereof, for doth fully equal seven great feet: It weighteth thirteen pounds with their affize, being only weight by the guests of the hand, it feemeth much heavier. The figure doth plainly signify a wax candle, (being folded and wreathed within it self) being far more thicker from one part, and making it self by little and little lefs towards the point, the thickest part thereof cannot be fuit within one hand, it is the compass of five fingers, by the circumference, if it be measured with a thread, it is three fingers and a span.

That part which is next unto the head hath no sharpens, the other are of a polished smoothnes. The plein of the spire are smooth and not deep, being for the most part like unto the wreathing turnings of Snails, or the revolutions or windings of Wood-bine about any Wood. But they proceed from the right hand toward the left, from the beginning of the horn, even unto the very end. The colour is not altogether white, being a long time somewhat obturated. But by the weight it is an easie thing to conjecture, that this Beast which can bear so great burden in his head, in the quantity of his body can be little lefs then a great Ox.

There are found oftentimes in Polonia certain horns which some men gues to be of the Unicorns, by a double argument. First, because they are found several, never by twain which as yet is heard, although sometimes they may be found with the skull and bones of the rest of the body: furthermore, because their strength or vertue is approved against great and most grievous diseas: concerning which thing Antonius Schnobergerus, a Physitian of great learning amongst the Sarmatians, and an excellent observer of nature, writ unto me some five year past, to see some of these horns, having lent them by the labour of my very good friend Jacobinus Rheticus, a most excellent Physitian in Sarmatia, and incommensurable in the Mathematicks Arts in this age.

The first of these horns (faith he) I saw being of the length of my fathom, with a dusky or darkish colour: the point thereof being exceeding sharp and smooth. The compass about 15 1/2, the
The root of the horn did exceed fix fpoons. The outside was plain, with no turnings of spires: the substance eafily to be crumbled, the figure crooked, the colour exceeding white within, which if it be drunk in Wine, doth draw over it felf a dark colour. Eight such divifions were joyned to the fame, as you fhall fee in the greater part which I fend, but that part is not of the horn, but either the entrance of the pala, or fome other things as I confider.

This horn was found under the earth, (not deeper then a foot, in a solitary and high place, as between two hills, through which a River runneth) by Countréy-men that were digging to lay the foundation of a house. But the horn was fitten with an Ax, and ferved into very small pieces: but that noble and excellent man James Erifke (in whose field the horn was found, being divifion from Cratogia two miles) by all diligence he could, left that the small pieces fhould be cut abroad, took deliberate heed, that they fhould be taken out of the earth. From the root to the top it was all round and smooth, but touching it with ones tongue, it cleafeth fuffice unto it, the tooth was as big as a man could grippe in his hand; being in the upper or outward part bony or hollow within, white in the middle, and outward somewhat red as the polifh.

But this horn was found all the Beaff, as by the greatness of his bones might eafily be perceived, being bigger in quantitу then a Horfe. It is moft certain that it was a four-footed Beaff, by the bones of the shoulders, thighs and ribs. But if this horn were the tooth of an Elephant, as fome do fuppofe, you would marvail why two (which I have heard) were never found together. But the teeth or rather horns of Elephants are never fo crooked that they might come almoft to half a circle as they did. The strength of this horn a penny weight thereof being put in Wine or water of Barage, health old Fevers, as alfo tertian or quarten Agues of three years continuance, and cureth many difeafes in mens bodies, as affwaging the pain of the belly, and making of thofe to vomit, who can by no means eafe their flomachs. Hitherto they have been divifions concerning one of fhew horns which I faw. The other was like unto this, but lefs pure; for the colour was outwardly moft black, inwardly moft white, being found in the River. The third, and fourth moft hard, fo that a man would think it were by the touching thereof stone or iron, being solid even unto the point, for I have not feen them wholly, but the part of one, to the length of a cubit; of the other, to the length of half a cubit, with a dark colour, being almoft of the fame thicknefs as the two former: But forasmuch as the two former have no rifts or chinks in them, thefe have by their longititude, being like herbs bending or wreathing in their falkes.

There was another found in a certain field, fo much appearing out of the earth, that the rude or Countréy fort did think it to be some pile or stake. Many alfo are cured and freed from fhaking Fevers by the medicinal force of thefe, the caufe whereof I fuppofe to be this, becaufe the former are foter, for as much as one of them will ly in the water for fo long a time, but the other under the earth being feare well hid. I afterwards saw a fifth like unto the firft, none of them being fraught or direft up, but alfo crooked, fome almoft unto a half circle: Hichtero Schonbergerus, who alfo addeth this: That there are more of thefe to be found in Polonia, and therefore for the moft part to be contenmned.

There are moreover found in Helvetia fome of thefe horns: one in the River Aula against the Town of Bruges, the other in the laft year, in the River of Bifte, but it was broken, even as the third with that famous Earl of the Cymbrians, William Warner in a Tower near unto the City Rattawth, who gave unto Gaffer a good piece thereof; who found another piece as he was a fishing at Bifte in the River. And it is no great marvel that they are found there, where through length of time they are broken into fmall pieces, and carried by the force of the waters into divers places.

But it is moft diligently to be observed, whether they are found in the earth, alfo to be known whether that great horn be of this Beaff, which hangs alone in the great Temple at Argentor (hanged by the pillar, for it hath hanged there many years before, as now it appeareth, for that doth plainely feem the fame magnitude, thicknefs, and figure which Schonbergerus hath described in his own horn, that we have allowed before for wilde Oxen. The Ancients have attributed fingular horns to the Unicorn, whom fome have calld by other names as it is faid: and furthermore to the Oryx (a wilde Beaff unknown in our age except I be receiv'd), which Aristilus and Pliny ca// a Unicorn, Alceus a Quadricorn. Oppianus doth not exprpref it, but he feemeth to make it a two horned Beaff. Simon Sithi doth alfo write, that the Musk-cat or Goat which brings forth Musk, hath one horn: Certain later writers (as Staliger reporteth) fay, that there is a certain Ox in Ethiopia which hath one horn coming out in the midft of his fore-head, greater then the length of a foot, boding upwards, the point being wreathed overfhand, and they have red hair, whereby we gather that the horn of all Unicorns is not pure. But the reafon why these horns are more found in Polonia, then in any other place, I cannot well guess, whether from thence we fhall fuppofe them to be of certain Beafts, which at this day abide in the Woods of Sarmentia; in times past, there were many more, which have lived both in greater and larger Woods, neither were they killed with fo often hunting; some whereof it is moft like have come to great age, as appeareth by their great and flately horns, which things we leave to be confidered of others. I fuppofe that the Apothecaries never have the true horn of a Unicorn, but that some do call a kind of false adulterated Horn, other the fragments of this great and unknown horn, of which we have spoken, and not only of the horn, but alfo of the bones of the head; fome of which are fo affected by longitnd of time, that you may take a three-fold fublance in them, although it be broken by a certain diftance, one being for the moft part white and pale, the other white and foter, the third fomy and molt white.

I hear
The natural properties of Unicorns.

The taking of Unicorns.

Concerning the horns of the Unicorn, I have sufficiently already written, as the Antients have delivered in their remedies: but in this place I will handle the remedies which late Writers have attributed thereunto, as also our own observations of the same. I remember that in times past, I saw a piece of this horn of the weight of nine inches, with a certain Merchant in the market, being black and plain, and not wreathed in circles or turnings, but at that time I did not so much observe it. Now amongst our Apothecaries I do not only finde small or little fragments out of which there flowed (as they say) some certain marrow, which are rounder, whiter, and softer.

But both the same colour, as also the substance being put too much, and eaten, if it be easily crummed, and not full as other horns, doth signifie the same not to be good or perfect, but counterfeited and corrupted: as perhaps the horn of some other beast burnt in the fire, some certain sweet odors being thereunto added, and also imbrued in some delicious or aromatical perfume; peradventure also Bay by this means, first burned, and afterward quenched or put out with certain sweet finelling liquors. There is great care to be had, that it be taken new, and while it smelleth sweet.

B b b 3.
sweet, not either abolished by age, nor the vertue thereof diminished by often or frequent cups. For rich men do usually cut little pieces of this horn in their drinking cups, either for the prevent- or curing of some certain disease. There are also some which incline it in gold or silver, and so caft it in their drink, as though the force thereof could remain many years, notwithstanding the continual soaking in Wine.

But that which is so used and drunk in Wine doth bring upon it a certain dark or obscure colour, the whiteness which before remained upon the same being quite lost, expelled and utterly abolished. Most men for the remedies arising from the same, command to use the horn simply by itself: Others prefer the narrow therein. It being caft in Wine doth boil, which some men either through ignorance or deceit, impute to be a sign of the true horn, when as contrarily any other horns being burnt, do in water or wine cause bubbles to arise. There are some wicked pertrons which do make a mingle mangle thereof, as I saw amongst the Venetians, (being as I hear made, compounded with lime and fope) or peradventure with earth or some stone: (which things are wont to make bubbles arise) and afterward sell it for the Unicorns horn.

Wherefore it shall be more to late to buy it out of the whole horn if it may be done, or of greater crums, and which may well describe the figure of a horn; then small fragments where you may receive less deceit. A certain Apothecary which was at Nooremberg, in a lately mart Town amostng the German, declared the way unto me how to deface the colour of an adulterate Unicorns horn, being made by some with Ivory, either macerated or boiled with certain medicines (by Set-foil as I suppose, and other things) by which means having scraped it, I found within the true substance to be Ivory. Antonius Brasavolas writeth, that all men for the most part do fell a certain stone for Unicorns horn: which truly I deny not to be done, who have no certainty therein my self: notwithstanding also it may to come pas, that a very hard and solid horn, about the point of a sword especially (which part is preferred to inferior, as also in Harts horns) to which either stones or iron may yield, such as Authors attribute to the Rhinoceros. And other Unicorns may bear the shape of a stone before it fell. For if Orphee concerning Harts horns rightly doubted, whether the same or stones were of greater strength: I think it more to be doubted in the kindes of Unicorns, for the horns of Harts are not only solid (as Aristotle supposed) but also the horns of Unicorns, as here I have said.

The horn of an Unicorn is at this day used, although age or longinquitie of time hath quite abol-lished it from the nature of a horn. There are some which mingle the Rhinoceros with the Unicorn, for that which is named the Rhinoceros horn, is at this day in Physical use, of which notwithstanding the Authors have declared no effectual force. Some fay that the Unicorns horn doth sweat, having any poyson coming over it, which is false, it doth perhaps sometimes sweat, even as some solid, hard, and light substance, (as also stones and glas) some external vapour being about them, but this doth nothing appertain to poyson.

It is in like manner reported, that a kinde of fone called the Serpents tongue doth sweat having poyson come over it. I have heard and read in a certain book written with ones hands, that the true horn of a Unicorn is to be proved in this manner. To give to two Pigeons poyson (red Arnick or Orpin) the one which drinketh a little of the true Unicorns horn will be healed, the other will die, I do leave this manner of trial unto rich men. For the price of that which is true, is reported at this day to be of no les value then gold. Some do fell the weight thereof for a florin, or eight pence: some for a crown, or twelve pence. But the marrow thereof is certainly of a greater price, then that which is of harder substance. Some likewise do fell a dram thereof, for two pence half penny, so great is the diversity thereof. For experience of the Unicorns horns to know whether it be right or not: put filk upon a burning coal, and upon the filk the aforefaid horn, and if so be that it be true the filk will not be a whit consumed.

The horns of Unicorns especially which is brought from new Islands, being beaten and drunk in water, doth wonderfully help against poyson : as of late experience doth manifest unto us, a man, who having taken poyson & beginning to swell was preferred by this remedy. I my self have heard of a man worthy to be believed, that having eaten a poysoned cherry, and perceiving his belly to cure himself, by the marrow of this horn being drunk in Wine, in very short space.

The same is also praised at this day for the curing of the Failing leeknes, and affirmed by Elianus, who called this disease curved. The ancient Writers did attribute the force of healing to cups made of this horn, Wine being drunk out of them: but because we cannot have cups, we drink the substance of the horn, either by it self or with other medicines. I happily sometime made this Sugar of the horn, as they call it, mingling with the fame Amber, Ivory dust, leaves of gold, coral, & certain other things, the horn being included in filk, and beaten in the decoction of Raisins and Cinnamon, I call them in water, the reit of the reason of healing in the same time not being negletued. It is moreover commended of Physitians of our time against the pestilent fever , (as Alexius Mundelius writeth) against the bitings of ravenous Dogs, and the strokes or poysonfome thing of other creatures: and privately in rich mens houses against the belly or maw worms; to conclude, it is given against all poyson whatsoever, as also against many most grievous diseases. The King of the Indians drinking out of a cup made of an Indian Unicorns horn, and being asked wharefore he did it, whether it were for the love of drunkennese, made answer, that by that drink drunkennese was both expelled and reforted, and worier things cured, meaning that it clean abolish all poyson whatsoever. The horn of a Unicorn, doth heal that deteatable disease in men called S. Johns evil, otherwise the curved
curved disease. The horn of an Unicorn being beaten and boiled in Wine, hath a wonderful effect in making the teeth white or clear, the mouth being well cleansed therewith. And thus much shall suffice for the medicines and virtues arising from the Unicorn.

Of the URE-OX.

This beast is called by the Latines, Urus; by the Germans, Aurox, and Urox, and Græco vene in; by the Lituanians, Taur; the Sybians, Bubri; and these beafts were not known to the Grecians, (as Pliny writeth) of whom Senecha writeth in this manner;

 Tibi dant variæ pellora Tigres,
 Tibi villesi terga bisontes,
 Latifam feri cornibus urii.

And Virgil also maketh mention of them in his Georgics, writing of the culture or tilling of Vines.

 Texenda sapere etiam & pecunio teneendum : Sileostres uris asidue, capitaes sequaces
  Præcipue cum frons testra, imprudentes, laborum, Illudtis. —
  Cui super indulgus hymene, solvens potentem.

These wild beasts or Ure-oxes are wilde Oxen, differing from all other kindes, already rehearsed in the story of Oxen, Bugles, Bifons, or any other, although some have unskilfully taken them for Bifons, and Sir Thomas Elton in his Dictionary, doth English Urus a Bugle; but beside him no body, that I know, and for this cause he is reprehended by other. Now although there be nothing in this beast but ordinary, yet seeing it is a creature so well known, we have left reason to omit his shape and colour, lest we should unjustly be condemned of negligence and carelessness.

In outward proportion of the body it differeth little from the Bull, It is very thick, and his back somewhat bunched up, and his length from the head to the tail is short, no ways answerable to the proportion of his stature and sides: the horns (as some say) are but short, yet black, broad, and thick, his eyes red, a broad mouth, and a great broad head, his temples hairy, a beard upon his chin, but short, and the colour thereof black, his other parts, as namely in the face, sides, legs, and tail, of a reddish colour.

These are in the wood Hercynia, in the Pyrney Mountains, and in Mazovia, near Lituania. Places of their abode. They are calld' Uro of Oxen, that is the Mountains, because their savage wildenes is so great, that they seldom defend from those safeguards. They far excel Bulls, and other wilde Oxen, coming nearer to the quantity or stature of Elephants, then to the Bull. In resemblance a man would think them to be compounded of a Mule and a Hart, for their outward resemblance so seem. It is said they could never be taken by men; although they were taken when they were young.
The History of Four-footed Beasts.

Countries of their breed.

Their nature.

Use of their parts.

Histories of other wild Oxen.
Of the Urs.

Theursus writeth, that betwixt Florida and Palma, in the new found World, there are very many strange shaped beasts, and among other a kinde of wilde Bull, whose horns are a foot long, but on his back he hath a tumour or bunch like a Camel, and is therefore called Bos Camelus, his hair all over his body is very long, but especially under his chin, and his colour like a yellow Mule, and this beast is a continual enemy to a Horse. Like unto these are the tame Solinus Oxen, and some other in Asia, who carry packes upon the bunches of their backs, and also bend their knees like Camels.

Of the Lybian Oxen.

There is so great an innumerable number of Lybian Oxen, of so great swiftnesse and celerity, that the Hunters are many times deceived in hunting them, and so do certainly chance or fall upon other wilde beastes for the same they rased, and he in the mean while doth hide himself in a place of brambles and briars, keeping himself there safe, while other wilde beastes doth appear like unto them, and so do deceive the eyes of the Hunters: therefore if any man do begin to follow after either of them, it will be but labour lost, for he is not able to comprehend or attain them with a Horse, except he may take them being wearied by longevity of time. But if any Hunters shall finde a young Calf, spare the life thereof, and shall not presently kill it, he shall reap a double profit by it: and first it doth bring profit to it self, and doth induce or lead his Dam into captivity. For after that the Hunter hath bound the Calf with a rope, the being inflamed by the love or affection which the beareth to her Calf, returneth back again unto it, coveting with an ardent desire to loose and take away her Calf out of the bond or halter, therefore the thralleth in her horn that he may loosen the cord, and pluck her young one away, whereby the is kept fast bound with her Calf, her horns being intangled in the rope. Then cometh the Hunter and killeth her, and taketh forth her liver, and also cutteth off her dugs or udder, and doth likewise pluck off her skin, and leaveth her flesh for the Birds and wilde Beasts to feed upon. There is another kinde of Ox in Lybia, whose horns do bend downward, and for that cause they are fain to feed going backwards. Of the fayings of Herodotus and Solinus, I have spoken before. Pliny doth write, that they are called Oxen going backward, because the broadnesse of their horns doth cover their eye-fight, so that it flanathan them in no use to go forward, but is very commodious to go backward. There is an Ox which liveth in the Woods of Africa, which doth resemble a domestical Ox, yet lesse in stature, of a brown or ruffer colour, and also most swift of foot. This beast is found in the deferts, or in the Marches or limits of the deferts. Their flesh is also of a perfect or absolute savour and taste, good for the nourishment of men.

Of the Indian wilde Oxen.

The horns of the Oxen of the Garamantes do grow downwards toward the earth, and therefore when they feed they bow the hinder part of the neck, (as Solinus writeth) and as we have spoken before in the diversities of wilde Oxen. The Woods also in India are filled with wilde Oxen. In the Province of India where the Gymnos inhabit, are great multitudes of Oxen which live in the Forests or Woods. In these Kingdoms which are upon the borders or confines of India, (in the midst of the day) there are many wilde and great Oxen which live in the Woods. These are Mountains in the utmost Regions of India, which are very hard to come unto, where they sly live those beastes wilde, which are among us domesticall and tame, as Sheep, Goats, Oxen, and so forth. The great King of India doth elect or choose a day every year for the runnings and combats of men, and also fightings of Beasts, who setting their horns one against another, do fight irefully with admirable rage, until they overcome their adversaries. They do also labour, and strive with all their nerves and finewes, even as if they were Champions, or fought for some great reward, or should get honour by their battell.

Wilde Bulls, tame Rams, Aifes with one horn, Hyenes, and lastly Elephants, as if they were capable of reason, they wound them among themselves, and the one doth oftentimes overcome and kill the other, and sometimes fall down together being both wounded. I have also recited before in another place of the intractability of Oxen, those Indian Oxen which are said to be most swift in their joyns in running to and fro, when they are at combate, because there we had not distinguished whether these were wilde Oxen or not: but it doth appear in this place, that they are wholly taken for wilde Oxen: and the thing it self doth manifest that domesticall Oxen are not so swift nor so strong.

The Oxen in India have altogether whole hooves, and also but one horn. Ethiopia also doth Pliny breed Indian Oxen, that is to say, Oxen that are like to those of India, for some have but one horn, and other some three. Solinus faith, that there are found in India some Oxen which have but one horn, and otherwise which have three horns, with whole hooves and not cloven. The Indian Oxen are said to be as high as a Camel, and their horn four foot broad. Ptolomæus doth report, that he saw a horn of an Indian Ox which did hold in the breadth of it thirty gallons.

There
The History of Four-footed Beasts.

There are also Oxen which are bred in India which in greatnesse are no bigger then a Buck, or Goat, they do run yoaked together very swift, nor do end their race with Jelie speed then the Goat-land Horses, and I did not take them to be Oxen living in the Woods, for our Rangifer and Oxen which live in the Woods, are the swiftest of all beasts in this kinde, and most apt to combats and runnings, and they may partly be called Oxen having one horn, and partly Oxen having three horns: neither are they found in Scandinavia, but also in other Regions and Dominions of Asia, as we believe that Indian Oxen are of the same kinde. Selinus doth not rightly call those Indian Oxen, which Aristotles callth Eebiptec, as I have declared above in the story of the Eebipte Oxen, for their horns are moveable. Ctesias doth write, that there are sprung up among the same beafts, that beast which is called Mynstecors: which is manifested by Aristotles in his History of Four-footed beafts. Persians also and others have not conidered this error. Among the Areobantia there are Oxen which live in the Woods, which do differ from those that are bred in the City, as much as wilde Swine from tame. Their colour is black, bending a little downwards, and their horns broad and upright. There is a City in India called Areobantia, taking the name from the River Areobantia, which doth flow out of Canacial, what those beafts are which do bend their horns upward, I have declared in the story of the Bifon; for as there may be spoken something concerning the difference of the Plants of the Woods, so also concerning the beafts that are bred in the City, and those that are bred in the Woods.

Of the WEASEL.

There are divers kindes of Weaftel, but in this place we do intreat of the leaft kinde, whose form and shape we have also here let down. It is likewise properly named of the Latines, WEASEL, a Weasel, for to we were wont plainly to name those which were common and domesticall, and to addie names to those which are more feldome seen, or live in the Woods for differenceake.

The word Chold in Levit. 11. is tranflated a Weafel of all Interpreters. The Rabbinis do call them Choldab, and commonly Mufela, as David Kimbi writeth. The Chaftalas do tranflate it Cholda, the Arabians Calcab, the Persians Gurba, and Hieron. Mufela. Oach is an Hebrew word, whereupon it was once called Obim, plurally in Ifai. 13. Babylon submersor, or implentis domus corum Obim, Munfierius cercopithecos verit. That is to say, Babylon fhall be overthrowed, and their bowes fhall be fied with Obim, that is, Weafels, but Munfierius doth call them Munkeys. David Kimbi, and the Maifter of Talmaid, do call it Nemilab, that is, like to a Cat, but commonly they call it a Marten, or Wirum, and Furon. The Authors of the Concordances of the Hebrewes, do interpret Kopb, Circopithecum, or Capbam, and Calcab, that is to say, Mufela, a Weafel, as the Hebrews do think. The Chold hath tranlated a Marten Obija. Simmabius also hath left or forfaken the Hebrew word. Aquila doth tranflate it Typhonis, that is, a Whifne-winde, Hieronymus doth tranlate it Draco, that is, a Dragon.

Roid is truly intrepted to be a kind of Lizard, or a Chamelion; in Levitices II. We also reade in Albertus, Mif, and Hyrcan, two barbarous words) for a Weafel, which he himfelf doth not underland: but I have difcерned or taken this signification out of the words of Aristotles: for Albertus doth moft unlearnedly expound Hicrum a Hare, being deceived, because both the living beafts do often times remove their young ones from one place to another in their mouths. Pethlis doth feem to be according to Aristotles, no other thing then Gale, that is to say, a Weafill. For Fryton (faith he) it hath wit like a Fox, that is to say, in fettling upon Hens or Chickins, and the other fhape and form of it is Kafiz, that is to fay, Mif, a Ferret. Namiflasa also is even to this day called a Weafel among the Greceens. Ibanusfe is also called a Weafel, Ibanwes is a little four-footed beaft. balas doth dofe feem to fignifie a Weafel, by a feigned word proceeding from the French or Italiens, which do call altio Beletam, Babotam pro Mufela, for a Weafel, but some of the later Greceens do abuse it, in terming it a Cat, as I have spoken before in the History of the Cat.

Theorem Casa in Aristotles doth interpret it sometimes a Weafel, and other sometimes a Cat; neither can I sufficiently gather wherefore he doth change it, feeling that the Greceens call Catam for a Cat Aethrum, and the Latines Felum. Some fay, that Mufela for a Weafel hath been interpreted
or declared of late days, being only led (if I be not deceived) with the affinity of the German word, for the German do call Musfela a Wifel. The Grecians do usually take to this day Musfela for a Weasel, as I have read in the Oration of Suidas. A Weasel is called in Italy Donuia, or Balbutla. It is apparent by the words of Avice, that Donuia, and otherwife Donuia is barbarously used pro Mift. Scops. la for a Weasel: Albertus and Niphon do write Donuia for a Weasel, by the which word, the later Writers do very obscurely understand Donuia for a Weasel, which is of the kinde of Goats living in the Woods. Donuia or Donuia is a small and weak beast, (as Itharus writeth) speaking of those that are wilde, and will not come to hand. When it doth bring forth young, it doth presently devour the Seconds or those that come after birth, before they touch the earth, and yet it is a prey Albertus, it self to other Four-footed beastes. You may also seem to take a little Dear, or a kinde of young Goat, or a Weasel, for that kinde of beast which doth devour her Seconds: But we read that neither of these do it.

The Lizard is said to devour her first litter which the litterer in her old age We also call Domestickl Weasels, Furms. A Weasel is called in France, Belote, or Belette, and Albetae. Some as I do hear, which do inhabit about the Towns of Meta, do call them Bacul. Carolus Figuli doth interpret a Weasel in French, Trousierum, or Marteuel, of which I have shewed before that there are two kindes, and also that there are Weasels living in the woods. In Spaine also they are called Comaveria. The people of Rhetia which speake Latin, do keep the Latin name. The Germans do call them Wiel or Wifelse. Georgius Agricola faith, that it is called a Weasel by reason of the noise that it maketh. Otherwise dwelling in Helvetia, do call it Herron, and some do call it by a corrupt word Hanuim, but those ought only to be named so which are altogether white, and are found in Winter time. But here in England it is called a Weasel, and some do write it Wease, or Weasal: But the white Weasel is called Mynver, by the transplantation of the letters of the French word, it is called Herminne, and among the Iberians, Kolcama.

Some do think at this day, that the beast whose shape and form we have given for a Weasel, is the Shrew-mouse, but not rightly, for their only reason is, that the bitings of it doth poyson and harm almoft in like manner. Albertus also doth write, that the Sea Weasel is called the field-Shrew, which is utterly false and untrue: For the Shrew is called among the Grecians, Mygale, male or female. They do now also commonly call Ecbemnon the Indian Mouse, and otherwise the fallow Deer: But Donuia, or Donuia, is of the Italians and some later barbarous Writers, altogether called a common Weasel, and not Ecbemnon, which is a peculiar beast to the Egyptians.

Now the reason of the Latin name Musfela, Carolus Figuli is of opinion, that it is derived of My Niphon, and Stelis, two Greek words, because it devoureth Mice, and both the Germans and the English derive their word Stiel, or Stelis, to rob or flitch, from the Greek word Stelis; so that it is so called, because this Weasel is a pill, and secret, stealing, and devouring beast. Caecilis faith, that Musfela is gaeulorius Mys. This beast is also called by Arfisile, Habeniuin, and it is said, that it hurteth Moles or blinde Mice.

The Epithets hereof are, fearfull, in-creeper, and swift, and beside these I finde not any matteriall, or worthy to be rehearsed. Now concerning their outward proportion, it is as we have here described, a long and thin body, but the colour thereof varieth; for some of them are brown, and branded, some black, and some clean white, which have been shewed already to be the Egyptians for in some places of Germany, Hibisilia, and the Alpes, the Weasels in the Winter become all white. But forasmuch as there are two kindes of Weasels, one vulgar and domesticket, living in houses and Cities, and the other wilde, living in the Woods and Mountains: we finde alfo that they differ in colour, neither of both being conflant in the same: for the domesticall Weasel is upon the back, and side fandy, red, and sometyme yellowish, and alwayes white on the throat, yes, sometymes as Geor. Agricola writeth, they are all white, whereas no man ought to wonder, seeing the Hares of Helvetia do in the Winter time turn white: And of these white Weasels or Ermine there are abundance in the Northern parts of Europe, where their Summers are short, and their Winters long: And these white Weasels differ nothing from the common vulgar Weasels of other colours, except that their hair flck faster to their backs; and it is observed, that in Allia the Noblewomen are apparelled with these skins; And there is a Wood in Scandinavia (called Lamiuscules) which is of fourscore mile long, wherein are abundance of white Weasels: And the Kingstents among the Tartarians are paid to be covered all over with the skins of Lyons without, and the walls to be hung with the Ermin or white Weasels within; and although the price of these skins be very dear among them (for sometimes so many as are used in one Garment will cost two thousand Crowns) yet do the people earnestly seek after them, accounting it no small honour, to wear so much wealth upon their backs.

Now the reason why these beasts came to be called Armines, is from Arnilla a chain, because they did wear them in fringes about their garments like chains; and although that some of the Alpine Mice be all white, and likewise the Pontique Moue, yet there must be a difference observed betwixt these Weasels which are properly called Armines, and those Mice which are so called, only by way of resemblance, as we have shewed already in their Stories. And of the Pontique Moue, I may add thus much more, that they live in the Winter time in hollow trees, wherein they become as white as snow all over, except their tails, and are in quantity like Squirrels, but in the end of May they turn somewhat red, because that they give themselves to copulation and generation of young ones, when they lay aside their whiteneffe, and live many days together in carnall copulation,
The History of Four-footed Beasts.

Of the Lemmar.

There are certain little four-footed beasts called Lemmar, or Lemmus, which in tempestuous and rainy weather, do seem to fall down from the clouds, and it was never yet found, whether their beginning arose first from heaven or earth, but this is certain that as soon as ever they have fallen to the ground, some of them have been opened, and in their bowels have been found green herbs, and therefore I marvel why ever it should be believed that these beasts are bred of some feculent matter in the clouds; but if any man ask me from whence then have they their beginning, I answer from the earth, even as Locusts and Caterpillers, who are said in holy Scripture to be carried to and fro with the winds, and so these beasts being delitute of natural food in their places of generation, do advance themselves into the wind, and so are carried into other strange and unknown Countreys, where they fall like Locusts upon every green thing, living until they have devoured all, but when once they taste of new grown herbs, they perish and die, by means whereof they encrease great pestilence and corruption, but the Arminns or Arminns do eat and devour them.

Now the Skins of these beasts are exceeding delicate having in them divers colours, and therefore the people flea them off from their bodies, and sell them by thirty or forty in bundles, for great price; but of these skins I have said enough, both here and elsewhere. The wide Weasels differ not from the vulgar domestical Weasel, their foreteeth are short and not long like a Moufe, the face broad, their genital part like a Foxes, their tail short, their legs and claws short, strong and sharp; and it is reported by Strabo, that the Weasels of Mauritania are as big as Cats, but their gaping and opening of their mouth much longer, and wider. There is an Island called Dordceles, on the one side whereof (as Pliny writeth) there are Weasels, and through the middle there is a way over which they never passe, and on the other side there are not only not any bred, but also if they be brought into it, they die and perish, and so likewise it is reported of Besta.

They make themselves caves and holes in the earth, rocks, and walls, wherein they lodge, into the which they frame two passages or doors, one into the South, the other into the North, (resembling herein the Squirrels) that so they may be free from the wind, on which side forever it bloweth, sometimes they get into stacks of Hay and straw, and there they lodge: those Weasels which live near houfes sleep not much, for they have been seen abroad all the Winter time, not only the vulgar but the Arminns; neither are they unthankfull unto the Countrey men in whole houfes they lodge, for they kill, eat, and devour all manner of Mice, Rats, and Moles; for because of their long, slender bodies, they are apt to creep into the holes of the earth, and narrow passages, fetching their prey from those places whither Cats cannot come; therefore in Helvetia the Countrey men nourish them more then Cats, because they destroy more vermin then Cats. The harm they do is to Hens, Chickens, and Eggs, and yet some fay they eat the Eggs and let the Hens alone: they are likewise enemies to Glee, and devour their Eggs; and Artemus writeth, that when they come unto dead men, they will pull out their eyes in such manner as they do Eggs, and therefore such Carkases are to be watched against them. Amyntas writeth, that the Shrew-moufe is conceived betwixt a Moufe and a Weasel, which opinion is not only ridiculous, but impossible, for how is it likely that a Moufe will engender with that beast which lyeth in wait to destroy her? It is also said, that a Weasel fighteth with those Serpents that hunt after Mice, for no other caufe, but to gain the prey from him.

There is nothing in this beast more strange, than their conception and generation, for they do not engender nor couple in their hinder parts, like other four-footed beasts, but at their ears, and bring forth their young ones at their mouth, and for this caufe Africitas writeth, the Jews were forbidden to eat them, for this their action was an emblem of folly, and of foolish men, which can keep no secrets, but utter all that they bear (thus faith he) But we that are Christians knew other reasons why the Jews were forbid to eat them. The Egyptians make of it another sign, for they say, that their copulation at the ear, and generation at the mouth, are emblems of speech which is first taught to the ear, and then uttered by the tongue: there be other again that hold this to be a fable: And Pope Clement writeth, that they conceive at the mouth, and bring forth at the ear. Many fay, it is true of the Weasel of the Sef, but not of the Weasel of the earth, which is therefore called Collitara, and this they would confirm by another fable of Medusa, whose head after it was cut off, it is said to bring forth Chrysaor and Pegasus; some do allledge for this opinion, that the Crows and the Dis do conceive at their mouths: but this is certain, that they have places of conception underneath their tails like other four-footed beasts, and therefore how it should come to passe, that their young ones should come forth at their mouths, I cannot easily learn. It may be that the opinion thereof first arose from the sight of some old one carrying her young in her mouth, for the young ones are very small like Mice, and therefore it is likely that they receive them to and fro, as Cats do their young ones, for they are in continual fear, lest they should be taken and destroyed by men, or by some other enemy beast.

The dung of Weasels doth smell many times like musk, the reason whereof we have shewed you in another place, all of them in general have a most rank and filthy favour. It is a raving and destroying beast; and although the body of it be very small, yet is the wit and understanding of it very
very great, for with singular art and subtility it compasseth his prey, whereupon there lyeth this history of Galanthis the maid of Alcmena, as Periuss observeth out of Ovid. When Alcmena was in long travel and child-beirth, it is said that the maid perceiveth she was hindered by Lucina, carefully obtained not only the knowledge of the caufe by Lucina, but also the remedy; whereupon she eafed her Lady, (like a true and faithful servant) of many pains. Lucina seeing that she was beguiled by Galanthis, and that her crafty wit had over-reached a Goddeffe, she turned her into a Weafel, for her punishment, that as she had finned by revealing of the counfell of the Goddess, fo she should be punished to bring forth all her young ones at her mouth, as Weafels do; and for this occafion, the Domethcall Weafel like a Maid doth continually live in houses, and her colour yellowish like the hair of Galanthis; thus fay they of metamorphosing and transforming.

Other fome fay, that when Alcmena was in travail of Hercules, having induced long torments, she was delivered by the weight of a Weafel which came in her prefence, and therefore the Urban Greats do religiously worship a Weafel, for they fay, that as it was nourfhit by Hercules the Goddeffe, fo it did nourfhit Hercules; but herein they take Gale for Galanthis aforefaid, that is, a Weafel, for Alcmenas maid. And feeing we have begun to talk of transformations, I will addle another thing out of Stobius, not impertinent to this common place, for he writeth in the difpofe of women, that the diuerfity of their diijpositions perfwadeth him that some of them are derived from one beaff, and fome from another: and namely thofe which come of Weafels, are a mirifible, fullen, and forrowfull kinde of women, to whom nothing is pleasing, delightfull, or acceptable, but having no minde to the pleafure of Venus, loathing her husband, hurtheth her neighbours, robbeth her elf, and devoureth confecrated and hallowed things, even after the manner of Weafels, which will take a booty from the Altar: Thus faith he, which I believe to bee true in the comparifon, but not in the generation or tranfmutation of women from Weafels.

I do marvail how it came to paffe, that a Weafel was called, an unhappy, unfortunat, and un-lucky beaff among Hunters, for they held opinion here in England, that if they meet with a Weafel in the morning, they fhall not speed well that day; therefore the Greats lay Galeft in, and Alcmenas excllent Emblem, whereby he infinuateth that it is not good to have a Weafel run upon ones left hand, and therefore advifeth a man to give over his enterprize after fuch an Omen. Now although I would have no wife man to f tand in fear of fuch a superfition concife, yet I will subscribe his verfe, more for variety and elegancy, then for truth:

\[\text{ Auspiciis res copia melius cedere nec sit:} \]
\[\text{ Puleci que jant omne facta, juvat.} \]
\[\text{ Donum agis, Melita tibi faccurret, omittae:} \]
\[\text{ Signa melius facis bisfis praevit gerit.} \]

It fhould seem that the beginning of this opinion did come from the punishment of a certain General of the Corintians Navy, who being perjured in breaking his faith to that Stare, came running away from them; and they fay, that afterwards he could never flepp, but that he dreamed Weafels came and tore his fleshe from his body: At laft through anguish and grief of mindes, he flew himfelf. These things are reported by Hecatides, which whether they be true or false, are but a filly and fender foundation to build upon them a Propheticall opinion, or preface future evils; and fo I will leave the morall part of the Weafel, and return again to the natural. They have knowledge like Mice and Rats, to run out of houfes before their downfall. They live in ha- tred with the Serpent that hunteth Mice, for by eating of Rues they drive them out of houfes wherein they inhabit; and this is a wonderfull work of God, that this filly beaff fhould have the knowledge of the vertue of that herb, and not only arm her felf with it. because it is hateful to Ser- pents, and they in no wif in nature able to abide it, but alfo by it to refore to life again her young ones after they are dead.

There is a pofoon in Weafels which defroyeth the Cockatrice, for when the Weafel findeth the Cockatries hole or den, the layeth her pofoon in the mouth thereof, whereby two contrary na-tures meet and fight, and the leffer overcometh the greater, and this is affirmed both by Pliny and Salinus; wherefore all manner of Cattle do fear Weafels. They hunt all manner of bodies, pulling out their throat as a Wolf doth a Sheeps. They will play with Hares till they have wearyed them, and then defroy them; they are in perpetuall enmity with Swine, Rieves, Crowes, and Cats, for although Cats sometimes let upon them, yet they cannot overcome them. In many places of Italy they are nourifhed tame, as for Ferrets are used to fetch Conies out of the earth, fo are Weafels by tying a string about their neck, to fetch young Pigeons out of Dove-cotes, and birds out of their nets. If the powder of a Weafel be given unto a Cock, Chickens, or Pigeons, it is fad, they fhall never be aNNoyed by Weafels.

Likewise if the brain of a Weafel be mingled with a renet in Cheefes, it keepeth them from being touched with mice or corrupted with age. The fleshe of a Weafel is not used for meat, but dried and preferved for medicines. The powder thereof mixed with water, driven away Mice, by callinge the gall of Stellus in a houfe where Weafels are gathered together, and then by Oyl of bitter Almonds, or falt Ammonia this may be killed, but if one of their tails be cut off, all the refidue do forake the houfe. And thus much shall suffice concerning the History of Weafels, now followeth the medicines arifing out of their bodies.

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The signification of a Weafel's occurrence.
The History of Four-footed Beasts.

The Medicines arising from the Weasel.

A Weasel being applied unto those which are troubled with Agues or Quartern Fevers, doth in short time cure them. It doth also being mingled with other things make a wonderfull pleasant mollifying medicine for those which are troubled with the gout, or any other infirmity in the joynts, and eateth those which have a continual ache in the head, leaving a certain matter on the top thereof, and stroaking it from the forehead to the hinder part of the head.

For the curing also of the gout, this is an excellent remedy. To take a little young whelp alive, well fatted, and a living VVeasel in nine pints of Oyl, and unto the same two or three pounds of Butter, and to boil them together, until the beasts be made lank or lither, and then to put your hands or feet a whole day in hot Oyl well strained. Avicenna attributeth certain things to VVeasels' flesh only, which the clashcall Authors rather ascribe to the powder of VVeasels which are thefe: to be applied to the gout, being drunk in wine against the Falling sicknese, and the head-ache, but it is accounted an effectual remedy against the bitings of Scorpions.

The flesh of a VVeasel being taken is a very good and effectual preservative against all poysions. The fame being taken in meat, the head and feet only call away, both help those which are troubled with wens or bunches in the flesh, being first annointed with the blood of the same beast. The blood of a VVeasel is very well applied to broken or exulcerated fores in the flesh. The fame vertue hath the whole body of a Weasel, boiled in wine, being in the manner of a plater placed thereunto. For the expelling of the gout take a dead Weasel, and boil it in Oyl, until it be made liuid, then strain forth the Oyl, and mingle it with wax, fathioning the fame in the form of a plater, and this being in good order applied, will in very short time expell it quite away.

A house Weasel is wont to be burned for divers remedies, and to be embowelled with salt, and dried in a shade. But there are some late writers which affirm, that a Weasel is better being dried or burned for the said disese, then used in the aforefaid manner, some also which are more foolifh, think it best, being only salted, but it is more proper, being used in the first manner.

The bodies of creatures which are dry by nature being dryed by the sprinkling of salt upon them, are unmeet for food, for a certain man going about to salt a Hare, made it like unto a dryed VVeasel. Some have written that the flesh of a Hedge-hog dried, doth very much profit those which are troubled with an outward or inward leprome: which if it can effect, it will more strongly have a drying force or power: even as the flesh of a VVeasel being dryed, and drunk in wine, expelleth poifon. A vulgar VVeasel being kept very old, and drunk in wine, to the quantity of two drams, is accounted a preuent remedy against the venom or flings of Serpents.

A young VVeasel being prepared, as is before faid, that is to say embowelled with salt, is of good force against all ill medicines. A VVeasel used in the fame manner doth presently cure the bites of Serpents. A VVeasel being burnt and dryed, especially the belly thereof, is accounted an excellent remedy against the bites of any other wilde beast. Some small part of the belly of a young VVeasel, to the quantity of two drams being bucket with Corander, and drunk in wine, is given to those that are bitten by Serpents, and is curable for them. The flesh of a VVeasel being burnt, mingled with Rue and wine, and so drunk, is very medicable for the curing of the bites of all creatures. The young whelps of VVeasels being imbowed with salt, is very profitable for the healing of the deadly flings or bitings of the Spider called Phalangium.

The whole of a Weasel doth cure the venemous bitings of the Shrew. The flesh of a Weasel being dryed, doth strongly drye and separate, by both which forces those are healed which are troubled with the Falling sicknese having drunk it in wine. This vertue is also attributed unto the blood of a Weasel. A Weasel being dryed and drunk in wine, doth heal those that are troubled with the Palfie or flaking of the joynts. Concerning the powder of Weasels, there are many things read: But Galen writeth, that he never burned this creature, that he might try the excellency thereof. The blood and powder of a Weasel are very profitable, being anointed on those whole bodies are vext with the leprome, according to the laying of Serenus in these verses;

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Serenus.

Elephanti

Marbo adversus et ridet de cortice succus;
Muffelave evi vel fujus sanguis ab illo.

The powder of a Weasel being mingled with the blood of a young Swallow doth heal the Quinzie or Squinzie, the inflamation of the jaways, as also those which are grievd with the strangury, being either taken in bread or in drink. The fame is also very effectual for the expelling of wens or bunches in the body, and healeth those which are troubled with the Falling sicknese, being dayly taken in drink. The same diseases are both healed by this medicine, to burn a living Weasel altogether in an earthen pot, and to mingle with the powder thereof Hony, Turpentine, and Butter, of each a sufficient quantity, and in the manner of an Ointment, to apply it unto the bodies of the grieved partie. The blood of a Swallow and a Weasel are commended by some to be very congruent and agreeable, but Pliny, Avicenna, and the rest of the antient writers commend the blood of a Weasel only to be very medicinable for these diseases following; namely, the Falling sicknese, the Foul evil, and the head-ache.
Of the Weasel.

The powder of a Weasel being mingled in water, and given to one that is mad or frenzy to drink, Pliny, is reported by some to be very good and profitable for him, if so be that they can compel the frantic person to perceive it. The powder of a Weasel is very effectual for the expelling or taking away of the pin and web in the eyes. There is a speedy remedy for the driving away of rheum in the head, and the Cataract swelling by rheum in the jaws, which is this. To take a Weasel upon a Thursday in the old Moon, and put him alive in an unburned pot, that in the Boyling he may be torn, and dried into powder, which powder being gathered together and well tempered with Honey, to give it to the diseased person every day in a spoon falling, to the quantity of three drams, and it will in short space wonderfully eafe him.

A Weasel being burnt, and the powder thereof wrapped in some fear-cloth which is anointed over with the Oyl of Flower-deluces, doth help and heal all fores or impostumes proceeding from the head to the ears, being applied thereunto. A VVæsef being beaten to powder, mingled with wax, and in the manner of a fear-cloth applied unto the shoulders, doth expell all pains, aches, or griefs therein whatsoever; it doth also purge or cleanse fores very effectually, according to these Veres of Sennus following:

*Obiects sc. ponc locos nova vulnera carpant,\* *Hormentum mensa curaritur fronte ruborum.*
*Et si jam vetei succedit follia morbo,*
*Mafculti inerne immisit, purgabitur uleum,*
*Sanguine cum viciue, quem bov gestauerit ante.*

A VVæsef being burned in an earthen pot, is very medicinable for the curing of the gout. The powder thereof being mingled with Vinegar, and in that manner thereunto applied. The dust of a living VVæsef burnt, mingled with wax Rose-water, and anointed with a feather upon gouty legs, cureth the same disease. The brain of a VVæsef being kept very long, and thoroughly dried, afterwards mingled with Vinegar, and so drunk, doth very effectually cure the falling fickness.

The brains of a Camel mingled with the brains of a VVæsef, being both well dried, and drunk in Vinegar, speedily helpeth those which are troubled with the disease called the Foul evil. If a horse shall fall into a fuddain disease (being for the most part termed dangerous) which our Countrymen call Reecb, concerning which I have spoken in the Horse, he is cured by some Horse-couriers by a small quantity of a VVæsef's skin, being about the bigginne of a forefayd golden Crown) which is given to him inwardly, whether in a potion by some horn, or cut small and mingled with chaffe, I know not. Some do give to the Horfes troubled with the aforefoaid disease the tail of a white VVæsef being half black, and half white, cut exceeding small in their chaffe or provender. If a Serpent or any other venemous creature shall fling or bite an Oxe, let the wounded place be strowed or smoothed with the skin of a VVæsef, and it shall in short time be perfectly cured. The same they do in a manner command to be done to Horfes which are so flung or bitten, rubbing the wound with a Weasel skin untill it wax hot, ministring in the mean time some certain Antidote within the Horfes body. There are some also which are of opinion that the skin being in the fayd manner applied, is of no efficay, but that the whole beast being cut and applied while it is hot, will rather profit, which both in a Shrew, as also in many other creatures is manifest.

The blood of a Weasel being anointed upon any impostume arising behinde the ear, doth instantly causeth the swelling to cease, or being broken, doth speedily heal the sore. The same also being anointed upon any impostumes in the head either whole or broken, doth very effectually cure them. The blood of a Weasel being anointed upon wevs or bunches of flevel in any part of the body doth instantly expel them. The same doit also help those which are troubled with the Falling sicknesse: which disease is also cured by the whole body of a VVæsef either burnt or embowed with salt. The head and feet of a VVæsef being caft away, and the body taken in any kinde of drink, doth perfectly heal those which are troubled with that peltiferous disease called S. Jobus evil. The blood of the fame beast is an excellent remedy for the expelling of the foul evil. The blood of a Weasel being anointed upon broken or excuterated bunches in the flevel, doth not only mitigate the pain, but also heal the wounds. The blood of a Weasel being anointed upon the jawes, doth heal all pains or fores therein whatsoever. The powder and blood of a Weasel being both mingled together, and anointed upon the body of any leprous man, doth in short time drive away all scabs or surces thereon. The blood of a VVæsef being anointed with a Plantain upon the legs or feet of any one that is troubled with the gout, doth very speedily mitigate or allwise the pain thereof. The same being anointed upon the veswes or sinewes which are thrum together, doth easilly mollifie them again, and loosen the grievous pain either in the joynts or articles. The liver of a VVæsef mingled with his own brains, being both well dried, and taken in any kinde of drink, doth very much profit those which are troubled with the disease called S. Jobus evil. The liver of a VVæsef, being thoroughly dried, and afterwards taken in water to drink, doth heal the disease called the Foul evil, taking hold of fenes and munde together: but there mult great care be had that this medicine be ministered unto the sick party, even when the disease is coming on him. The gall of a Hare being mingled with the liver of a VVæsef to the quantity of three drams, one dram of Oyl of Beavers stones, four drams of Myrrhe, with one dram of Vinegar, and
and drunk in hony, or baftard wine, doth heal those which are troubled with a dizziness or certain swimming in the head. The liver of a Weasel is reported to be very good and medicinable for the curing of the Lethargy, and DropFre evil. The liver of a Weasel being bound to the left foot of a woman, doth altogether hinder her from conception. The gall of a Weasel is a very excellent and effectual remedy against the venom or poison of Asps, being taken in any kind of drink. The yard of a Weasel, Hart, or Doe, being dried, and beaten to powder, and taken in wine, or any other drink, is an excellent medicine for the curing of the bites or stings of Serpents. The yard of a Weasel or Ferret, is commended for a very excellent remedy against the strangury, or distempe called the Colicke and stone. The ftones of a male Weasel, or the secret parts of a female Weasel, is reported by fome to be very medicinable for the curing of the Falling sickness. The ftones of a Weasel being bound unto any part of a woman while theis is in travail of childe birth, doth altogether hinder her from delivery. By the left ftone of a Weasel being bound in a piece of a Mules hide, there is a certain medicine made, which being drunk by any woman not being with child, caufeth barrenneffe, as also by women being with childle, hard and grievous pain in delivery. The efficacy or force in them, have the ftones of a Weasel being cut off in the change of the Moon, and he suffered to go away alive, being tied upon any part of a woman in the hide of a Mule. The heel of a living Weasel being taken away and bound unto a woman, doth make her that the shall not conceive fo long as the shall fo bear it. The powder of a Dogs head dried, being put into any broken or exulcerated fores, doth eat away all the corruption or dead flfle encruling therein. The fame vertue hath the powder of Weafels dung, being ufed in the faid manner.

The dung of Mice or of a Weasel, being anointed upon the head, is an excellent remedy for the falling off of the hair on the head, or any other part of mans body, and doth also cure the difafe called by fome the Foxes evil. The biting of a Weasel is reported by fome to be very venemous, and in his ravingen or madneffe not to be leffe hurtfull then the bitings of mad Dogs. For Weafels and Foxes are very often mad. But arnolbis is of a contrary opinion, and affirmeth that the Weasel doth more hurt by his biting, then by any venom he can put forth. Others also do affirm, that there is venom in Weafels for this caufe, that in all kinde of Weafels when they are angry, the force of their fmmel is fo rank and strong. The beft way to drive away Mice, is by scattering the powder of Weafels or Cats dung up and down, the favour whereof of Mice cannot abide, but the fame being made into some certain kinde of bread will smell more strongly. That the bites of a Weasel are venemous and deadly, there is an example written by Arifides, of a certain man who being bitten by a Weasel, and ready to die, gave a great figh, and fayd, that if he had died by a Lyon or Panther, it would never have grieved him, but to die by the biting of fuch an ignoble beatt, it grieved him worse then his death. The biting of a Weasel doth bring very quick and grievous pain, which is only known by the colour, being dusky or blewith: and it is cured by Onions and Garlick, either applied outward, or taken in drink, fo that the party drink sweet wine thereon. Unripe Figs alfo mingled with the flour of the grain called Orobs, doth much profit the fame. Treacle in like manner being applied in the manner of a plaifter, speedily cureth them. Garlick being mingled with Fig-tree leaves and Cinnamon, and so beaten together, are very well applied to the faid bites. It cometh also to passe, that sometimes the Weasel biteth some Cattell, which prefently killeth them, except there be some infall remedie. The remedy for this is it, to rub the wounded place with a piece of a Weafels skin well dryed untill it waxe hot, and in the mean time give the beft Treacle to drink in the manner of an antidote. The Weasel ufually biteth Cowes dugs, which when they are fwnollen if they be rubbed with a Weafels skin they are instantly healed.

Of the WOLF.

The several names.

A Wolf is called in Hebrew Zeb, as it is faid in Gen. 49. and among the Chaldeans, Detha and Deo, among the Arabians Dih. The female is called Zebab a the-Wolf; and the malucine Zebim, but in Ezech. 22. it is called Zebabib, that is to fay, a Wolf. Aljebba (Heith. And. Bohum.) is a common name for all Four-footed beasts which do feet on men, killing and tearing them in pieces, devouring...
devouring them with their teeth and claws, as a Lyon, a Wolf, a Tiger, and such like, whereon they are said to have the behaviour of Arizona, that is, wilde beasts which are fierce and cruel. From hence happily cometh it, that not only Albertus, but also some ignorant Writers do attribute unto a Wolf many things of which Aristotle hath uttered concerning a Lyon.

Oppianus among the other kinde of Wolves hath demonstrated one which is bred in Glicicia. And also hee doth write, that it is called in the mountains of Laurus and Amyntus, Chryson, that is to say, Aurum, but I conjecture in those places it was called after the language of the Hebrews or Syrians which do call Sabab, or Schab aurum, and Seb Lupum for a Wolf, or Dabab, or Debab for Aurum: They also do call Deb or Debba for a Wolf. Dib (other the wife Dib) is an Arabian or Syrian word: Also the translation of this word in the book of medicines is divers, as Adib, Adip, Aladip, and Aldip: but I have preferred the last translation, which also Befutunis doth use. Adip Alambat doth signify a mad or furious Wolf. The Wolf which Oppianus doth call Aurum, as I have said even now, doth feem to agree to this kinde, both by signification of the name Aurum, and also by the nature, because it doth go under a Dog close to the earth, to etch the heat of the Summer, which Oppianus doth write, doth seek his food out of hollow places, as a Hyena or Dabb doth out of graves where the dead men are buried. The golden coloured Wolf is also more rough and hairy than the residue, even as the Hyena is said to be rough and maned. And also these Wolves necks in India are maned, but it differeth according to the nation and colour where there are any Wolves at all.

Lycaon a Wolf among the Grecians, and Lupus, and Lycaon, and Lycos, among some of the Arabic Writers, is borrowed from them, as Mulfer hath noted in his Lexicon of three languages. In Italy it is called Lupo. In French Loup, in Spain Lobo, in England Wolf. In Libya, Lobo, as it were by a transposition of the letters of the Greek word. Now because both men, women, cities, places, mountains, villages, and many artificial instruments have their names from the Latin and Greek words of this beast, it is not vain or idle to touch both them and the derivation of them, before we proceed to the natural history of this beast. Lupus as some say in Latin is Quafer, or Lupiter or earth, because it refembles a Lyon in his feet, and therefore Lycos or earthe, wrote, that nothing liveth that it preseth or treadeth upon in wrath. Other derive it from Lycus, the light, because in the twilight of the evening or morning it devoureth his prey, avoiding both extreme light, as the noon day, and also extreme darkness as the night. The Grecians do also call them Nydernis canes, dogs of the night. Lupus and lupula were the names of noble devouring Harlots, and from thenceforth cometh Lupanar for the Swees. It is doubtfull whether the nurse of Romulus and Remus were a Harlot, or she-wolf, I rather think it was a Harlot then a Wolf that nurfed those children. For we read of the wife of Eosulus, which was called Larentia, after she had played the whore with certain Shepherds was called Lupa. In all Nations there are some mens names derived from Wolves, therefore we read of Lupus a Roman Poet, Lupus Servatus a Priest or Elder, of Lupus de Oliveto a Spanish Monk, of Fulbus Lupinus a Roman, and the German have Vulf, Vulpe, Hard, Wulfgang.

The Grecians have Lycembe, of whom it is reported he had a daughter called Nebole, which he promised in marriage to Archibocus the Poet, yet afterwards he repented and would not perform his promife, for which caufe the Poet wrote against him many bitter Verfes, and therefore Lycembe when he came to knowledge of them, dyed for grief. Lycaon was a common name among the Grecians for many men, as Lycos Gnaios an excellent maker of edged tools. Lycoen the brother of Nefer another, the son of Priamus Ilian by Agbabie: But the famous and notorious among all, was Lycaon, the King of Arcadia, the son of Titarn and the earth, whose Daughter Calife was deflowed by Jupiter, and by Tana turned into a Bear, whom afterwards Tana pitying, placed for a sign in heaven, and of whom Virgil made this Verse:

Pleides, Hyadus, claramque Lycaonis Arljin.

There was another Lycaon the son of Pelasgus, which built the City Lycaon, in the Mountain Lycus, this man called Jupiter Lycaon, upon a time sacriificed an Infant upon his Altar, after which sacrifice he was presently turned into a Wolf. There was another Lycaon after him, who did likewise sacrifice another childe, and it was said, that he remained ten years a Wolf, and afterwards became a man again: whereof the reason was given that during the time he remained a beast, he never tasted of mans flesh, but if he had tasted thereof he should have remained a beast for ever. I might add hereunto Lycoethon, Lycoethes, Lyceinimnus, Lyctinus, Lycomedes, Lyconus, Lycus, and of womens names, Lyra, Lyce, Lycofar, Lycofaris, Lycias, and many such others, besides the names of people, as Ipria, of Mountains and places, as Lyabetus, Lyceus, Lycrea, Lyconnia, Lyconus, Lycoethon School. Of floods and Rivers, as Lyceus, Lycomes. Of Plants, as Wolfbane, Lupum fulcidarium, Lupinus, Lycreuthus, Lycofarus, Lycofaris, Lycofaris, and many such others, whereof I have only defined to give the Reader a taffe, following the same method that we have observed in other beasts. And thus much shall suffice to have spoken of the names of this beast.

The Countries breeding Wolves, are for the most part those that follow. The inhabitants of Crete were wont to say, that there was neither Wolves, Bears, nor Vipers could be bred in their Countrieys illand, because Jupiter was born there; yet there is in a City called Lycaon, (so named for the breeding multitude of Wolves that were abiding therein.) It is likewise affirmed of Sardina, and Olympus, Wolves.

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a Mountain of Macedon, that there come no Wolves in them. The Wolves of Egypt are less than the Wolves of Greece, for they exceed not the quantity of Foxes. Africa likewise breedeth small Wolves, they abound in Arabia, Sxenia, Ethiopia, and the Earl-domes of Tyrol in Muscovia, especially that part that boundeth upon Livonia. The Wolves of Saxonia, by reason of extremity of cold in those parts, are blinde and lose their eyes: There are no Wolves bred in Lombardy beyond the Alps, and if any chance to come into that Country, prently they ring their Bells, and arm themselves against them, never giving over till they have killed him, or drove him out of the Country. In Norway there are three kides of Wolves, and in Scandinavia the Wolves fight with Elks. It is reported that there are Wolves in Italy, who when they look upon a man, cause him to be silent that he cannot speak. The French men call those Wolves which have eaten of the flesh of men Escobares. Among the Crotontes in Meotis, and divers other parts of the world, Wolves do abound: there are some few in France, but none at all in England, except such as are kept in the Tower of London, to be seen by the Prince and people, brought out of other Countries, where there fell out a rare accident, namely, a Maffive Dog was limed to a Bhe-Wolf, and the thereby conceived, and brought forth fix or seven young Whelps, which was in the year of our Lord 1605, and thereabouts.

There are divers kides of Wolves in the world, whereof Oppiarus in his dedication to Shepherds, maketh mention of five, the first is a twife Wolf, and runneth fast, called therefore Tuntas, that is, Sagittarius, a shootor. The second kide is called Harpager, and these are the greatest ravencers, to whom our Saviour Chrift in the Gospel compareth fale Prophets, when he faith, Take heed of false Prophets which come unto you in Sheep's clothing, but are inwardly Lyco Harpagers, ravening Wolves; and these excell in this kide. The third kide is called Lupus ursus a golden Wolf, by reason of his colour, then they make mention of two other kides, (called Acmon) and one of them peculiarly Illimit.

The first, which is twife, hath a greater head then other Wolves, and likewise greater legs fitten to run, white spots on the belly, round members, his colour betwixt red and yellow, he is very bold, howleth fearfully, having fiery-flaming eyes, and continually wagging his head. The second kide hath a greater and larger body then this, being twifer then all other; betimes in the morning he being very hungry, goeth abroad to hunt his prey, the fides and tail are of a sliver colour, he inhabith in the Mountains, except in the Winter time, wherein he defendeth to the gates of Cities or Towns, and boldly without fear killeth both Goats and Sheep, yet by theft and secretly.

The third kide inhabith the white Rocks of Taurus and Silicia, or the on the tops of the hill Armenia, and such other sharp and inaccessible places, being worthily for beauty preferred before the others, because of his golden resplendent hairs: and therefore My Author faith, Non Lupus seu Lupparum fere. That he is not a Wolf, but some wilde beast excelling a Wolf. He is exceeding strong, especially being able with his mouth and teeth to bite a funder not only bones, but Brafle and Iron: He feareth the Dog far, and heat of Summer, rejoicing more in cold then in warm weather, therefore in the Dog years he hideth himself in some pit or gaping of the earth, until that Sunny heat be abated. The fourth and fith kides are called by one common name Acmon, now Actaeon signifieth an Eagle, or else an Instrumet with a short neck, and it may be that these are so called in resemblance of the ravening Eagle, or else because their bodies are like to that instrumet, for they have short necks, broad shoulders, rough legs and feet, and small fowets, and little eyes: herein they differ one kide from the other, because that one of them hath a back of a sliver colour, and a white belly, and the lower part of the feet black, and this is Ilitus canes, a gray Kite-wolf; the other is black, having affer body, his hair flanding continually upright, and liveth by hunting of Hares. Now generally all Authors do make some two, some three, some four, and some five kinds of Wolves, all which is needless for me to protest, and therefore I will content my self with the only naming of such differences as are observed in them, and already expreffed, except the Tuntas and the fea-Wolf, of whom there shall be something said particularly in the end of this History. Olani Magni written, in his History of the Northern Regions, that in the Mountains called Doffiri, which do divide the Kingdoms of Sweita and Norwy, there are great flocks or heards of Wolves of white colour, whereof some wander in the Mountains, and others are in the vales. They feed upon little, small, and weak creatures, but there are also wilde common Wolves, who begin to destroy their herds of Cattell, and flocks of Sheep, against whom the people of the Country do ordain generall huntings, taking more care to destroy the young ones then the old, that so the breeders and hope of continuance may be taken away. And some also do keep of the Whelps alive, flutting of them up close and taming them, especially females, who afterwards engender with Dogs, whole Whelps are the most excellent keepers of flocks, and the most enemies to Wolves of all other.

There be some have thought that Dogs and Wolves are one kide; namely, that vulgar Dogs are tame Wolves, and ravening Wolves are wilde Dogs. But Scaliger hath learnedly confuted this opinion, shewing that they are two diftinck kides, not joyned together in nature, nor in any natural action, except by contraint: for he faith, that there are divers wild Dogs that are not Wolves, and so have continued for many years in a hill called Mountfelon, altogether refrufing the Society and service of men, yea, sometimes killing and eating them; and they have neither the face, nor the voyce, nor the nature, nor the conditions of Wolves, for in their greatest extremity of Hunger, they never set upon flocks of Sheep: so that it is unreasonable to affirm, that Wolves are wilde Dogs, although it much needs be confessed, that in outward proportion they are very like unto them. Some
Some have thought that Wolfs cannot bark, but that is false (as Albertus wrote) upon his own knowledge, the voice of Wolfs is called *Vulatus*, howling, according to their voices;

Aft *Lupus fulvus, silvat* agrestis apes,
And again:

Pur meltem fingere *Lupis ululatibus urbes.*

It should seem that the word *Vulatus*, which the Germans translate *Heulen*; the French, *Hurlet*; and we in English, howling, is derived either from imitation of the beast's voice; or from a night whooping Bird called *Vulca*, I will not contend, but leave the Reader to either of both, for it may be that it cometh from the Greek word *Olia* xei:n, which signifies to mourn and howl after a lamentable manner, and so indeed Wolfs do never howl, but when they are oppressed with famine: and thus I leave the discourse of their voice with the Annotation of *Servius: Vulatae Canum* & *Furiam.* To howl is the voice of Dogs and Furies. Although there be great difference of colors in Wolfs, as already I have shewed, yet most commonly they are gray and hoary; that is, white mixed with other colors, and therefore the *Greritis* in imitation thereof, do call the very-light which is between day and night, as it were participating of black and white *Lycaon,* W.; -light, because the upper side of the Wolfs hair is brown, and the neather part white. It is said, that the flaggis hair of a Wolf is full of vermin and worms, and it may well be, for it hath been proved, that the skin of a Sheep which was killed by a Wolf breedeth worms.

The brains of a Wolf do decrease and increase with the Moon, and their eyes are yellow, black, and very bright, sending forth beams like fire, and carrying in them apparent tokens of wrath and malice; and for this cause it is said, they see better in the night then in the day, being herein unlike unto men, that see better in the day then in the night, for reason giveth light to their eyes, and appetite to beasts, and therefore of ancient time the Wolf was dedicated to the Sun, for the quickness of his seeing sense, and because he feeth far. And such as is the quickness of his sense in seeing, such also it is in smelling, for it is reported, that in time of hunger by the benefit of the wind, he smelleth his prey a mile and a half or two miles off; for their teeth they are called *Canis mutrates,* that is sawed, yet they are smooth, sharp, and unequal, and therefore bite deep, as we have shewed already, for this cause the sharpest bits of Horfes are called *Lupata.*

All beasts that are devourers of flesh do open their mouths wide, that they may bite more strongly, and especially the Wolf. The neck of a Wolf standeth on a straight bone that cannot well bend, therefore like the Hyena, when he would look backwards he must turn round about, the same neck is short, which argueth a treacherous nature. It is said that if the heart of a Wolf be kept dry, it rendreth a most fragrant or sweet smelling savour. The liver of a Wolf is like to a Horfes hoof, and in the bladder there is called a certain stone called *Syrira,* being in colour like Saffron or Hony, yet inwardly contains certain weak finning flars: this is not the stone called *Syrira,* *Indicus,* which is defined for the vertice of it against the stone in the bladder. The fore-feet have five distinct toes, and the hinder-feet but four, because the fore-feet ferve in stead of hands, in Lions, Dogs, Wolfs, and Panthers. We have spoken already of their celerity in running; and therefore they are not compared to Lions which go foot by foot, but unto the swiftest Dogs. It is said they will swim, and go into the water two by two, every one hanging upon another's tail which they take in their mouths, and therefore they are compared to the days of the year, which do successe follow one another, being therefore called *Lucubra.* For by this succive swimming they are better strengthened against impiety of the floods, and not loft in the waters by any over-flowing waves or billows. Great is the voracity of this beast, for they are so infaatile that they devour hair and bones with the flesh which they eat, for which cause they render it whole again in their ejectments, and therefore they never grow fat. It was well said of a leated man: *Lupus vorat potius quam comedit carnem, & potius mutat po门槛.* That is, A Wolf is said rather to rain then to eat his meat. When they are hungry they rage much, and although they be nourished tame, yet can they not abide any man to look upon them while they eat; when they are once satisfied, they endure hunger a great time, for their bellies standeth out, their tongue swollen, their mouth is flapped, for when they have drove away their hunger with abundance of meat, they are unto men and beasts as meek as Lambs, till they be hungry again, neither are they moved to rapine, though they go through a flock of sheep; but in short time after, their bellies and tongue are calling for more meat, and then faith mine Author: *In antiquum figuram redit, iterumque Lupus exufit.* That is, They return to their former conditions, and become as ravening as before. Neither ought this to seem strange unto any man, for the like things are formerly reported of the Lion; and it is said that Wolfs are most dangerous to be met with all towards the evening, because of their fasting all the day before, and for this is alluded the saying of holy Scripture where the Prophet makes mention of *Lups Vesperini,* but we have shewed already in the story of the Hyena, what those signify.

It is said that Wolfs do also eat a kind of earth called *Argilla,* which they do not for hunger, but to make their bellies weigh heavy, to the intent, that when they set upon an Horfe, an Ox, a Hart, an Elk, or some such strong beast, they may weigh the heavier, and hang fast at their throats till they have pilled them down; for by vertue of that tenacious earth, their teeth are sharpened, and the weight of their bodies encreased; but when they have killed the beast that they
they set upon, before they touch any part of his flesh, by a kind of natural vomit, they disgorge themselves, and empty their bellies of the earth, as unprofitable food.

The remainder of their meat they always cover in the earth; and if there be many of them in hunting together, they equally divide the prey among them all, and sometimes it is said, that they howl and call their fellows to that feast which are absent, if their prey be plentiful. Now this they have common with Lions, in their greatest extremity of hunger, that when they have election of a man and a beast, they forsake the man and take the beast. Some are of opinion, that when they are old, they grow weary of their lives, and that therefore they come unto Cities and Villages, offering themselves to be killed by men, but this thing by the relation of Niphus is a very false; for he professed that he saw an old Wolf come into a Village, and set upon a Virgin to destroy and eat her, yet he was so old that he had scarce any teeth in his head, but by good hap company being at hand, the Maid was saved, and the Wolf was killed.

Now those Wolves that are most sluggish and leaft given to hunting, are most ready to venture upon men, because they love not to take much pains in getting their living: This Wolf is called Vinietes, but the inordinate hunting Wolf Kunepjænia. It is reported that a Wolf will never venture upon a living man, except he have formerly tasted of the flesh of a dead man, but of these things I have no certainty, but rather do believe the contrary; that like as Tyrants in an evil griev'd elate, do pick quarrels again every man that is rich for the spoil of their goods, accounting them their enemies, so well and often they have deserv'd at their hands: In like manner, Wolves in the time of their hunger fall upon all creatures that come in the way, whether they be men or beasts, without partiality, to fill their bellies, and that especially in the winter time, wherein they are not afraid to come to Houles and Cities.

They devour Dogs when they get them alone, and Elks in the Kingdom of Norway, but for Dogs it hath been seen, that they have lived in a kinde of society and fellowship with Wolves, but it was to steal and devour in the night time, like as Theeves do cover their malice and secret grudies one to other, when they are going about to rob true men. Wolves are enemies to Aiffs, Bulls, and Foxes, for they feed upon their fleeth, and there is no beast that they take more easily than an Aif, killing him without all danger, as we have showed already in the story of an Ais.

They also devour Goats and Swine of all sorts, except Boars, who do not easily yield unto Wolves. It is said a Sow hath resifted a Wolf, and that when he fought with her, he is forced to use his greatest craft and subtlety, leapiong to and from her with his beast activity, left the sow should lay her teeth upon him, and so at one time deceive him of his prey, and deprive him of his life. It is reported of one that saw a Wolf in a Wood, in take his mouth a piece of Timber of some thirty or forty pound weight, and what he did practis'd to leap over the trunk of a tree that lay upon the earth; at length when he, priz'd his own ability and dexterity in leaping with that weight in his mouth, he did make his cave and lodged behind that tree; at last it fortunate there came a wilde Sow to seek for meat along by that tree, with divers of her Pigs following her, of different age, some a year old, some half a year, and some leis. When he saw them near him, he suddenly set upon one of them, which he conjectur'd was about the weight of wood which he carried in his mouth, and when he had taken him, whilst the old Sow came to deliver her Pig at his first crying, he suddenly leaped over the tree with the Pig in his mouth, and so was the poor Sow beguiled of her young one, for she could not leap after him, and yet might stand and fee the Wolf to eat the Pig which he had taken from her. It is also said, that when they will deceive Goats, they come unto them with the green leaves and small boughs of Oysters in their mouths, wherewithal they know Goats are delighted, that fo they may draw them therewith, as to a bait to devour them.

Their manner is when they fall upon a Goat or a Hog, or some such other Beast of small stature, not to kill them, but to lead them by the ear with all the speed they can drive them to their fellow Wolves, and if the beast be stubborn and will not run with him, then he beareth his hinder-parts with his tail, in the mean time holding his ear fast in his mouth, whereby he causeth the poor Beast to run as fast as fatter then himself unto the place of his own execution, where he findeth a crew of ravishing Wolves to entertain him, who at his first appearance feize upon him, and like Devils tear him in pieces in a moment, leaving nothing un eaten but only his bowels.

But if it be a Swine that is so gotten, then it is said, that they lead him to the waters, and there kill him, for if they eat him not out of cold water, their teeth doth burn with an intolerable heat. The Harts when they have loft their horns do lie in secret, feeding by night for fear of the Wolves, until their horns do grow again, which are their chiefest defence. The least kind of Wolves we have shewed already, do live upon the hunting of Hares, and generally all of them are enemies to sheep, for the foolish sleep in the day time is easily beguiled by the Wolves who at the flight of the Sheep maketh an extraordinary noise with his foot, whereby he caustheth the foolish Sheep unto him, for standing amazed at the noise he falleth into his mouth and is devoured: but when the Wolf in the night time cometh unto a fold of Sheep, he first of all compafseth it round about, watching both the Shepheard and the Dog, whether they be asleep or awake, for if they be present and like to resist, then he departeth without doing any harm, but if they be absent or asleep, then lootheth he no opportunity, but entereth into the fold, and falleth a killing, never giving over till he have destroyed all, except he be hindered by the approach of one or other; for his manner is not to eat any till he have killed all, not because he feareth the over-livers will tell tales, but for that his
his infaftable minde thinketh he can never be satisfied, and then when all are slain he falleth to eat one of them.

Now although there be great difference between him and a Bull both in strength and stature, yet is he not afraid to adventure combat, truing in his policy more then his vigor, for when he fetteth upon a Bull, he cometh not upon the front for fear of his horns, nor yet behind him for fear of his heels, but fritt of all standeth aloof from him, with his glaring eyes, daring and provoking the Bull, making often proffers, to come near unto him, yet wife enough to keep aloof till he lype his advantage, and then he leapteth suddenly upon the back of the Bull at the one side, and being fo accent'd, taketh such hold that he killeth the Beast before he loozen his teeth. For it is also worth the observation, how he draweth unto him a Calf that wandereth from the dam, for by singular treachery he taketh him by the nofe, first drawing him forward, and then the poor Beast striveth and draweth backward, and thus they struggles together, one pulling one way, and the other another, till at laft the Wolf perceiving advantage, and seeing when the Calf pulleth heavy, suddenly he leppt his hold, whereby the poor Beast falleth back upon his buttocks, and so down right upon his back; then flyeth the Wolf to his belly which is then his upper part, and easily teareth out his bowels, so satisfying his hunger-greedy appetite: But if they chance to fee a Beaver in the water, or in the marsh, encombed with mire, they come round about him, flopping up all the paffages where he should come out, baying at him, and threatening him, so as the poor defireful Ox plungeth himself many times over head and ears, or at the least wife they fo vex him in the mire, that they never fuffer him to come out alive. At laft when they perceiue him to be dead and clean without life, they pull at him, it is not xible to observe their singular subtlety to draw him out of the mire, whereby they may eat him; for one of them goeth in, and taketh the Beast by the tail, who do-0709.4049038,6-1-1.9865669teth him with all the powers he can, for wit without strength may better kill a live Beast, then remove a dead one out of the mire: therefore he looketh behind him and calleth for more help: then presently another of the Wolves taketh that first Wolves tail in his mouth, and a third Wolf the fects, a fourth the thirds, a fifth the fourths, and fo forward, encreaing their strength, until they have pulled the Beast out into the dry land: whereby you may fee, how they torment and stretch their own bodies, biting their tails mutually, pinching and straining every joxent until they have compassed their defire, and that no man shoul think it strange for a Wolf to kill an Ox; it is reported that Danaus did build a Temple to Apollo at Argos, in the very fame place where he saw a Wolf destroy an Ox, because he received instruction thereby, that he should be King of Greece. Wolves are also enemies to the Buffes, and this is no marvel, feeing that it is confidently reported by Plineus, that in time of great famine when they get no meat, they destroy another one; for when they meet together, each one bemoaning himfelf to other, as were by confent they run round in a circle, and that Wolf which is fritt giddy, being not able to fland, falleth down to the ground, and is devoured by the residue, for they tear him in pieces, before they can arife again.

Pliny affirmeth that there be Wolves in Italy, whose sight is hurtful to men, for when a man feeth the harne of one of them, though he have never fo much defire to cry out, yet he hath no power: but the mean- ing of this is, as we find in other Writers, that if a Wolf fritt fee a man, the man is filent, and cannot fpeak, but if the man fee the Wolf, the Wolf is filent and cannot cry, otherwife the tale is fabulous and superflitious, and thereupon came the proverb Luips in fabula eft, to significare silence. Now although these things are reported by Pliny, Puerilus, Vincentius, and Ambrofius, yet I rather believe them to be fabulous then true, howbeit Albertus writeth, that when a man is in fuch extremity if he have power to loofe his cloak or garment from his back, he shall recover his voyce again. And Sextus faith, that in cafe one of thefe Wolves do fee a man first, if he have about him the tip of a Wolves tail he shall not need to fear any harm. There be a number of fuch like tales concerning Wolves and other creatures, (as that of Pythagoras) A Beaver making water upon the urine of a Wolf, shall never conceive with young. All dometicaul four-footed Beasts, which fee the eye of a Wolf in the hand of a man, will presently fear and run away.

If the tail of a Wolf be hung in the crach of Oxen, they can never eat their meat. If a Horse tread upon the foot-reps of a Wolf which is under a Horfe-man or Rider, he breakeh in pieces, or else standeth amazed. If a Wolf treadeth in the foot-reps of a Horfe which draweth a Waggion, he cleaveth fad the rode, as if he were frozen.

If a Mare with Foal tread upon the foot-reps of a Wolf, the ewe faleth her Foal, and therefore the Egyptians when they signify abornment, do picture a Mare fading upon a Wolfes foot. Thefe and fuch other things are reported, but I cannot tell how true) as supernatural accidents in Woves. The Wolf also outwighte to overcome the Leopard, and followeth him from place to place, but forasmuch as they dare not adventure upon him fingle, or hand to hand, they gather multitudes, and fo devoure them. When Woves fet upon wilde Bears, although they be at variance among themfelves, yet they give over their mutual combats, and joyn together against the Wolf their common adverary. For these occasions a Wolf hath evermore been accounted a molt fierce and wilde Beast, as may further appear by this History following. When Eurifines and Porus intended to marry the Daughter of some Grecian, that fo they might joyn themselves in perpetual league and amity by affinity, they went to Delphi to ask counsel of Apollo in what place they should meet with their wives. Apollo gave them answer, that when they should meet with an extreme wilde Beast, as they went into Lacedemonia, and yet the fame Beast appear meek and gentle unto them, there they should
should take their wives. When they came into the land of the Cleottomi, they met with a Wolf carrying a Lamb in his mouth, whereupon they conceived that the meaning of Apollo was, that when they met with a Lamb in that Country, they might very happily and successeively take them wives, and so they did, for they married with the daughters of Theophanes Cleonymus, a very honest man of that Country. It is reported of Milo Costoni, that a valiant strong man, how upon a feaide rending a tree in fonder in the woods, one of his arms was taken in the closing of the tree, and he had not strength enough to loofe it again, but remained there inclofed in most horrible tormentes, until a Woff came and devoured him.

The like story unto this, is that which Elymaus reporteth of Gelon the Syracusan, a Schollar, unto whom there came a Wolf as he sat in the School writing on his Tables, and took the writing tables out of his hand. The Schoolmafer being inagared herewith, and knowing himselfe to be a valiant man, took hold of the fame tables in the Woffes mouth, and the Wolf drewe the Mafter and Scholars in hope of recovery of the tables out of the School into a plain field, where suddenly he devoured the Schoolmafer and a hundred Scholars, sparing none but Gelon, whose tables were a bait for that prey, for he was not only not slain, but preferred by the Wolf, to the fingular admiration of all the world; whereby it was collected, that that accident did not happen naturally, but by the over-ruling hand of God: Now for these occasions, as also because that the wood and skin of beafts killed by Wolves are good for nothing, (although the flefh of Sheep is more fweeter) are unprofitable and good for nothing.

Men have been forced to invent and finde out many devises for the destroying of Woffs, for necessity hath taught men much learning, and it had been a shameful mistery to induce the tyrannie of fuch spoiling beafts, without labouring for refiitance and revenge: for this caufe they propounded also a reward to fuch as killed WVoIfs, for by the law of Draco, he that killed a young VVolf received a talent, and that killed an old Woff received two talents.

Solen prefcribed that he that brought a VVolfalive, should receive five pieces of money, and he that brought one dead, should receive two. Apollo himself was called Lycodentis, a VVolf-killer, because he taught the people how to put away VVols. Homer calleth Apollo Ilaysenes, for that it was laid immediately after he was born of his mother Latona, he was changed into the shape of a VVolf, and so nourished; and for this caufe there was the Image of a VVolf set up at Delphos before him.

Others fay, that the reafon of that Image was, because that when the Temple of Delphos was robbed, and the treaure thereof hid in the ground, while diligent inquisition was made after the thieves, there came a VVolf and brought them to the place where the golden vefelts were covered in the earth, which he pulled out with her feet. And some fay that a VVolf did kill the sacrile- ger, as he lay asleep on the mountain Parnaffus, having all the treaure about him, and that every day he came down to the gates of Delphos howling, until some of the Citizens followed her into the Mountain, where she flew them the thiefe and the treaure both together. But I lift not to follow or f tand upon thefe fables. The true caufe why Apollo was called a VVolf-killer was, for that he was feigned to be a Shepheard or Herdman, and therefore in love of his Cattle to whom VVols were enemies, he did not only kill them while he was alive, but also they were offered unto him in sacrifice, for VVols were facred to Apollo, Jupiter, and Mars; and therefore we read of Apollo Lytius, or Lytus, to whom there were many Temples builded, and of Jupiter Lytus, the sacrifices of him called Lytian, and games by the fame name. There were other holly-days call'd Lyteralia, wherein barren women did chaffe themselves naked, because they bare no children, hoping thereby to gain the fruitfulnes of the womb, whereof Ovid speakeyth thus:

Excipit favcunde patienter verbere dextra:
Jam facer optatum nonem babebit avi.

Property and some other writers seem to be of the minde that those were firft insti.tuted by Fabius Lupercus, as appeareth by these verfes:

Verbera pellitum seto fannovebat arator,
Unde licens Fabium facra Lupercum habebat.

And Junoal thus:

Nec prodest agili palmas praebere Lupero.

Now concerning the manner of taking of VVols the Ancients have invented many devises and pins, and firft of all an Iron toall which they finall fatten in the earth with Iron pins, upon which pins they feave a ring, being in compafs about the bignefs of a VVolf head, in the midft whereof they lay a piece of fteth, and cover the Toil, fo that nothing is feen but the fteth, when the Woff comeeth and taketh hold of the fteth, feeling it fteel, pulling hard, he pulleth up the ring, which bringeth the whole Toil on his neck, and sharp pins. This is the firft manner that Crescentiensis repeateh of taking VVols, and he fay there are other devises to enfaire their feet, which the Reader cannot underftand, except he faw them with his eyes.

The Italians call the nets wherein VVols are taken, Tagliola, Harpaio, Lo Rampino, and Lycino, the French, Hausfeld, and Blondus affiirmeth, that the shepheards of Italy make a certain gin with a net, wherein
wherein that part of the VWolf is taken which is first put into it. Now the manner of taking VVolis in ditches and pits is divers, first of all they dig a deep ditch, so as the VWolf being taken, may not get out of it, upon this pit they lay a hurdle, and within upon the pillar they fix a live Goole or Lamb, when the VWolf windeth his prey or booby, he cometh upon the trench, and seeing it at a little hole which is left open on purpose to catch the VWolf into the deep ditch; and some use to lay upon it a weak hurdle, such as will not bear up either a man or a beast, that so when the VWolf cometh upon it, it may break, and he fall down; but the belt devise in my opinion that ever was invented in this kind, is that the perch and hurdle may be so made, and the baft so fet, that when one VWolf is fallen down it may rise again of its own accord, and stand as it did before to entrap another; and great care must be had, that these kind of ditches may be made in solid and strong earth, or if the place afford not that opportunity, then must the inside be lined with boards, to the intent that the baft by bearing and digging with his feet make no evation.

The Latians use to raise up to a Tree a certain engine like a Moule-trap, but much greater, through which there is a cord where they hang a baft of flesh or pullove, or some such thing which the VWolf loveth; when he cometh unto it, he suddenly snatcheth at it, and so pullbeth the trap upon his own pate. The Lyowabians, Myssam, and Tribalians, Inhabitants of Asia, were wont to carry short weapons to kill VVolis, and they used also the strongests Dogs, who by the encouragement of the Hunters would tear the VVolis in pieces, for there is hardly any Dog so courageous, as to adventure upon a VWolf at single hand.

The Dogs have therefore certain collars made unto them of leather stuff full of sharp Iron nails, to the intent that their necks may be safe guarded from the VVolis biting. Now Nouns faith, that all hunting of VVolis with Dogs is in vain, except there be also set up certain great nets made of strong cords, stretched out and standing as a tiffle, as may be immoveably tauned to the bodies of trees, or strong pillars in the earth, and in divers places of these nets they must set round about to cover them, to the end the VVolis destroy them not; and at either end of the net must be made a little thred with bougets to cover a man, wherein the hunter must lodge with his Spear, ready to pierce through the VWolf when he perceiveth him in the net, for if the VWolf be not instantly wounded, he will deliver himself and escape, and then also he must be followed with the cry of Men and Dogs, that he may not return back again into his den, and the Hunters observe this order in hunting of a VWolf, and driving him to their nets.

When they are far from their nests, they hunt them but gently, and let them go at leisure, but when they are cloer and nearer unto them, they follow them with all speed and violence, for by that means many are intrapped and suddenly killed; and these are those hunting observations which I finde to be recorded in Authors for the taking of VVolis. And this is the nature of this baft, that he feareth no kind of weapon except a stone, for if a stone be cast at him, he presently falleth down to avoid the stroke, for it is said that in that place of his body where he is wounded by a stone, there are bred certain worms which do kill and destroy him; and therefore the Egyptians when they do decipher a man that feareth an eminent danger, they picture a VWolf and a stone; as Oros writeth.

VVolis do likewise fear fire even as Lions do, and therefore they which travel in woods and secret places by night, wherein there is any fulfion of meeting of VVolis, they carry with them a couple of flints, wherewith they strike fire, in the approach of the ravenous beast, which to daunteth his eyes, and daunteth his courage, that he runneth away fearfully. It is said that VVolis are afraid of the noise of swords or iron fruck together; and it may well be, for there is a true story of a man travelling near Baffil, with a bell in his hand, who when he saw that the throwing stones at the VWolf which followed him would nothing availe, and by chance fell down, in the mean time a bell which he carried about him did give a sound, at which found the VWolf being affrighted ran away; which when he perceived, he founded the bell aloud, and so drove away the wilde ravening beast. As the Lion is afraid of a white Cock and a Moule, so is the VWolf of a Sea-crab or thramp. It is said that the pipe of Pibocarin did repreh the violence of VVolis when they set upon him, for he had the same unfuckenly, and indiñññnly, at the noise whereof the raging VWolf ran away; and for he had been believed, that the voyce of a singing man or woman worketh the same effect. Herod takes the last so much of himself, that by singing he drove away a VWolf, as in these versets;

Nanse; me siles Lupus in Sabina,
Dum mean canto Latagias, et ultra
Terminus curas vulgaris erat,
Fugit inermem.

Quae pertinuum nec; militaris
Dumia in lati alti ejgentia,
Nei Juba telius generat Leonam
Arida matue.

If at any time a VWolf follow a man afar off, as it were treacherousely to set upon him suddenly and destroy him, let him but set up a flick or flasses, or some such other knowledgable mark, in the middle space betwixt him and the VWolf, and it will scare him away; for the fulphonned baft fear eth such a man, and thinketh that he carryeth about him some engin or trap to take away his life: and therefore also it is said, that if a traveller do draw after him a long rod or pole, or a bundle of flicks and cions, a VWolf will never set upon him, wolthily murthering some deferred policy to overthrow and catch him. Eophiopis writeth, that if a man do anoint himself with the fat or fewet
fewet taken out of the reins of a Lion, it will drive away from him all kind of Wolfs. There be some that take WVolfes by poisonous, for they poyfon certain pieces of meat, and cast them abroad, whereof when the Wolfs do eat, they die immediately. There were certain Countrymen which brought the skins of Wolfs into the City of Rome, and carried them up and down the streets publi
cally to be seen, affirming that they had killed those Wolfs with the powder of a certain herb call'd Cariwm Vartus, and that therewithal also they would kill Rats and Mice. Pauflanias faith, that there was a Temple of Apollo Lyceum, at Siccia, and that on a time the Inhabitants were so annoyed with Wolfs, that they could receive no commodity by their flocks, wherupon Apollo taking pity of them, told them that there was in their Temple a certain piece of dry wood, commanding them to pull off the rinde of that bark of wood, and beating it to powder, to mingle it with convenient meat for WVolfes, and so cast it abroad in the fields.

The people did as they were commanded by the Oracle, and thereby destroyed all the WVolfes; but what kind of wood this was, neither Pauflanias nor any of the Priests of Siccia could declare. In one part of the world the Ewe-tree, and certain fragments of Juniper. The Spindle-tree, and Rododaphne do yeeld poyfon unto WVolfes mixed in their drink, and besides them we know no trees that are venemous, and yet plants innumerable, especially WVolf-bane. And the occasion why there are so many poyfonful herbs then trees, is in the juice or liquor whereby they are nourished, for where the juice is wholesome and well tempered, there it increaseth into a great tree, but where it is imperfect and venemous, there it never groweth tall, nor bringeth forth any great floe.

There are certain little Fishes called by the Grecians, Lycoi, and by the Latinists, Blennius, which we may call English WVolf-Fishes, and these the Hunters use to take Wolfs in this manner: when they have taken a great many of them alive, they put them into some tub or great mortar, and there kill them by bruizing them to pieces, afterwards they make a fire of coals in the Mountains where the WVolfes haunt, putting into the same some of these fishes mixed with bloud and pieces of Mutton, and so leaving it, to have the favours thereof carried every way with the wind, they go and hide themselves: whilest that in the mean time the WVolfes enraged with the favour of this fire, seek to and fro to finde it, because of the smell, the fire before they come is quenched or goeth out naturally, and the WVolfes by the smok thereof, especially by taking of the fleth, bloud and fish naturally there they finde, do fall into a drowsie dead sleep, which when the Hunters do perceive, they come upon them and cut their throats. The Aenemius do poyson them with black fishe, and some do take a cat, pulling off her skin, taking out the bowels, they put into her belly the powder of Frogs, this Cat is boyed a little upon coals, and by a man drawn up and down in the Mountains where WVolfes do haunt; now if the WVolfes do chance to meet with the train of this Cat, they instantly follow after her, ingred without all fear of man to attain it, therefore he which draweth the Cat, is accompanied with another Hunter armed with a Gun, Pistol, or Crofs-bow, that at the appearance of the WVolf, and before his approach to the train, he may destroy and kill him.

I will not discourse of WVolf bane, commonly called Antidum in Latin, wherewithall both men and beasts are intoxicat'd, and especially WVolfes, but referring the Reader to the long discourse of Conrastin Gesner, in his History of the WVolf, I will only remember in this place an Epigram of Auffonius wherein he pleasantly relatach a flory of an adulterated woman, defining to make away her jealous husband, and that with speed and vehemency, gave him a drink of WVolf-bane and Quick-silver mingled together, either of both fingle he poyson, but compounded are a purgation, the Epigram is this that followeth:

Toxica zeloto dedit uxor marito.
Nec satia ad mortem credidit esse datum,
Miseruit argenti lelatia pandere vivi,
Cogeret ut celarem via geminata ocrem,
Drodat hie quis, factum dixit venenum;

| Antidum sumet, qui sociata bibet. |
| Ergo inter sejus moxia pocula constant. |
| Cepha lelatia maxa satirfera. |
| Praetum & oculos abo psinter receffum. |
| Lubrica dejectum qua uita non cibis. |

Concerning the enemies of Wolfs, there is no doubt, but that such a ravening beast hath few friends, for except in the time of copulation wherein they mingle sometimetime with Dogs, and sometime with Leopards, and sometimetime with other beasts, all beasts both great and small do avoid their society and fellowship, for it cannot be safe for strangers to live with them in any league or amity, seeing in their extremity they devour one another: for this caufe, in some of the inferior beasts their hatred lasteth after death, as many Authors have observed; for if a Sheep be hanged up with a Wolves skin, the wool falles th off from it; and if an infringement be fringed with string made of both these beasts, the one will give no found in the presence of the other; but of this matter we have spoken in the story of the sheepe, shewing the opinion of the bell learned, concerning the truth thereof. The Ravens are in perpetuum enmity with Wolfs, and the antipathy of their natures is so violent, that it is reported by Ploes and Elium, that if a Raven eat of the carcasse of a beast which the Wolf hath killed, or formerly tafted of, the presently dyeth.

There are certain wild Onions called Kelle, and some fay the Sea-Onion, because the root hath the similitude of an Onion, of all other things this is hateful to a Wolf, and therefore the Arabi

us fay, that by treading on it his leg falleseth into a cramp, whereby his whole body many times endureth
endureth inefurable torments, for the Cramp increaseth into Convulsions; for which cause it is
worthy to be observed how unpeakable the Lord is in all his works, for whereas the VVolf is an
enemy to the Fox and the Turtle, he hath given secret inflict and knowledge both to this Bealt
and Fowl, of the virtuous operation of this herb against the ravening VVolf; for in their absence
from their fells, they leave this Onion in the mouth thereof, as a sure guard to keep their young
ones from the VVolf.

There are certain Eagles in Tataria which are tamed, who do of their own accord being fet
on by men adventure upon VVolves, and to vex them with their talons, that a man with no la-
bour or difficulty may kill the beast, and for this caufe the VVolves greatly fear them and avoid
them; and thereupon came the common proverb, 
Lupus fugit aquilam: And thus much shall suffice

to have spoken in general concerning the taking.

Now we will proceed to the other parts of their History, and firft of all of their carnal copula-
tion. They engender in the fame manner as Dogs and Sea-calves do, and therefore in the middle
of their copulation they cleave together against their will, It is observed that they begin to engen-
der immediately after Christmas, and this rage of their luft lafteth but twelve days, whereupon
there was wont to go a fabulous tale or reafon, that the caufe why all of them conceived in the
twelve days after Christmas was, for that Latona so many days together wandered in the shape
of a the VVolf in the Mountains Hyperborei, for fear of Juno, in which likenefs she was brought to
Del 

but this fable is confuted by Plutarch, rehearsing the words of Antipater in his Book of Beasts,
for he faith when the Oaks that bear Acorns do begin to caft their flowers or blossomes, then the
VVolves by eating thereof do open their wombs, for where there is no plenty of Acorns, there
the young ones dye in the damis belly, and therefore fuch Countries where there is no flore of
Acorns, are freed from VVolves; and this he faith is the true caufe why they conceive but once a
year, and that in the twelve days of Christmas, for thohe Oaks flower but once a year, namely,
in the Spring time, at which fession the VVolves bring forth their young ones. For the time that
they go with young, and the number of whelps, they agree with Dogs, that is, they bear their young
nine weeks, and bring forth many blinde whelps at a time, according to the manner of thoheit
that have many claws on their feet. Their legs are without Articles, and therefore they are not able
to go at the time of their littering, and there is a vulgar opinion, that the VVolf doth never in all
her life bring forth above nine at a time, whereas of the luft which the bringeth forth in her old age is
a Dog, through weaknes and infirmity; but the Ebations among whom VVolves do abound, do af-
firm constantly, that in the beginning of May, they bring their young out of their dens, and lead
them to the water, sometimes feven, and sometimes nine, every year encreasing their number; fo
that the firft year the littereth one whelp, the second year two, the third year three, and so ober-
veth the fame proportion unto nine, after which time the growthen barren and never beareth more :
and it is faid when the bringeth her young ones to the water, the oberveth their drinking very
diligently, for if any of them lap water like a Dog, him the recepteth as unworthy of her parentage,
but thole which fuck their water like a Swine, or bite at it like a Bear, them the taketh to her,
and nouriseth very carefully.

VVe have faid already that VVolves do engender not only among themselves, but among other
beasts, and fuch are to be underftood of them which bear their young an equal proportion of
time, as of Dogs and VVolves cometh the Lupus Canarius, or Panther, and the Crocuta. Of the Hyxn
and the Wolf come the Thoes, of whom we shall speake in their due place in the end of this story, and
the VVolf it self feemeth to be componded of a Wolf and a Fox.

Concerning the natural disposition of this Bealt we have already spoken in part, and now we will
adde that which doth remain; and firft of all their Epithets which are attributed unto them among
several Authors are moft clear demonstrations of their disposition; as fowre, wilde, Apalhen, Sharp,
fierce, bold, greedy, whoar, fieth-eater, wary, swift, bloody, blood-lovers, degenerate, hard, glu-
ton, hungry, Cattle-eater, famishing, furious, yellow, faihing, ungenteel, unharmonious,
and unlawful, Cattle-hunter, teeth-grafer, infatiable, treacherer, martial, lowerful, mountain, nightly,
robber, Itrate, ravener, mad, fiatcher, cruel, pack-bearer, blood-fucker, foamer, proud, fearing,
ullen, terrible, vehement, hollwing, and fuch other like belonging to the male Wolf. Now unto
the female there are fome peculiar ones also, as inhumane, ungenteel, martial, obfcur, rank, ravener,
fanded, Romanian, greacie, terrible, and Volfian: and the ravening defire of this Wolf doth not only
appear in the Proverbs of holy Scripture already repeate, as where Chrift compareth the Hereticks
to Wolves, but also from hand instruments and ficknesses, for a little hand-faw is called of the La-
tines and Germans Lupus, a Wolf; because of the inequality of the teeth, wherewithal a man fhear-
eth afunder violently any piece of wood, bones, or fuch like thing.

There is a disease called a Wolf, because it comufeth and eateth up the flefh in the body next the
farts, and much every day be fed with frefh meat, as Lambs, Pigeons, and fuch other things wherein
is blood, or else it comufeth all the flefh of the body, leaving not fo much as the skin to cover the
bones. Also the galls on a mans feet which cometh by Horse-riding, are by the Ancients called Lupis,
and by Martial, Ficus, whereof he made this divifion:

Stragula succinii venator surn veredt,
Nom salet a nudu surgere ficum equo.

D d d There
There be also instruments called Lupi, and Harpagos, or Harpagones, wherewithall Ankers are looed in the Sea, or any thing taken out of the deep. There is a certain territory in Ireland, (whereof Mr. Camden writeth) that the Inhabitants which live till they be past fifty year old, are foolishly reported to be turned into Wolves: the true cause whereof he conjectureth to be because for the most part they are vexed with the disease called Lycanthropia, which is a kind of melancholy causing the persons so affected, about the moneth of February to forfake their own dwelling or houses, and to run out into the Woods, or near the graves and sepulchres of men, howling and barking like Dogs and Wolves. The true signes of this disease are thus described by Morcellus: those that he which are thus affected, have their faces pale, their eyes dry and hollow, looking drollily, and cannot weep. Their tongue as if it were all scabbd, being very rough, neither can they spit, and they are very thirsty, having many ulcers breaking out of their bodies, especially on their legs: this disease some call Lycam, and men opprèfse thereof with Lycanth, because that there was one Lycam as it is signified by the Poets, who for his wickednes or sacrificing of a childe, was by Jupiter turned into a Wolf, being utterly distracted of humane understanding, and that which Poets speak of him, may very well agree with melancholy, for thus writeth Ovid:

*Territus ipsi fuit, neglectus, frena raris
Exulatus, fustratus, loqui constiter.*

And this is most strange, that men thus diseased should desire the graves of the dead. Like unto this is another disease, called by Bellumst, *Lamionem Leominium,* which is faith he, Consulst rationes cum fælio malis, noxias & iriandias: *A Leone dilittium videtur malum, quod ex denti aliquos bovinus Lindet,* & *Leomin infatis in eos venit:* that is, the Lion-devil disease is a confusion of reason, joined with wrathful, and impious facts; and it seemeth to be named of Lions, because that such as are opprèfse therewith, do rage against men, and wound them like Lions.

There is a pretty Apology of a league that was made betwixt the Wolves and the Sheep, whereupon came the name *Lycophiset,* my Author rehearseth it thus: *Lupis et agnis salutis aliquando fuit, datis stringit, obfidiens, Lupi fuis catulis, ovus Canum obturatum dederet. Qui est ovibus ac pasien-tibus Lupi matris defiderio ululantes educunt, tum Lupi irruentes fident fadus, feluum clamantium, ovos; Canum presfito definitas lamiunt, that is to say, There was a peace made betwixt the Wolves and the Sheepe, either side giving hostages to other, the Wolves gave their young whelps, and the Sheep gave the Shepherds Dogs to the VVolves. Now when the young VVolves were among the flock of Wolves, they howled for their dams, which when the old VVolves heard, they came rushing in upon the Sheep, crying out that they had broken the league, and therefore they destroyed the Sheep in the abience of the Dogs that should keep them: whereby is notably signified the simplicity of innocent men, and the impiety of the wicked, for whatsoever bonds of truce and peace are made with them, they ever respect their own advantage, taking any small occasion; like VVolves at the crying of their young ones, without all offence of the innocent and harmless, to break through the brazen walls of truce, peace, and amity, for the execution of their bloody and ungodly designs.

VVolves are truly said to be fierce and treacherous, and not generous and bold, and noble like Lions. They especially rage in the time of their hunger, and then they kill not so much as will suffice, but all the flock before them; but being satisfied, as we have said already, they seem rather Lambs then VVolves. The male is always as careful of the young ones as the female, for while she suckleth her young ones, he bringeth meat unto her in the den, and when that they are greatly confined both to fly away, they carry their young ones along with them. Great is their malice toward them that hurt them, as Nephtis faith, he cried one day when he was a hunting near Rome, for his Dog was fighting with a VVolf, and he comming in with the multitude of Hunters, alighted from his Horfe, and drew his sword, and gave the VVolf a wound. The VVolf feeling the stroke of the sword forfook the Dog and turned upon the man, making all force at him he could to bite him, but he professed he escapeth with singular danger, more by the help of his fellow hunters, then by his own valour; wherefore he concludeth, that as VVolves are enemies to all, so they take special revenge of them that harm them, as we have said before of Lions. Some say that when many of them have obtained a spoil, they do equally divide it among them all. I am sure the like is reported betwixt the old Lion and the young, but whether it be true in VVolves I cannot tell, but rather think the contrary, because they are inatiabte and never think they have enough. And Alberius faith, they do not communicate their prey like Lions, but when they have fed sufficiently, they hide the reftidue in the ground till they hunger again.

When they fell upon horned beasts, they invade them behinde, and on their backs; when they set upon Sheep, they choose a dark cloudy day or time, that so they may escape more freely; and to the intent that their treadings should not be heard, they lick the bottom or foles of their feet, for by that means they make no noise among the dry leaves; and if going along they chance to break a stick, and to confift their minds make a noise, then pretently they bite their foot, as if it were guilty of that offence: For the most part they fell upon such Cattle as have no Keepers, and raven in secret. If they come unto a flock of Sheep where there are Dogs, they first of all consider whether they be able to make their party good, for if they see they cannot match the Dogs, they depart away although they have begun the spoil, but if they perceive their forces to be
be equal or superior, then they divide themselves into three ranks, one company of them killeth Sheep, a second company fighteth with the Dogs, and the third fighteth with the men. When they are in danger to be taken by the hunters, they bite off the tip of their tails, and therefore the Egyptians, when they would describe a man delivered out of extremity and danger, do picture a Wolf lacking that part of his tail. To conclude, when they are in peril they are extremely fearful, affrighted, and afraid, especially when they are unavoidably included in the feem harmless, and then argue the beneficence of the men, which is full, cowardly, and treacherous, daring do nothing but for the belly, and not then neither, but upon a singular advantage, and for the manifesting hercelf, I will express these two stories following, as they were related to Gefner by Michael Hers, and Iugius Gubcrus. It happened (faith the first) that a certain Wolf constrained by famine, came unto a village near Milan in Italy, and there entred into a certain house, wherein sat the good wife and her children, the poor woman being terrified herewith, and not knowing what the did, ran out of the house, pulling the dore to after her, and so running the Wolf in among her children, at last her husband returned home, unto whom she related the accident, and how she had shut up the Wolf; the man being more afraid then was cause, left the Wolf had devoured some of his children, entered hastily in a dores, longing to fave and deliver his poor Infants, whom the fearful mother had left with the Wolf, when he came in he found all well, for the Wolf was in wofe cafe, altomithed, amazed, daunted, and flanding like a flock without fene, not able to run away, but as it were offering himfelf to be devour'd: And this is the first history. The fecond is like unto this, but more admirable, for the great Uncle of Gubcrus, being marvelously addicted to the hunting of wide beasts, had in his land divers ditches and trenches cut up with other pits and caves wrought very artificially for the safe keeping of fuch beasts as should fall into them. Now it hapned that upon one Sabbath day at night there fell into one of those pits three creatures of divers disposition, and adverse inclination, none of them being able to get out thereof: the first was a neighbors wife of his a poor woman, which going to the field to gather Bees and Rapes for her meat the day following, it fortuned that the fell down by a mishance into the said pit, wherein she was fain to lodge all night (you must think with great anguish, sorrow, and perilous danger to her felf) beside that which her husband and family conceived at home, but she had not carri'd long in the said pit ere a Fox was likewise taken and fell down upon her, now began her grief to be encreated, fearing left the wide bell should bite and wound her, having no means to escape from him, nor no man to help and relieve her, although the cried as loud as ever the could; wherewithal being wearied, necessity made her to be patient, being a little comforted to fee the Fox as much afraid of her, as she was of him, and yet she thought the night full long, willing for the break of the day, when men fir abroad to their labours, hoping that some or other would hear her moan, and deliver her from the society of fuch a Chamber-fellow: while thus fhe thought, striving betwixt hope, fear, and grief, lo what befel her more woefully then before, for suddenly a Wolf was taken and fell down upon her, then the loft her hope, and in lamentable manner thinking of husband and children, how little they conceived of her extremity, resolved to forsake the world, and commended her foul to God, making no other reckoning but that her disfreasted lean limbs should now be a supper and breakfast to the Wolf, wishing that she might but fee her husband, and kifs her children before the loft her life by that savage execution; but all her wishes could not prevail, nor clear her heart from fear and expectation of an unavoidable death: while thus the mused, the saw the Wolf lie down, the fitting in the one corner, and the Fox refting in another, and the Wolf appealed as much as either of both, fo the woman had no harm but an ill nights lodging, with the fear whereof she was almost out of her wits. Early in the morning came his great Uncle the Hunter to look upon his trenches and pits what was taken, and coming unto that pit, he found a treble prey; a Woman, a Wolf, and a Fox: whereat he was greatly amazed, and stepped a little backward, at the firft fight the woman feeing him cryed out, calling him by his name, and praying his aid: he knowing her by her voyce, prettily leaped down into the pit, (for he was a valiant man) and with his weapon firlew the Wolf, and then the Fox, and so delivered the woman from the fear of them, yet there was forced to leave her till he went and fetched a ladder, for she was not able to come forth as he was; then having brought the ladder, he went down again into the pit, and brought her forth upon his shoulders, in that manner delivering her safe to her husband and family. Now these two stories do plainly set forth, that a Wolf daren't do nothing while he is in fear himself.

It hath been a question whether Wolves can be tamed or no, some fay that they are always wide and can never be tamed. [Albert] writeth, that being taken wheals, they are tamed and will play like Dogs, yet he faith, they never forget their hatred againft the Hunter and the desire of Lambs or other beasts which are devour'd by Wolves, whenever he goeth abroad. And [Stumpfius] writeth, that even when they are tamed, they are angry with their Masters that look upon them while they eat their meat.

[Strabo] writeth a fable of two Woods among the ancient Veneti, one of them dedicated to Juno, and the other to Diana, and he would make the world believe, that therein the Wolves lived peaceably and gently with the Harts, and did come to the hands of men like familiar tame Dogs, suffering themselves to be found which is full, cowardly, and treacherous, daring do nothing but for the belly, and not then neither, but upon a singular advantage, and for the manifesting hercelf, I will express these two stories following, as they were related to Gefner by Michael Hers, and Iugius Gubcrus. It happened (faith the first) that a certain Wolf constrained by famine, came unto a village near Milan in Italy, and there entred into a certain house, wherein sat the good wife and her children, the poor woman being terrified herewith, and not knowing what the did, ran out of the house, pulling the dore to after her, and so running the Wolf in among her children, at last her husband returned home, unto whom she related the accident, and how she had shut up the Wolf; the man being more afraid then was cause, left the Wolf had devoured some of his children, entered hastily in a dores, longing to fave and deliver his poor Infants, whom the fearful mother had left with the Wolf, when he came in he found all well, for the Wolf was in wofe cafe, altomithed, amazed, daunted, and flanding like a flock without fene, not able to run away, but as it were offering himfelf to be devour'd: And this is the first history. The fecond is like unto this, but more admirable, for the great Uncle of Gubcrus, being marvelously addicted to the hunting of wide beasts, had in his land divers ditches and trenches cut up with other pits and caves wrought very artificially for the safe keeping of fuch beasts as should fall into them. Now it hapned that upon one Sabbath day at night there fell into one of those pits three creatures of divers disposition, and adverse inclination, none of them being able to get out thereof: the first was a neighbors wife of his a poor woman, which going to the field to gather Bees and Rapes for her meat the day following, it fortuned that the fell down by a mishance into the said pit, wherein she was fain to lodge all night (you must think with great anguish, sorrow, and perilous danger to her felf) beside that which her husband and family conceived at home, but she had not carri'd long in the said pit ere a Fox was likewise taken and fell down upon her, now began her grief to be encreated, fearing left the wide bell should bite and wound her, having no means to escape from him, nor no man to help and relieve her, although the cried as loud as ever the could; wherewithal being wearied, necessity made her to be patient, being a little comforted to fee the Fox as much afraid of her, as she was of him, and yet she thought the night full long, willing for the break of the day, when men fir abroad to their labours, hoping that some or other would hear her moan, and deliver her from the society of fuch a Chamber-fellow: while thus she thought, striving betwixt hope, fear, and grief, lo what befel her more woefully then before, for suddenly a Wolf was taken and fell down upon her, then the loft her hope, and in lamentable manner thinking of husband and children, how little they conceived of her extremity, resolved to forsake the world, and commended her soul to God, making no other reckoning but that her disfreasted lean limbs should now be a supper and breakfast to the Wolf, wishing that she might but see her husband, and kiss her children before the lost her life by that savage execution; but all her wishes could not prevail, nor clear her heart from fear and expectation of an unavoidable death: while thus she mused, she saw the Wolf lie down, the sitting in the one corner, and the Fox resting in another, and the Wolf appealed as much as either of both, so the woman had no harm but an ill nights lodging, with the fear whereof she was almost out of her wits. Early in the morning came his great Uncle the Hunter to look upon his trenches and pits what was taken, and coming unto that pit, he found a treble prey; a Woman, a Wolf, and a Fox: whereat he was greatly amazed, and stepped a little backward, at the first sight the woman seeing him cryed out, calling him by his name, and praying his aid: he knowing her by her voyce, prettily leaped down into the pit, (for he was a valiant man) and with his weapon firlew the Wolf, and then the Fox, and so delivered the woman from the fear of them, yet there was forced to leave her till he went and fetched a ladder, for she was not able to come forth as he was; then having brought the ladder, he went down again into the pit, and brought her forth upon his shoulders, in that manner delivering her safe to her husband and family. Now these two stories do plainly set forth, that a Wolf daren't do nothing while he is in fear himself.
The History of Four-footed Beasts.

Although nothing hath hitherto been brought to light concerning the Sea-wolf of the ancient writers, that I know, yet his form is notable to be observed; and you may judge whether you will call him a Thief or a Sea monster, much differing from the Wolf's, as that he feedeth to challenge a particular description or treatise. It is also a Four-footed beast that liveth both on sea and land, satisfying his hunger on the most part upon fishes; it hath been seen upon the British Ocean-thoar, and it doth resemble the Wolf that liveth on the land, that it is not unaeedevedly called among the common people a Wolf.

It doth live also a long time being tamed, it hath a dangerous head, and very many hairs growing on both sides of his eyes to shadow them, his nostrils and teeth are like unto a Dogs, and strong hairs growing about his mouth; also small bristles growing upright upon his back: and adorned and marked on every side with black distinct spots, a long tail, thick and hairy, all the other parts being like to a Wolves, as you may easily see by this expressed Picture: and unto this belongeth the story of the Wolves last before expressed, which live upon fishes, and divide them familiarly with men.
Of the THOES.

T

Here are two kinds of Thoes, as there are of Panthers, differing only in magnitude or greatness. But the lesser Thoes is like unto the lesser Panther, a Lycopanther, and the Lycaon Canatus engendered between a VVolf and a Dog are all one four-footed beast. The Thoes also are a kind of VVolf. And again there is a kind of VVolf which Alisflat doth call Cabaces, but Aisicon doth write, that it ought to be called Beruet, in the Perifian tongue. And again in another place, where he doth write, that the Lion and the Thoes are utter enemies, and Albertus doth translate it, that a VVolf doth fight with the four-footed beat Tabor, which is a corrupted word, Tabor, for Tabor, as Cabace for Thoes, and this some men think to be the Lyx. Thoes is called in Hebrew, Tabas; Alisflat is a four-footed beat like to a Wolf. Adictaeb is also a kind of Woff, but I do not know whether these names belong only to the Thoes, or to any other kind of Wolf. Selium doth call Thoes Ethiopian Wolves, and a little before he said that Lycaon was an Ethiopian Wolf, maimed on the neck, and so divers coloured that a man would think there were no colors wanting in them.

The people of Sybia likewise say, that the Buff doth change his colors, neither is there any other beat covered with hair, except the Lycaon among the Indians, (as Pliny also writeth) and besides this there is no mention made of the Lycaon among all the ancient writers. Lycaons are called Dogs, in the story of the diversities of Dogs. The lesser kind of Thoes are the beat, for some make two kinds of Thoes, and some three, and these like birds, and other four-footed beat, change their color, both in Winter and Summer, so that sometime they appear bare, and again at other times all over, that is bare in the Summer, and rough in the Winter, but it doth plainly seem that there is no more kind of Thoes but one, which the things that come after doth prove and make manifest. Nearbe faith, that thoese Tigers are not true Tigers, which are commonly called Tigers, but changeable Thoes (as if that every Thoes were not changeable) and greater then the other Thoes.

They have no renown which take the Lycops Caninus for a Thoes, which we have already shewed to be a Lyx; for the Rhetians which speak Itallian &c. the Savages do to this day call him Cervario, and for the Armenian Woff the Ciacius, and the Lycaon Canatus we have already shewed, that it is a Panther, and therefore it is needles to fland any longer upon those names in this place. We will therefore take it for confessed, that the Thoes is a beat engendered between a Woff and a Fox, whereas some are greater and some are smaller, and there are found about the Mountain Pangem, Citum, Olymp, Mytis, Pindus, and Nys, beyond Syria, resembling for the most part a Hyanza, having a longer body, and a straighter tail than a Woff, and although it be not so high of stature, yet it is as nimble and as strong as is the Woff, and it seemeth that the very name Thoes is taken from the celerity and swiftness in running and leaping, for it getteth his living by the quickness of his feet. In the outward face it much resembles a Woff his Father, but in spots and length of his body it resembles a Panther his Mother; they couple in generation like Dogs, bringing forth two or four at a time, like Wolves, which are blinde, and their feet cloven into many toes.

They are enemies to Lions, and therefore they do not live in the same place where Lions are, not only because they live upon the same victuals and food, but also because they are a more pitiful creature then they, especially to man, for if they see the face of a man at any time, they run unto him and do him all such reverence as their brutish nature can demonstrate.

And further Pliny and Selium write, that if they see a man oppossed by any other beat, they run and fight for him, although it be with the Lion, not sparing to offer their own lives, and to spend their dearest blood in the defence of the king, who by secret instinct of nature they understand to be ordained of God, the King and chieft of all worldly creatures: therefore Gratus called this kind, femifem, Thoes de fanguine prolem, and of their taming and fighting with Lions, he speaketh:

---Thoes commissus Leones
Ei subire aula, & parvis donscope laceria.

They live for the most part upon Harts, whom they take in the swiftness of their course, flye they bite and suck their blood, then suffering them to run away to some Mountains, thither they follow them and take them the second time, not destroying them all at once, but by distance of time, whereby the Harts blood groweth sweeter unto them, and they have the better appetite thereunto to destroy them. The Lycopanthers, and also the beat Pathyon, whereof Albertus speaketh, I do take to be two several distinct beats from the Thoes, although the quantity and stature agree, and I fee no cause if there be any flesh beat in the world, but that we may truly say they are a lesser kind of Panthers. And this shall suffice to have said of these beats, which are deemed to be of the kind of Wolves, wherein we have endeavored to say so much of the general and special as we could collect out of any good Authors; and thus we will shut up the story of the Wolf with a short remembrance of his medicinal vertues.

---The Medicines of a Wolf.

A Wolf being foddain alive until the bones do only remain, is very much commended for the pains of the Gout, or a live Wolf steeped in Oyl and covered with Wax, is also good for the same disease.

D d 3
The skin of a Wolf being tasted of those which are bit of a mad or ravenous Dog, doth preserve them from the fear or hazard of falling into water. The skin of a Wolf is very profitable for those which are troubled with the wind colick, if it be bound fast about the belly: and also if the person so affected doth sit upon the said skin, it will much avail him. If any labouring or travelling man doth wear the skin of a Wolf about his feet, his shoes shall never pain or trouble him. The skin of a Wolf being new plucked off from him, and especially when it hath the natural heat in it and rowled about the member where the cramp is, is very effectual against it.

The blood of a Wolf being mixed with Oyl, is very profitable against the deafness of the ears. The dung and blood of a Wolf is much commended, for those that are troubled with the Colick and Stone.

The blood of a Buck, Fox, or Wolf being warm, and so taken in drink, is of much force against the disease of the stone. He who doth eat the skin of a Wolf well tempered and fodder, will keep him from all evil dreams, and cause him to take his rest quietly. The flesh of a Wolf being fodder, and taken in meat, doth help those that are Lunatick. The flesh of a Wolf being eaten is good for procreation of children. You may read more things in the chapter going before, concerning remedies of the flesh of a Wolf taken in meat. The fat of a Wolf is no less efficable, then the flesh.

The fat of a Wolf doth very much profit, being anointed upon those whose jynots are broken. Some of the later writers were wont to mix the fat of the Wolf, with other Ointments for the disease of the Goat. Some also do mingle it with other Ointments, for the Plltie. It doth often also the Uvula, being anointed thereon. The fame also being rubbed upon the eyes, is very profitable for the beards or bloud-shot of the eyes. The head also of a Wolf is very good for those that are very troubled with sleep upon being laid under their pillow. The head of a Wolf being burned into ashes, is a special remedy for the leathness of teeth. The right eye of a Wolf being killed, and bound to the body, doth drive away all Agues and Fever. The eye of a Wolf being rubbed upon the eye, doth dimmit all diseases that rife in the fight of the eye, and it doth also take away all marks or prints being made with hot Irons. The right eye of a Wolf also is profitable for those that are troubled with Birchtes on the right side of the belly; and the left eye of a Wolf for pains on the left side. The right eye of a Wolf is very good against the bitings of Dogs. Also the eye of a Wolf is much commended for those that are Lunatick by the bitings of Dogs.

The teeth of a Wolf being rubbed upon the gums of young Infants, doth open them, whereby the teeth may the easier come forth. Again, the gums of children are loosen'd with the tooth of a Dog, being gently rubbed thereon, but they are sooner brought forth with the teeth of a Wolf. Some men do commend the tongue of a Wolf to be eaten of those that are troubled with the Falling-ficknes. The artery which springeth in the throat of a Wolf being taken in drink, is a most certain cure against the Squinsie. The throat of a Wolf taken in drink, is very much commended for those that are troubled with the Falling-ficknes. The lungs or lights of a Wolf being fodder and dried, and mingled with Pepper, and so taken in milk is very profitable for those that are puffed up or swollen in the belly.

The heart of a Wolf being burned and beaten to powder, and so taken in drink, doth help those that are sick of the Falling-ficknes. Take one ounce of the gum of an Oak, and half an ounce of the gum of a Pear-tree, and two drams of the powder made of the top of a Hart-bone, and one dram of the heart of a Wolf, all which being mingled together, and made into medicine, is always used for the cure of all ulcers: but it will be more effectual if thou dost add thereto the hinder-part of the skull of a man beaten to powder. The Liver of a Wolf is of no use vertue then the Lungs or Lights, which I have manifested in the medicines of the Fox. The Liver of a Wolf helpeth or profitteth those that are sick of the Falling-ficknes. The Liver of a Wolf being washed in the belt white wine, and so taken, is very good for those diseases that arise in the Liver. The Liver of a Wolf mixed in the medicine made of Liver-wort, is very much commended for the diseases in the Liver. Galen also doth say, that he hath holpen those which have been diseased in the Liver, only using the medicine made of Liverwort, and he faith, if he did apply any other medicine thereto, he did little or nothing at all profit him.

The Liver of a Wolf is very profitable for those that are troubled with the furce in the mouth. The Liver or lappes of a Wolf is much used for those that are troubled with diseases in the Liver, but you must dry it and afterwards beat it to powder, and so give the party so affected one dram of it in sweet wine. The Liver lappes of a Wolf faith Maresellis, being dried and beaten to powder, and a little part of it mingled in like portions with the powder made of Fengeek, of Lupines, Woodworm, and of the herb called Herba Menthe, and so mingled that it may be about the quantity of a cup full, and so given that day which he is not troubled with the Fever, but if he shall be troubled with it, let him take it in water for the space of three days, and after he hath drunk it, let him lie for the space of half an hour with his arms spread abroad: and afterwards let him walk very often, but eat very seldom, and let him be sure he keep himself for the space of those three days well ordered, and from drinking any cold drink, or eating any salt or sweet thing, and within a little space after he shall be freed from that disease. The Liver lappes of a YWolf being wrapped in bay-leaves, and so set to dry at the Sun or at the fire, and being dryed, beat it to powder in a Mortar, first taking away the leaves very warily, which being powdered, you must keep it in a clean vessel, and when you give it to drink, you must add thereto two leaves of Spoonwort, with ten grains of Pepper beaten very small, and as much clarified Honey as is needful, and also made hot with a hot burning Iron, and mingled very diligently in a Mortar, which being so warmed, you must give him to drink sitting right
right up in his bed, that after he hath taken the potion, he may lie down on his right side for the space of an hour, drawing his knees together, and after that he hath done so, let him walk up and down for the space of an hour, and this will likewise cure him of the same disease.

Avicen doth set down a medicine concerning the cure of the hardness of the Liver, which is, Take Opium, Henbane, Oyl made of Beavers bones, Myrrhe, Saffron, Spicknard, Agrimony, the Liver of a Wolf, and the right horn of a Goat burned, of each equal parts, and make thereof a medicine. The Liver of a Wolf being made in the form of a dry Electuary and given as a Lozeng, doth also very much profit against the diseases of the Liver.

Gugger a Philosopher doth affirm, that the Liver of all living beasts doth very much profit against all pains of the Liver. The Liver of a Wolf being thoroughly dried and drunk in sweet Wine, doth mitigate all griefs or pains of the Liver. The Liver of the same beast to the quantity of a penny, taken in a pinte of sweet Wine, is very medicinaile for the curing of all pains in the Liver whatsoever. The Liver of a Wolf being taken in hot wine, doth perfectly cure the cough. If an intolerable cough doth vex any man, let him take of the Liver of a Wolf, either dried or burnt, as much as he shall think convenient, and therewith let him mangle wine, honey, and warm water, and afterward drink the same falling every day, to the quantity of four Spoonfuls, and he shall in short space be cured of the same.

The laps or fillets of a Wolves Liver, being applied unto the side, doth perfectly heal any itch or pricking aching therein. The Liver of a Wolf being taken in sweet wine, doth heal those which are troubled with a Tisick. The Liver of a Wolf being first boiled in water, afterwards dried, beaten and mingled with some certain potion, doth insanely heal the grief and inflammation of the stomach. The powder of a Wolves Liver mingled with white wine, and drunk in the morning for some certain days together, doth cure the Dropkie. The Liver of a Wolf taken either in meat or drink, doth aflwage the pains of the fecret parts. Two Spoonfuls of the powder of a Wolves Liver being given in drink, doth cure all pains or fores of the mouth. The gall of a Wolf being bound unto the navel of any man, doth loosen the belly.

The gall of a Wolf, being taken in wine, doth heal all pains in the fundament. The entrails of a Wolf, being washed in the best white wine, blown upon, dried in an Oven, pounded into dust, afterwards roweld in Wormwood, is a good and effectual remedy against the Colick and Stone. If some part of the yard of a Wolf being baked in an oven, be eaten by any, either man or woman, it insanely stirreth them up to luft. Concerning the genital of a Wolf I have spoken before in the medicines of the Fox: but antiquity, as Play laith, doth teach that the genital of beasts which are bony, as Wolves, Foxes, Ferrets, and Weeals, are brought to an especial remedy for many diseases. If any man take the right f hone of a Wolf, being bloody, steep it in Oyl, and give it unto any woman to apply it unto their secret parts, being wrapped in wool, it insanely caueth her to forfaie all carnal copulation, yea although she be a common strumpet. The same being taken in some certain perfumes, doth help those which are troubled with the soul evil.

The eyes being anointed with the excrements of a VVolf, are insanely freed from all covers or spreading skin therein. The powder of the same VVolf being mingled with the sweetest Honie as can possibly be had, and in like manner rubbed or spread upon the eyes, doth expel all dizzining from them. The time of a VVolf long rubbed until it be very light, being mingled with Honey, by the unction thereof, causeth the fitch or scurfe growing about the eyes to avoid away, and reforreth them to an exceeding cleaninesse. The powder of a VVolvs head being rubbed upon the teeth, doth make fast and confirm the loofenesse thereof, & it is most certain that in the excrements of the same beasts, there are certain bones found, which being bound unto the teeth, have the same force and efficacy.

The dung of a VVolf or Dog being beaten into small powder, mingled with Honey and anointed upon the throat, doth cure the Quinsie or Squinsie as also all other fores in the throat whatsoever. The time of a VVolf being given to those which are troubled with the Colick to drink, doth easily cure them, but this dung is more effectual if it have never touched ground, which is very hard to come by, but it is found by this means. The nature of the VVolf both in making his water, as also in voiding his excrements is like unto a Doggs, for while he voideth his water he holdeth up his hinder-leg, and voideth his excrements in some high or sleepy place far from the earth, by which means it faileth down upon bushes, shrubs, elder-trees, or some other herbs growing in those places, by which means it is found never touching the earth. There is furthermore found in the time of VVolvs certain bones of beasts which they have devoured, which for as much as they could not be ground or chewed, so also can they not be concocted, which being beaten and bruised small, are by some commendable to be excellent given in drink for the ease of the Colick, but if the grieved person shall be some fine or delicate person which cannot endure to gross a medicine, then mingle it with Salt, Pepper, or some fuch like thing, but it is most often given in sweet wine, so there be but a small quantity thereof drunk at one time.

But this dung which the Graecians call Lagatons, and is to be applied to the groin of the diseased person, ought to be hanged in a band made of wooll, but not of any wooll: But it would be more effectual if it were made of the wooll of that Sheep which was slain by a VVolf. But if the same cannot be got, then it is fit that there be two bands, one which may be bound about the groin, and another which may be bound upon the dung to keep it from falling.

There are also some which call a small quantity of the same dung to the bigness of a Bean in a little pot, setting the same to any one which is troubled with the said disease, and it healeth them (which in
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in a manner seemeth incredible) in very short time. The dung of a Wolf boiled in small white wine, and afterwards taken in drink, is very profitable for those which are troubled with the colick: and it is also reported that if the same dung be covered with the skin of the same beast, and hung upon the thigh of any one which hath the colick being bound with a thread made of the wool of a Sheep's skin, a Wolf, it will instantly cure the said diseas.

The time of a Wolf, so that it be not found upon the earth, but upon some trees, Brambles, or Bulrushes, being kept, and when there shall be need bound unto the arm of him that shall be troubled with the Colick, or to his neck being included in a bone, or in Copper, and hung with the thread wherein with filk-women weave, doth wonderfully and most speedily cure him, so there be great care had, that in the mean time there be a little of the same dung given to the grieved party to drink, not knowing what it is. The dung of a Wolf being taken, and the bones therein beaten into powder, mingle therewith cold water, giving it to any one to drink which is troubled with the Stone, and it will instantly cure him.

The dung of a Wolf beaten into the smallest powder then strained and given unto any in his face which is troubled therewith to the quantity of half a spoonfull in hot water, is a very effectual and approved cure for the Stone. The bones which are found in Wolves, being bound unto the arm of any one which is troubled with the Colick, having never touched the ground, do with great speed and celerity cure him. The pattern bone of a Hare found in the dung of a Wolf, being bound unto any part of the body of him which is troubled with the colick, doth very effectually cure him. The dung of a Wolf with the hairs of a white Afe, taken by any woman in a certain perfume, maketh her apt for conception.

The teeth of a Wolf are unequal, wherefore their bitings are very dangerous. A ravenous Wolf by his biting bringeth the same danger, as a ravenous Dog, they also are cured by the same medicines, as we have declared at large in the story of the Dog. The wounds which come by the teeth or nails of a Wolf are very dangerous, for the fifth which pierceth through all clouts or spunges which are laid upon them: But they are cured by no other means then the bitings of Dogs: Aristotele writeth these things concerning the bitings of a Lion, and not of a Wolf.

Johannes Vitus the Hungariam declared that there were certain men in Hungary bitten by a mad Wolf, and that they were as it seemed perfectly cured: But before forty days expired they all died by a most bitter and painful disease, small pieces of flesh excreting through their urine in the form of Dogs, with an exceeding pain or torment. It is also reported of a certain Countryman, who when he had drunk a Wolf with his Club, and the Wolf had so torn his face with his nails, that he pulled off the skin, he was in short time healed that there appeared no sign of any harm, but in short time after he began to be sick, and to howl like unto a Dog, and so perished: by which it was conjectured that that Wolf was mad. An Ox being bitten by a mad Wolf or Dog is cured by Garlic, being beaten and rubbed upon the wound: The Wolf himself is also healed of any wound by old salt flesh applied unto the same. Two drams of Gentian being drunk in wine, is an excellent cure for the bites of a mad Dog and raving Wolves, as also of all beasts tearing with their teeth or nails. The bites of Wolves being marked in the bodies of any Catell, are burned or seared with a hot Iron, left that the biting be assuredly hurtfull, may draw unto it self corruption. And thus much shall suffice concerning the medicines of the Wolf.

Of the ZEBEL, commonly called a SABEL.

Among all the kinds of Weasels, Squirrels, Wood-mice, wilde Mice, or other little beasts of the world, there is none comparable to this Zebel, commonly called in Latine Zebelius, and Zebela, from whence the Germans call it Zabel, the Illyrians and Polonians, Sobel and Sobolt, the Italians, Sef, and Sabinet: The skins hereof are called Zebeline, and Zebelin, and sometimes Zibeline. Its bred in Maloia, and the Northern parts of the World, among the Lapons, but no where more plentiful then in Tartarie, Siberia, and Sarmatia, and it is therefore called by some Mus Sybisnes, the Sybian Moufe. The French men because of the similitude it hath with a Martin, do call it by a compound name, Marty Zebelinus. It liveth for the most part in the Woods, being leffer then a Martin everay way, and hath also shorter legs: They run up and down upon trees like Squirrels, easily falling their claws in the boughs; when they leap, their tail ferveth them instead of a cross Beam to direct them. They bite mof scurily, for their teeth are as sharp as Razors, and there is no beast in the World of their quantity so angry and terrible as they: their flesh is unprofitable and good for nothing. The only price and estimation of this beast is for the skin, which farre excelgeth all the skins of the World, either Ermins, Martins, or Foines, differing herein from the Martins, because their hair is thinner, and if you stroke them from the head to the tail, or on the contrary from the tail to the head, they do lie every way smooth, whereas the Martins do only fall smooth from the head to the tail.

These are more subject to Worms then other skins, except they be continually worn, or laid up with bunches of Wormwood: but above all other things the laying of them open one day togethe in the Sun or air, doth him more harm then a whole years wearing, for the beast itself liveth evermore in shadowy places, forbearing the sun except he be hunted, and catcheth small birds in secret. In the furthest part of Lituania they have little or no money, and therefore the Merchants which traffique thither do exchange their wares for Zebel or Sabel skins; those are the best which have
Of the Sivet-cat.

have most white and yellow hairs mingled in them, and the Garments of Princes are only fringed and lined with these Sabel skins, and honourable Matrons, ancient Noble men and their Wives do likewise use two or three of these to wear about their necks; for it is certain that a garment of these skins is much dearer than cloth of Gold, and I have heard and also read, that there have been two thousand Ducks payed for so many as were put in one Cloak.

It is a very libidinous and lustful beast, and at that time lanketh very rankfully, wherefore it mingleth itself with Martins of all sorts that it meeteth. And thus much shall suffice to have described of this little beast. Now there are divers other which seem to be of this kind, of which, though I have not much to say, yet rather then they should be omitted, I will express their bare names, that so I may give occasion to all our Country-men that shall travel into other Nations, to make enquiry after them, that to at their return, if they have any confidence of publique good, they may get themselves eternal fame and names, by communicating publiquely their own knowledge, experience, and learning, which they have gained in thefe, or other Four-footed beasts.

Of the NOERTS.

This beast is of the quantity of a Wesel, and by the Germans called Noerzt, and Nertz, from which word the Latines have their Noerza for this beast. It liveth (as Georgius Agricola writeth) in the Woods, betwixt Sowes and Vifula, the colour of the hairs which is short and smooth, is for the most part like an Otter. Their skins are fold at Franceford by forty in a heap or bundle, they are long, and more red then the Ferrets, every bundle most commonly is fold for fix and twenty Nobles. Some think that this is the Latex, spoken of before, because it geteth his living in the waters.

Of the VARMEL.

This beast is called by the Latines Vormelia, by the Germans Wormiein, it is lefse then a Ferrer, the belly whereof is black, all the residue of the skin full of white, pale, red, and yellow spots, which adorneth it in admirable manner, very comely and excellent to be looked upon, the tail not past half a hand breadth long, the tip whereof is black, but the hairs of the residue mixed with white and a th colour together.

There is another beast which for the variety of the colours, which are apparent in his skin, he is called a Salamander, not that which liveth in the fire, but one like unto it, having a gentle hair, differing all over into black and yellow spots, and these because of our ignorance we reckon among our outlandish Wesels.

In India there is a little beast called Oburewa, having a very precious skin, and this (as Cardan writeth) hath a bag under the belly, wherein it suffereth his young ones to go in and out, as before we have said of the simiaa, or Foxe-Ape.

There is another little beast in Hungaria, called Ureken, which dwelleth in holes of the earth as Coney do, the outward proportion whereof is like a Wesel, but it is much thinner and longer, the colour of the back is red, and all the residue of the body Moufe colour. Now although I do not read any special use of the skin of this beast, yet I thought it good to name it in this place, because it is reported that the breathing thereof upon the face of man is venemous and poyfonfull, for when Souldiers sleep in their tents upon the earth, they come many times and look in their faces, and poyfon them: And thus much for the Zebel, and the severall kinds of this little beast.

Of the ZIBETH, or SIVET-CAT.

This beast description that is of this beast in all the World, that I could ever finde, was taken by Doctor Gay, and thus tens as it is here figured to Doctor Gifmer with these words following. There came to my sight (faith Doctor Gay) a Zibeth or Sivet very lately, which was brought out of Africa, the picture and shape whereof in every point I caufed to be taken, which is this prefixed, so that one Egge is not more like another, then this is to the said Sivet or Zibet. It is greater then any
any Cat, and lefser then a Texus, having a sharp face like a Martin, a short, round, blunt ear, which was black withouht, but pale within, and on the brims a blewsky-coloured eye, a foot and leg black, and more broad or open then a Cats: Likewise a black claw, neither so crooked, nor so hid in the foot as it is in a Cat, but their teeth are more fearefull and horrible. It is all spotted over the body, but the nose thereof is black, the neither part of the upper chap pale, and the middle part black, and from thence to the top of the head it is of the colour of a Badger. The lower chap was all black, and the briflies of the upper chap were white, growing forth of a pale skin, and a little above the eye there were two other white ones growing forth of a black skin.

The throat thereof was black, and a little above the eye there arife three black lines or ftrakes, whereof the firft or uppermoft defcendeth down right to the throat, the second defcendeth compaffe in and out to the middle of the neck, and the third down to the shoulder, and then a little beneath that place on the contrary, arife two other black lines like circles afcending in the compaffe of the shoulder to the back bone: and all the residue of the body is dillinguifh'd and parted into many colours, having divers and fundry fpots fcarted abruptly throughout the whole circuit, whereof fome are continued and joyned together. For that which is upon the back is continued from the shoulder, and the second and third arifing in that part, are broken and divided, the fourth and all the residue are in like fort difcontinued and separated one from the other, fo that their position ruruneth all in length.

The firft part of his tail to the middle is spotted, and all the refidue black. The hair both on the face, legs, and feet, is foft, and very gentle to be handled, falling down, but in all other parts of the body, it is harfh, deep, and ftanding upright: the fpots doth both afcend and defend, the tongue hereof was smooth and not rugged, and under the tail was the paffage for the excrements after the fflation in other beftes, and a little beneath the fame was the receptacle or bag containing the Sivet, and a little space after that the privy part of the male which was hid or fhethed in the body. The beafl being moved to anger, uttereth a voyce like to the voyce of an angry Cat, withall doubling the letter R.R. but being not angry the voyce is like a young Cats although lower.

This Zibeth was in length from the head to the tail, one foot, three palms, and one Roman fingers breadth, but the breadth thereof under the belly, was one foot, two palms, and three Roman fingers. It was a gentle and tractable Creature, and was fold for eight pounds of English money, which was in French twenty four Crowns, or in Florens forty and eight. These things are faid by Doftor Cau. Now unto this Geffer addeth, that he received fuch another Picture from one Johannes Bentmannus, which he took by another of these Cats in the possession of the Duke of Savoy, and he faid that it was bought by him for seventy Taters (every Tater being worth in our English money eight pence half penny) in the year of the Lord, 1545. This beafl is a very clean beafl, I mean, a hater of filthineffe: and therefore the place wherein it lyeth muft be swept every day, and the Veoffel clean wash'd. The Sivet or liquor diliftilled out of the Cod, muft be taken away every second or third day, or else the beafl doth rub it forth of his own accord upon fome poftle in his kennel, if he be tamed or inflected. This Sivet is an Excrement not growing in the secret part only, but in a peculiar receptacle by it felf, increaing every day the weight of a groat; the colour whereof at the beginning is like Butter, but afterwards it growtheth more fad and brown: one ounce of it if it be pure and not foppifhed, is fold for eight Crowns at the leaff. There be Impoffors, which do adulterate it with an Oxes gall, Styrrax, and Hony. This is of a strange favour, and preferred before Musk by many degrees, yet it fmelleth worse if it be held hard to the nose: It is faid that the liquor running out, doth go back again if any Veoffel be put to receive it, except it be a Silver Spoon or Porringr.

Les Affer faith, thefe Beafles are wilde, untamable, and live upon flesh, but the European Merchants buy of the young ones and nourifh them tame, with Bran, Milk, hard Egges, and other things, and that fo they convey them into Europe out of Africk, emptying their Codswice or thrice a day in the hot Countreys: and that this Sivet is nothing elfe but the sweat of the beafl under the feds, fore-legs, neck, and tail. There were divers of thefe Zibeths tamed among other. It is reported of a Conful of the Florentine Merchants at Alexandria, that had one of thefe tame, that it would play with a man, and bite his nose, ears, cheeks, or lips fo gently that it fhould not be felt, therefor whereof was given, because it was at the firft nourifhed with the milk of a Woman. Cardinall Galleatus had three of thefe at Rome, which he kept for their Sivet: And Obio Duke of Brunodia, had also one which he nourifhed with Sugar. They are bred in Ethiopia and India, about the City Vegus and Tanafari. Their Sivet is not faavoury till it be wash'd and cleaned. It is faid to be very excellent againft the frrangulations of the wombe; and it is good againft the Colick: It hath also vertue to purge the wombes of women, to purge the brain, and is applied to many other diseases and infirmitie.
THE HISTORY OF SERPENTS. OR, The second Book of living Creatures:

WHEREIN IS CONTAINED Their Divine, Natural, and Moral descriptions, with their lively Figures, Names, Conditions, Kindes, and Natures of all venomous BEASTS: with their several Poylons and Antidotes; their deep hatred to Mankinde, and the wonderful work of God in their Creation, and Destruction.


By Edward Topsell.

London, Printed by E. Cotes, 1658.
The History of Servants: A Selection of Popular English Short Stories.
To the Reader.

Entle and pious Reader, although it be needless for me to write any more of the publishing of this Treatise of Venemous Beasts, yet for your better satisfaction and direction, briefly take this which followeth.

After the publishing of the former book of Four-footed Beasts, I understood of two things much misliked therein, wherein I also my self received a just offence. First, the manifold escapes in the Press, which turned and sometimes over-turned the sense in many places, (especially in the Latine) which fault as it may in part concern me, so yet it toucheth another more deeply, yet are both of us excusable: He in wanting the true knowledge of the Latine Tongue, and I, because of my employment in my Pastorall charge, and both of us together, because we were not so thoroughly estated, as to maintain a sufficient Scholar to attend only upon the Press. Wherefore, in this second Book, we have removed away that blot, and used a more accurate diligence, and I trust there is no escape committed perverting the sense, and not very many altering the letters.

The second exception taken against the former Treatise, was the not Englishing or translating of the Latine Verses, which thing I purposed to have done, if I had not been overhaltened in the business; for it had been to the work an Ornament, and to the History a more ample declaration: This fault I have now amended in the setting forth of this second Book of Living Creatures. All therefore that can be laid for your direction, I could with the History more compleat for the manifestation of the most blessed Trinities glory, whose works are here declared; and for the better revelation of the severall natures of every Serpent. I may fail in the expressing of some particular, yet I suppose that I have omitted no one thing in their narration, which might be warranted by good authority or experience. And therefore, although I cannot say that I have said all that can be written of these living Creatures, yet I dare say I have wrote more then ever was before me written in any Language.
Now therefore ask the Creatures (after God) and they will tell you: For, saith S. Austin, Interrogatio creaturarum profunda est consideratio ipsarum: responso earum, attestatio ipsarum de Deo, quoniam omnia clamant, Deus nos fecit. The asking of the Creatures is a deep and profound consideration of their several natures: their answer is, their attestation or testimony of God, because all of them cry out, The Lord hath made us. Wherefore, seeing it is most true, incognita non desiderantur, things unknown are not desired, to the intent that all true English Christians may hereafter more affectionately long after and desire, both the mysticall vision of God in this World, and also his perfect sight in the World to come, I have (for my part) out of that weak ability wherewith I am endued, made known unto them in their own mother Tongue, the wonderfull works of God; for the admiring of Gods praise in the Creatures, standeth not in a confused ignorance, not knowing the beginnings and reason of every thing, but rather in a curious and artificiall invesigation of their greatest secrets.

Therefore, let all living men consider every part of divine widsom in all his works; for if it be high, he thereby terrifieth the proud; by the truth he feedeth the great ones; by his affability he nourisfeth the little ones. And so I will conclude my Preface with the words of the three Children: O all ye works of the Lord, praise him and magnifie him for ever.

Edward Topsell.
A GENERAL TREATISE
OF
SERPENTS,
DIVINE, MORAL, and NATURAL.

Of the Creation and first Beginning of SERPENTS.

Here is no Man that can justly take exception that this History of Serpents beginneth at their Creation: for seeing our purpose is, to set forth the works of GOD, by which as by a clear glass, he endeavoureth to disperse and distribute the knowledge of his Majesty, Omnipotency, Wisdom and Goodness, to the whole race of Mankinde, it seemeth most proper that the first stone of this building, laid in the foundation be fetched from the Creation: and the rather, because some Naturalists (especially amongst the ancient Heathen) have taken the Original of these venomous Beasts, to be of the earth, without all respect of Divine and Primary Creation. And hereunto some Heretics, as the Manichees, and Marcionites, have also subscribed, though not directly, for they account the Creation of these venomous and all hurtful Beasts an unworthy work for the good GOD, because they could never see any good use of such creatures in the World.

Yet we know the blessed Trinity created the whole frame of this visible World by it self, and for good, reasonable, and necessary causes, framed both the beneficial and hurtful Creatures, either for a Physical or Metaphysical end. Therefore it is most certain, that if we consider the outward parts of these Creatures attended with life, no man nor nature could begin and make them, but the first Efficence or Fountain of life: and if we can be brought to acknowledge a difference between our shallow capacity, and the deep wisdom of God, it may neceffarily follow by an unavoidable sequel, that their uses and ends were good, although in the barrenness of our understanding, we cannot conceive or learn them. But I purpose not to follow these things Philosophically by arguments, but rather Divinely by evident demonstration of the things themselves. And first of all, it appeareth, Gen. 1:24, that God brought out of the earth all creeping things after their kindes: And left that any man should doubt, that under the general name of creeping things, Serpents, and other venomous Beasts, were not intelligibly enough expressed; it is added Chap. 3,1 That the Serpent was more subtile then all the Beasts of the field which God had made. The Prophet David also, Psal. 148,7 among other things which are exhorted by the Prophet to praise their Creator, there are named Dragons, which are the greatest kindes of Serpents. Unto this also alluded S James, ch.3,7, saying: That the whole nature of Beasts, and of Birds, of creeping things and things in the Sea is tame by the nature of Man: for man, which is next unto God, hath authority and power, to rule over all his works, and therefore over Serpents.

And herein it is fit to shew, what wonders men have wrought upon Serpents, taming and destroying them rather like Worms and Beasts, no ways enemies to mankind, but friendly, and endowed with sociable respect, or else as weaklings commanded by a superior power. Such an one was Aysr a notable Inchanner, who by touching any Serpent brought it into a deadly sleep: according to these verses;

\[
\begin{align*}
\text{Nec non Serpentes dito examinare veneno},
\text{Debus Aysr: taflique graves sepire obeydres.}
\end{align*}
\]

In English thus;

The cunning Aysr, Serpent fierce, of poysen did disem,
And Water-fraikes to deadly sleep, by touching he did charm.
Of Serpents in General.

Aelius Gadamesius, in his description of the new World, telleth an excellent history of a Ligurian young man, being among the Negroes travelling in Africa, whereby he endeavoureth to prove, how ordinary and familiar it is to them, to take and charm Serpents, according to the verfe of the Poet:

Frigidus
In pratis cantando rumpitur anguis.

That is, the cold earth-snake in Midsum green,
By singling, broke in pieces may be seen.

The young man being in Africa, among the Negroes, and lodged in the house of a Nephew to the Prince of Budanel, when he was taking himself to his rest, suddenly awaked by the hearing the unwanted noise of the hissings of innumerable forts of Serpents; whereas he then wondered, and being in some terror, he heard his Hoft (the Prince Nephew) to make himself ready to go out of the doores, (for he had called up his servants to saddle his Camels:) the young man demanded of him the cause, why he would go out of doores now so late in the dark night? To whom he answered, I am to go a little way, but I will return again very speedily: and so he went, and with a charm quited the Serpents, and drove them all away, returning again with greater speed then the Ligurian young man his guests expected. And when he had returned, he asked his guests if he did not hear the immediate hissings of the Serpents? and he answered, that he had heard them to his great terror: Then the Prince Nephew (who was called Bishop) replied, saying; they were Serpents which had befet the house, and would have destroyed all their Cattle and Herds, except he had gone forth to drive them away by a charm, which was very common and ordinary in those parts, wherein were abundance of very hurtful Serpents.

The Ligurian young man hearing him say, marvailed above measure, and said, that this thing was so rare and miraculous, that scarcely Christians would believe it. The Negro thought it as strange that the young man should be ignorant hereof, and therefore told him, that their Prince could work more strange things by a charm which he had, and that this and such like were small, vulgar, and not to be accounted miraculous. For when he is to use any strong poyson upon preuent necessity, to put any man to death, he putteth some venom upon a sword, or other piece of Armor, and then making a large round circle, by his charm compelleth many Serpents to come within that circle, he himselfe standing amongst them, and observing the most venomous of them all so assembled, which he thinketh to contain the strongest poyson, killeth him, and causeth the residue to depart away presently; then out the dead Serpent he taketh away the poyson, and mixeth it with the feed of a certain vulgar tree, and therewithal anointeth his dart, arrow, or swords point, whereby is caused present death, if it give the body of a man but a very small wound, even to the breaking of the skin, or drawing of the bloud. And the said Negro did earnestly persuade the young man to see an experiment hereof, promising to shew all as he had related, but the Ligurian being more willing to hear such things told, then bold to attempt the trial, told him, that he was not willing to fee any such experiment. And by this it appeareth, that all the Negroes are addicted to Incantations, which never have any approbation from GOD, except against Serpents, which I cannot very easily be brought to believe.

And seeing I have entered into this passage of Charming, being (no doubt) an invention of Man, and therefore argueth his power to tame these venomous Beasts, according to the former sayings of Saint James, although I condemn such courses utterly, yet it is lawful to proteste the fame, seeing the holy Ghost, Psalm 58. ver. 4. 5. affirmeth a practife against Serpents, a dexterity and ripinenes in that practife, and yet an impossibility to affect any good, except the voice of the Charmer come to the ear of the Adder: For thus he writeth; Their poyson is like the poyson of a Serpent-like a deaf Adder that flippeth his ear, 5. Which heareth not with the voice of the Inancher, though he be most expert in cunning. Upon which words Saint Augustine, Saint Jerom, and Capituliter writing, say; that when the Charmer cometh to Inchant or Charm, then theylay one of their ears to the earth so close, as it may not receive the sound, and their other ear they close with their tail. I will therefore yet add somewhat more of this taming of Serpent.

I have heard a Gentleman of singular learning, and once my worshipfull good friend, and daily encourager unto all good labours, report divers times very credibly, upon his own knowledge and eye-sight, that being at Padua in Italy, he saw a certain Quack-salver, or Mountebank upon a stage, pull a Viper out of a box, and suffered the said Viper to bite his foot, to the great admiration of all the beholders, receiving thereby no danger at all. Afterward he put off his doublet and shirt, and showed upon his right arm a very great unwonted blew vein, standing in the common course of nature; and he said, that he was of the lineage of Saint Paul, and so were all other that had such veins, and that therefore (by special vertue to that Family given from above) no Viper nor Serpent could ever annoy or poyson them: but withall, the fellow drank a certain compound water, or antidote, for fear of the world, and so at one time vented both his superflicious hypocrisie, and also much of his Antidote to his great advantage.

But I have since that time also read, in Matthew his Commentaries upon the sixth Book of Disputation, that there were wont to be many such Juglers in Italy, carrying in their botomes living Serpents, of whose fraudulent Impostures he speaketh in this fort. They take Serpents in the Winter
Of Serpents in General.
Winter time, when they grow dead and flife through cold, & yet for their better defence against their venomous biting, they defend themselves by a certain experimental unguent, known to be practiced in this sport, made of the Oyl preffed out of wilde Radish, the roots of Dragonwort, the juice of Daffodil, the brain of a Hare, the leaves of Sabine, spixts of Bay, and some other few things thereunto added. Asfoon as they have taken them, they instantly all to ftep upon their heads, for by reafon of a secret antipathy in Nature, they grow very dull thereby, and lay aside the force and rage of venom; for the fettle of a Man, is of a clean contrary operation to their poifon. And when afterward they make oftentation hereof in the Market, or publique Stage, they fuffer them to bite their own flesh: but firft of all, they offer them a piece of hard ftefth, whereupon they bite to clean their teeth from all fpawn and fpume of venom, or else sometime pull forth the little bags of poifon, which inhere in their chaps, and under their tongues, fo as they are never more replete or filled again: And by this deceit they deceive the world where ever they come, giving forth that they are of the linage of Saint Paul, who cast a Viper off from his hands, as we read in the holy Scriture.

It was an invention of ancient time among the wife Magitians, to make a pipe of the skins of Cats legs, and therewithall to drive away Serpents; by which it appeareth, that the soveraignity of Man over Serpents, was given by GOD at the beginning, and was not lost, but continued after the fall of man, (although the hand that should rule be much weaker) and practiced by the most barbarous of the world, necelcity of the defence forcing a violence and hatred, betwixt the Serpent and the Womans feed. For this cause we read of the feven daughters of Atlas, whereof one was called Hyge, whose daily exercise was hunting of venomous Beasts, and from her the Hyge had her denomination. And for a conclusion of this Argument, I will add to this one story more out of Ethiopia. When Thonus the King of Egypt had received of Menelion, Helen to be safely kept, whiles he travelled through Ethiopia, it hapened that the King fell in love with her beauty, & oftentimes endeavour'd by violence to ravifie her; then, it is also faid, that Helen, to turn away the Kings unlawful luft, open'd all the matter to Phedyamma the wife of Thonus, who impatiently fearing her own elfate, left that in time to come, fair Helen should deprive her of her husbands love, banifhed her into the land of Pharos, which was full of all manner of Serpents, and yet taking pity on her for her simplicity, gave her a certain herb, whereby the drove away all Serpents. For (it is faid) when the Serpents and venomous Beasts do but smell the fame herb, they infantly hide their heads in the earth. Helen coming into that Island plante the fame there, and was therefore called by the Inhabitants after her own name Helenium, which the skilful Herborifls at this day affirm to grow in Pharos.

Unto this discourse of the taming of Serpents, I may add yet more strange things, if any thing be strange in the nature of this world. And thofe are some Histories of the familiarity of Men, Women and Serpents. Alexander was thought to be begotten of a Serpent, for it is faid, that on a time there was found a great Serpent upon his Mother Olympia as she was fleeping; and some fay (for the honour both of the Mother and the Son) that this Serpent was Jupiter, turned into the likeness of a Serpent, as we read he changed himself into many other shapes. And the like story unto this, is allledged of Scipio Africaius his mother, who long time remained barren without the fruit of the womb, infomuch as P. Scipio her husband utterly defpair'd of posterity. It hapned one day, as she was in her bed, her husband being abfent, there came a great Snake and lay beside her, even in the presence of the fervants and family, who being mightily afftomfled thereat, cryed out with loud voyces for fear, whereat the woman awoke, and the Snake fled away invisibly. P. Scipo hearing this report at his return home, went to the Wizards to understand the lecret or significatio of this prodige: who making a facrifice, gave anfwere that it betoken'd prodigie, or birth of children, and thereupon followed the birth of Scipio Africaius.

We read alfo in Plutarch of certain Serpents, lovers of young Virgins, who after they were taken and infinared, fhou'd all manner of fuitful, vitiouf, and amorous geftures of uncleannefs and carnality; and by name, there was one that was in love with one Eufba a Virgin, who did accouml to come unto her in the night time, fliding gently all over her body never harming her, but as one glad of fuch acquaintance, tarry'd with her in that dalliance till the morning, and then would depart away of his own accord: the which thing being made manifest unto the Guardians and Tutors of the Virgin, they removed her unto another Town. The Serpent muffing his love, fough her up and down three or foure days, and at laft met her by chance, and then he fatified her not as he was wont, with fawning, and gentle fliding, but fiercely affaulted her with grievous countenance, flying to her hands, and binding them with the fpire of his body faft to her sides, did softly with his tail beat upon her backe parts. Whereby was collected, fome token of his chafement unto her, who had wrong'd fuch a Lover with her wilful abfence and disappointment.

It is alfo reported by Eutamon, that Egemon in his verses, writeth of one Athis a Thesilian, who feeding his Oxen in the fpife, near the Fountain Helenium, there fell in love with him a Serpent of exceeding bignefs and quantity, and the fame would come unto him, and foftly lick his face and golden hair, without doing him any manner of hurt at all. Thence, and fuch like things do evidently prove, that Serpents are not only involuntary tamed by Men, but alfo willingly keep quarter with them, yielding to the firft Ordinance of the Creator, that made them subjécts and vassals to men. And thus much shall fuffice to have spoken in this place, concerning the firft creation of Serpents.
of the natural Generation of SERPENTS, and their several Originals.

IT being thus cleared, that Serpents were at the beginning created by GOD, and are ruled by men, as now followeth, that we should in the next place talk of the matter of their beginning, and the means of their continuance ever since their Creation.

First therefore it is most plain in Genesis, that the Earth (by the virtue of the Word of GOD) did produce all Creeping things, and among them Serpents: but since that time, they have engendered both naturally, and also prodigiously.

As concerning their constitution, it is held to be most cold, above all other living Creatures: Pliny, and therefore Pliny writeth, that they have neither heat, nor blood, nor sweat. Hereunto subscribeth Galen, both Galen and Pausiy. Avicen seemeth to affirm the contrary, Mercurialis decideth this controversie, and proveth that Serpents are extremely cold, and their bodies outwardly moist. First, because those which are slung and poysoned by Serpents, are oppressed with an unnatural cold, which overcometh natural heat, and disturbs all their parts, vexing them intolerably. Secondly, there can be assigned no other reason why these Creatures hide themselves four months in the year, but only their natural cold, making them so tender, as they are altogether unfit to endure any external frigidity. Thirdly, if a man take a Snake or a Serpent into his handling in the midst of Summer, and warmeth part of the year, yet shall he perceive that they are cold in a palpable manner being alive, which is not a quality compatible to any other creature. Fourthly, seeing that blood is the proper and native heat of all heat in natural living bodies, Serpents having a very small quantity of blood, must also have a smaller proportion of heat: and therefore it followeth unavoidably, that the eminency of their temperament is cold in the highest degree, above all other living Creatures. And that their bodies be outwardly moist, it appeareth (faith Isidore) by this, that when they slide along upon the Earth, (which way forever they go) they leave behind them in their train or path a flimy humour.

By this therefore it is confirmed, that they are of the Earth and of the Water, as afterward we shall shew in the description of their kindes. But yet there are prodigious beginnings of Serpents, Plutarch, whereof some seem to be true, and other to be fabulous. The first sort are those which Pliny affirmeth to be engendered of the marrow in the back-bone of a man, and that indifferently, out of the dead bodies of good and evil men. Yet some more modell, thinking it unreasonable, that the remains of a good meek man, should beget or be turned into so barbarous, venomous, and cruel a nature; rather taking it for granted, that peace and quietness is the reward of such perfons, attribute these beginnings or alterations to the bodies of wicked men, as a just deferred punishment of their former evils, that the revolusions of their bodies should after death turn into Serpents, whom they resembled being alive in the venomous fraud of their spirits. Of this Ovid speakseth.

Sunt que ex omn. clausis putrefactis a Spina fepulchra,
Mutari credent hominum angue medallis.

Which may be thus Englished,

Some think the putrid back bone in the grave rack'd,
Or narrow chang'd, the shape of Snakes to take.

In Egypt, as Frogs and Mce are engendered by showres of rain, so also are Serpents: And Avicen Macrobius, faith, that the longest hairs of women are easily turned into Serpents. Nicander dreameth, that all Callus Rho. venomous Beasts are engendered of the blood of the Titans or Giants. Aemulus, of the blood of Pliny. Typhon. Aplinam Rhodium, of the drops of blood which do distil from Gorgons. Virgilus Sitch, that being laid in a hollow place, subject to receive moisture, engendereth Serpents, Of the Gorgons drops, Ovid writeth thus;

Cumque super Lybicas vitubr penderet arenas,
Gorgonei capiti gatata cecidere cruente,
Quas hunc exception, varias animaeus in angues,
Unde frequent illa est infestaque terra culbris.

Which may thus be Englished;

And as he over flow
The Lybick sands, the drops of blood that from the head did fall
Of Gorgon being new cut off, upon the ground did fall,
Which taking them, and as it were conceiving them without,
Engender'd fiery Snakes and Worms: by means whereof that Cime
Did swarm with Serpents ever since, to this same present time.

But most strange of all other, are the succeeding Narrations. For it is reported that when L. Scipio, and C. Norbus were Conuls, that the Mother of Clusium in Herturia, brought forth a living Serpent in head of a childe, and the said Serpent by the command of the Wizards was cast into a River, nevertheless it would not drown, but swummed against the stream. And Pliny faith, that at the beginning of the Marjek war, there was a mid-servant that brought forth another Serpent. And

Fausina
Of Serpents in General.

Caesius Tacitus writeth, that when Tirsa found Serpents in carnal copulation in Cilicia, he slew a female, who prefently after death was turned into a Woman, then alfo he flew a male, who likewife being dead, was in the fame place and manner turned into a Man. When Cadmus was was fent by his Father, to feek out his fifter Europa that was ravifhed by Jupiter, with ftraight charge not to return back again except he could finde her, having fpent much time in feeking her to no purpofe, becaufe he could not finde her, and not daring to go back again to his father; he was warned by the Oracle that he fhould go into Boreas to build a City. Coming thither, he fent his companions to the fountain of Mars that was in the Countrie to fetch water, where a great Serpent came and killed them; at alfo Cadmus not finding their return, went likewise to the fame Fountain, where he found all his men flain, and the Serpent approaching to affail him but he quickly killed it. Afterward he was admonifhed by Pallus, to fwear the teeth of the fame Serpent upon the ground, which he performed, and then out of thofe teeth (faith Ouid) arrove a multitude of Armed men, who inftantly fell to fight one with the other, in fuch cruel and bloudy manner, that at the left there were but five of them alleft alive, which five (by the will of Pallus) were prefervd to be the Fathers of

His form exposiio peregrina anguis arenis
Ov. paras. & paras fablanis sive capitis
Lambis, & hymmeria inbaita ducitere cultum:

In English thus;
No foner on the faur coaf now caft a land they were,
But that cruel' natur'd Snake did ftraight upon them fly,
And licking on his ruffled hair, the which was dropping dry,
Did gape to fpy upon thofe lips that had been wont to fong
The heavenly hymns. But Phoebus ftraight preventing that fame thing,
Disjoint the Serpent of his bars, and turns him into fton;
With gaping chops, &c.

So Caesius Tacitus writeth, that when Tirsa found Serpents when he was with childe of Commodus and Antonius, and one of thefe Serpents feemed more fierce then the other, which proved allegorically true: for afterward Commodus was fo voluptuous and tyrannous, that he feemed like a Serpent to be born for nothing, but for the deftruction of mankind.

In the year of our Lord 1551, there was a little Latin Book printed at Vienna, wherein was contain'd this History following. In this Summer (faith the Book) about S. Margaries day, there happened molt rare and admirable accidents: for near a Village called Zieba, by the River Throfe in Hungary, there were many Serpents and Liffards bred in the bodies of men, very like to fuch as are bred in the earth, whereupon they fell into exquitite torments: and there dyed of that calamity, about three thousand, and some of the bodies being laid against the Sun gaping, the Serpents came forth of their mouths, and suddenly entred into their bellies again. Amongst other, there was a certain Nobleman's daughter which dyed of that malady, and when she was dif-.fected or ripped, there were found in her body two great Serpents. These things feem to be miraculous, and above the order of Nature: yet credible, becaufe in our experience in England, there have been Worms like Serpents found in the bodies of men, whereof fome have been ejected the parties being alive, and other when as the parties were dead. But that thefe beginnings of Serpents being unnatural, are Divine and fent from God as scourges, it may appear by another notable History, recorded in the aforesaid Book, both in the fame year, and in the fame Countrie.

There was (faith mine Author) found in a mower or ryck of Corn, almost as many Snakes, Adders, and other Serpents, as there were heafs, fo as no one heafl could be removed, but there prefently appeared a heap of ugly and fierce Serpents. The Countrу-men determined to fet fire upon the Barn, and fo attempted to do, but in vain, for the flame would take no fire, although they labored with all their wit and policy to burn them up. At laft, there appeared unto them at the top of the heap a huge great Serpent, which lifting up his head fpake with mans voice to the Countrу-men, faying: If with fuch ferventry you defire, for you fhall not be able to accomplish our burning, we were not bred by Nature, neither came we hither of our own accord, but were fent by God to take vengeance on the firl of men. And thus much for the true and natural beginnings of Serpents.

Now we read in read in holy Scripture, that the rod of Moses was turned into a Serpent by divine miracle, whereby he was affured of the power that God would give him to deliver his people Israel out of Egypt, which land abounding with Serpents, both natural bred in the earth, and moral, fuch are crafty and politick Princes and people: yet Moses fhou'd take them as he did his Serpent by the tail, and caufe them to bend unto him like as it were a wand, or elfe fome other little walking faffe: and also that his power fhould be unrefiftible, becaufe his Serpent devourous others The Magitians or Sorcerers, (as Janne and Jambes) refilited him, and alfo turned their rods into Serpents. But Moses did it by true piety, they by diabolical delusions, as falf Christians many times work miracles by outward signes of true piety, and therefore Moses rod overcame the Sorcerers Serpents, becaufe the end of fraud and falsehood is, to be overcome by truth and piety.

From this changing of rods into Serpents, came the feveral metamorphofing of sundry other things into Serpents alfo, as that tale of Osfebow head, after he was torn in pieces by the Thracian wo- men; and the fame thrown into a River, was taken up in Lemnos. The Poet defcribeth it thus;

| His form exposiio peregrina anguis arenis | Tandem Phoebus adsit: morafsque inferre param et
| Ov. paras. et paras fablanis sive capitis | Arcet, et in Lapidem rutilus Serpentis aperas
| Lambis, et hymmeros inbitant divellere cultum: | Congelat, et patibus ut erant indurat biaus. |

In English thus;
No foner on the faur coaf now caft a land they were,
But that cruel' natur'd Snake did ftraight upon them fly,
And licking on his ruffled hair, the which was dropping dry,
Did gape to fpy upon thofe lips that had been wont to fong
The heavenly hymns. But Phoebus ftraight preventing that fame thing,
Disjoint the Serpent of his bars, and turns him into fton;
With gaping chops, &c.
and so of the people of Thebes. And to Aesop's faiweather; that with the help of men bred of Serpent's teeth, came Japhon to obtain the Golden Fleece. They feign also, that Aesopus, when he ftove with Hercules about Desienia, turned himself into divers shapes, and laft of all into a Serpent, or as fome fay, into a River. So likewise Cadmus aforefai, being overcome with the sight and fenfe of his own miseries, and the great calamities that fell to his Daughters and Nephews, forsook Thebes, and came into Libya, where it is faid, that he earnestly defired of the Gods to be turned into a Serpent, because a Serpent was the first original of all his extremities. Antipater faiweather Jupiter to be turned into a Serpent; and Medusa refuling the love of Neptune, is also faiweather by Ovid to be turned into a Serpent, when he writhe:}

<table>
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<tr>
<th>Hand plegis retlor temple viriafe Minerve</th>
<th>Gorgonem crimen turpes matutin in Hydros.</th>
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<tr>
<td>Dictur, averna eft &amp; caftus Agide vulnus</td>
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<tr>
<td>Nunc quoque ut attonitas formidine terrae biffes,</td>
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</tr>
<tr>
<td>Nota Jovis texit: nunc hoc impune fillet,</td>
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*writeth, that the myrtle rod was not lawful to be brought into the Temple of Jove, and that a Vine branch was extended over the head of her fign: and whereas it was not lawful to name Wine, they brought it into her Temple under the name of milk, and that therein continually lived harmless Serpents. The reafon of all this was, because that her own Father Fama fell in love with her, whom the refiiled with all modelly, although thef were beaten with a Myrtle rod, and made to drink Wine; but at laft the beaftly father was transformed into a Serpent, and then he opprefling her with the fpires of his winding body, ravifhed her againft her minde. These and fuch like stories and Fabies are extant about the beginnings of Serpents; all which, the Reader may confider, to lift up his minde to the carnall and ardent meditation of that power that of Iones can make men, of Rocks, water, of water, Wine, and of small Rods great Serpents. Then thus having expreffed the Original of Serpents in their Creation, it followeth now to fing Pity, the refidue of this Chapter about their generation. It is a general rule that all Beasts wanting feet, have long bodies, perform their work of carnal copulation by a mutual embracing one of the other, as Lampeys and Serpents: And it is certain, that two Serpents in this action feem to be one body and two heads, for they are fo indivifibly united and conjointed together, and the frame of their body is altogether unapt for any other manner of copulation. When they are in this action on they fend forth a rank favour offenfive to the fenfe of them that do perceive it: And although like unto many fihes, they want ftones, yet have they two open passages wherein lyeth their generative feed, and which being filled provoketh them to their venerable luft; the feed it felf being like a milky humor: and when the female is under the male, the hath alfo her passages to receive the feed, as it were into the cells of her womb, and there it is framed into an Egge, which the hideth in the earth an hundred in a cluftcr, about the quantity of a Birds egg, or a great bead, such as are used sometime by women.

And this is general for all Serpents, except Vipers, who lay no Eggs, but hatch in their wombs their young ones, as we fhall fhew at large in their particular history. The Serpent having laid her Egge firfteth upon them to hatch them at feveral times, and in a year they are perfected into young ones. But concerning the suppoftered copulation of Serpents and Lampeys, I will not meddle in this place, referring that difcourfe to the History of Fihes, and now only it fufficeth in this place to name it, as a feigned invention; although Saint Ambrofe and other ancient Writers have believed the fame, yet Areneus, and of late days P. Jovin, have learnedly and sufficiently declared by unanswerable arguments the clean contrary. The Serpents love their Egges moft tenderly, and do every one of them know their own, even among the confufed heaps of the multitude, and no lefs is their love to their young ones, whom for their safeguarfe, sometime they receive into their mouths, and fuffer them to run into their bellies: And thus much for the generation of Serpents.

Of the Names of Serpents, and their several parts of Anatomy.

By Serpents we understand in this difcourfe all venomous Beasts, whether creeping without legs, as Adders and Snakes, or with legs, as Crocodiles and Lizards, or more neerly compleate bodies, as Toads, Spiders, and Bees; following herein the warrant of the beft ancient Latins, as namely Cornelius Celsus, Pliny and Apuleius, do call Lice Serpents, in that their relation of the death of THESEUS, who was the Preceptor of Pythagoras, of whom it is faid, Serpentisus perisse, to have perifhed by Serpents, when on the contrary it is manifef ted he was killed by Lice. *Hifole and Golen define a Serpent to be animal funginum pudendum orbatum or orbatum, that is, a bloody Beaf without feet, yet laying egges; and fo properly is a Serpent to be understood.

The
Of Serpents in General.

The Hebrews call a Serpent Nacabij. Daron and Cheveia by the Chaldees: so allo Talmínim and Sheckphorn, by the Hebrews; as Rabbi Solomon, Munifter and Fagninus write. The Grecians, Opbidi and Opus, although this word do allo signify a Viper in particular, even as the Latin, Serpens, or Serpula do, sometime a Snake, and sometime an Adder. The Arabians, Hali, and Hadace, for all manner of Serpents. And Telub, or Tenvia, or Agefim for Serpents of the Wood, likewise Apatius and Atlas. The Germans, Einjebian, which word seemeth to be derived from Angii, by an usual figure, and after the German fashion, prepending Scb. The French call it Un serpent; the Italias, Serpe & Serpente: and Mundanus faith, that Seræa and Serzone, are general words for all manner of Serpents in Italy, which strike with their teeth. The Spaniards call them Serpe: the Grecians call the young ones in the Dan's belly, Embria; and the Latines, Catilæ. And thus much for the names in general, which in holy Scripture is Englished a Creeping thing.

Now it followeth, that I should fet down a particular description of all the outward parts of Serpents; and first of all, their colour is for the most part like the place of their habitation, or abode, I mean like the Earth, wherein they live, and therefore I have seen them black, living in dung; some yellow, living in sandy rocks; and some of other colour, as green, living in trees and fields; but generally they have spots on their sides and belly, like the scales of fish, which are both white, black, green, yellow, brown, and of other colours allo, of which Ovid writeth:

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Longo caput extulis ante
Ceratulum Serpent, borrendaque fìbula mift.
That is,
The greenish Serpent extend her head from den so steep,
And fearful hissing did send forth from throat so deep.

The frame of their bodies do not much vary in any, except in the feet and length, so that with a reservation of them, we may express their universal Anatomy in one view; for almost all of them are of the fame proportion that is seen in Lizards, if the feet be excepted, and they made to have longer bodies. For they are inclosed in a kind of shell or crusty skin, having their upper parts on their back, and their nearer parts on the belly like a Lizard, but they want flones, and have such manner of places for copulation as fishes have, their place of conception being long and cloven. All their bowels, by reason of the length and narrowness of their bodies, are allo long and narrow, and hard to be discerned, because of the dissimilitude of their figures and shapes. Their artery is long, and their throat longer then that: the ground or root of the artery is near the mouth, so as a man would judge it to be under the tongue, so as it seemeth to hang out above the tongue, especially when the tongue is contracted and drawn backward. The head long like a Fishes, and flat; never much bigger then the body, except in monstrous and great shaped Serpents, as the Boas. Yea, Arisjolite makesh mention of a Serpent that had two heads; and Arisjolus, of a Serpent in the Piney Mountains, thin by a foudier, that had three heads, in whole belly were found two fons of the said foudier devoured by him, and the back-bone thereof was as great as a man's skull, or a Rams head. And thus an one we read in our English story was found in England, in the year 1349. And the 23 year of Edward, the third, there was a Serpent found in Oxfordshire, near Clippinganour, that had two heads and facing like women, one being shapèd after the new attiré of that time, and another after the manner of the old attiré, and it had great wings, after the manner of a Bat.

The tongue of a Serpent is peculiar, for besides the length and narrowness thereof, it is allo cloven at the tip, being divided as it were with very little or small nails points. It is allo thin, long, and black of colour, volatile; neither is there any beast that moveth the tongue so speedily: wherefore some have thought, that a Serpent hath three tongues, but in vain, as Isidorum fetheweth, for they deceive by their nimblenes thereof. Their ventricile is large, like their maw, and like unto a Dogs, allo thin, and uniform at the end. The heart is very small, and cleaveth to the end of their artery, but yet it is long, and fetheweth like the reins of a Man: wherefore sometimes it may be seen to bend the tip or lap thereof to the breast-ward. After this followeth the lights, but far separate from it, being simple, full of fibres, and open holes like pipes, and very long: the liver long and simple; the milk small and round as in Lizards. The gall is for the maw part as in fishes, but in Water-fishes it is joyned to the Liver: in other Serpents to the stomach or maw. All their teeth fand out of their mouth, and they have thirty ribs, even as there were among the Hebrews and Egyptians thirty days to every moneth.

Arisfolie faith, that as their eyes be small, so allo they have the fame good hap that befalleth young Swallows, for if by chance they fratch or rend out their eyes, then is it said they have other grow up naturally in their places; in like manner their tails being cut off, grow again. And generally Serpents have their heart in the throat, the gall in the belly or stomach, and their ftons near their tail: their egges are long and foft, and in their teeth they carry poyson of defence and annonyance, for which cause they defire above all other things to fave their heads. Their fight is but dull and dim, and they can hardly look at one fide, or backward, because their eyes are placed in their temples, and not in their fore-head, and therefore they hear better then they see. They have eye-lids, for generally no creatures have eye-lids, except those which have hair in the other parts of their bodies; four-footed beasts in the upper cheek, fowl in the neather, or Lizards which
have eggs, or Serpents which have loit backs. They have also certain passages of breathing in their nostrils, but yet they are not so plain that they can be termed nostrils, but breathing places. Their ears are like to finny Fishes, namely small passages, or hollow places in the back parts of their head, by which they hear.

Their teeth are like Sawes, or the teeth of Combes joyned one within the other, that so they might not be worn out by grinding or grating together; and yet they bend inward, to the end that they may the better hold their meat in their mouths, being without all other external help for that purpose; for even those Serpents which have feet, yet can they not apply them to their chaps. In the upper chaps they have two longer then all the residue, on either side one, bored thorough with a little hole like the sting of a Scorpion, by which they utter their poyfon. Yet there be some good Authors that affirm, that this poyfon is nothing else but their gall, which is forced to the mouth by certain veins under the ridge or back-bone. Some again say, that they have but one long tooth, and that a crooked one, which turneth upward by often biting, which sometime fall-eth off, and then groweth again, of which kind those are, which men carry up and down tame in their boxoms.

Although they be great raveners, yet is their throat but long and narrow, for help whereof, when they have gotten a bootie, they erect themselves upon their tails, and sware down their meat the more easily. They cannot be said properly to have any neck, yet something they have, which in proportion answereth that part. They have tails like all other creatures, except Men and Apes, and some say that their poyfon is contained in their tails, and is from thence conveyed into little bladders in their mouths, therefore the Mountebanks or Juglers, break that bladder, that they may keep them without poyfon, but within the space of twenty four hours they are recollected, and grow anew again.

Their bodies are covered over with a certain skin like a thin bark, and upon Serpents it supplyeth the place that scales and hair do upon Beasts and Fishes; for indeed, it is a pure skin, and in molt things they are like to Fishes, except that they have lights, and Fishes have none: the reason is, they live on the earth, and the Fishes in the sea, and therefore have fins and gills instead thereof. The little Serpents have all their bones like thorns, but the greater, which stand in need of greater strength, have solid bones for their firmitude and better constitution. It is questionable whether they have any milt or no, and some say they have at the time of their laying of eggs, and not otherwise. Their place of conception or secret, is large, and flaneth far out, beginning beneath, and a rising up to the back-bone double; that is, having one skin or enclozure on either side, with a double passage, wherein the eggs are engendered, which are not laid one by one, but by heaps or clusters together. They have no bladder to contain urine, like to all other Creatures which have feathers, scales or rindle-speckled skins, except the Tortoises: the reason is, because of the exiguity and smallness of the asfumed humour, and also all the humour acquired, is conumed into a loose and evaporate flesh. And to conclude this Anatomy, I will add a short description on which Gregorius Mezer a Physitian wrote to Gesner, 1558. by his own dissection as followeth, sayring.

As I lay at rest in a green field, there came unto me a great Serpent hisling, and holding up her neck, which I sud duty with a piece of wood amazed at a stroak, and so flew without peril to my self. Afterward, dicking her faft to a pale, I drew off her skin, which was very falt and sharp, and I found betwixt the skin and the flesh, a certain little thin skin, defending all upon the body with the outward skin, and this was somewhat fat. And when I came unto the place of excrements I found it like a Finnes, but there iffued forth certain fithf, farre exceeding in thinkeing favour the excrements of a man. After I had thus pulled off the skin, it was easie for me to look into the inward parts, which I found to answer the inward Anatomy of fishes and Fowls in some parts, and in other things, there appeared a proper disposition to the Serpent it self. For the Artery Trachea was about three or four fingers long, turned about with little round circles, and so defended to the lights, unto which the heart and the bladder containing the gall, did adhere or cleave falt. Then the liver was long, like the Fith Lucius, and so a white caule or fatene covered both the liver and stomach, which was half a span long: The guts began at the chaps, and so defended down to the place of excrements, as we see they do in Fishes.

Beneath the liver were the guts, upon either side defended a certain nervy or hard vein, unto which the eggs did cleave: which were covered with such little skins as Hens eggs are before they be layd, but yet they were distinguished in fcat or place, because of their multitude; for upon either side I found two and thirty eggs. The tongue of the Serpent was cloven, and very sharp, but there appeared not any poyfon therein. And so it is evident, that in the vein Trachea, heart and lights, it agreeeth with Birds; in the liver, guts and caule, it refembleth a Fith, but in the place of the gall, and disposition of the eggs, it differeth from both. And thus farre Mezer, with whose words I will conclude this Chapter of Serpents Anatomy.
Of the quantity of Serpents, and their abode, food, and other accidents.

So great is the quantity of Serpents, and their long during age increafeth them to fo great a figure, that I am almost afraid to relate the fame, left some fulpicious and envious minded persons, should utterly condemn it for fabulous; but yet when I consider not only the plentiful testimonies of worthy and undoubted Antiquaries, and all the evidence of all ages, (not excepting this where-in we live) wherein are and have been flowed publiquely many Serpents, and Serpents skins, I receive warrant sufficient to express what they have oberved, and affured answer for all future objections, of ignorant, incredulous, and unexperienced Ages. Wherefore as the life of Serpents is long, fo is the time of their growth; and as their kinds be many, (as we shall manifest in the succeeding discourse) fo in their multitude, some grow much greater and bigger than other.

Gellius writeth, that when the Romans were in the Carthaginian war, and Attius Reginus the Conful had pitched his Tents near unto the River Bragrae, there was a Serpent of monstrous quantity, which had been lodged within the compass of the Tents, and therefore did caufe to the whole Army exceeding great calamity, until by calling of stones with lings, and many other devises, they opprefled andlew that Serpent, and afterward flewed off the skin and laid it to Rome, which was in length one hundred and twenty feet. And although this seem to a beft of unmatchable figure, yet Poffidionius a Christian Writer, relateth a story of another which was much greater, for he writeth, that he saw a Serpent dead, of the length of an acre of Land, and all the residue both of head and body, were anfwerable in proportion, for the bulk of his body was fo great, and lay fo high, that two Horfemen could not lee one to the other being at his two fides, and the wideness of his mouth was fo great, that he could receive at one time within the compass thereof, a Horfe and a man on his back both together: The scales of his coat or skin, being every one like a lare buckler or target. So that now there is no fuch caufe to wonder at the Serpent which is faid to be killed by S. George, which was as is reported fo great, that eight Oxen were but strength enough to draw him out of the City Silena.

There is a River called Rhymedon near the Coafts of Byzantium, wherein are Snakes of exceeding monstrous quantity, for when through heat they are forced to take the water, for their safegard against the Sun, and birds come flying over the pool, suddenly they raife their heads and upper parts out thereof, and swallow them up. The Serpents of Megalana, are faid by Pausanias to be thirty cubits long, and all their other parts anfwerable. But the greateft in the world are found in India, for there they grow to fuch a quantity, that they swallow up whole Bulls and great Stags. Wherefore I do not marvel that Ptom the King of India, sent to Augufus Cefar very huge Vipers, a Serpent of ten cubits long, a Tortoise of three cubits, and a Partridge greater than a Vulture. For Alexander in his Navigation upon the Red-fea, faith; that he faw Serpents forty cubits long, and all their other parts and members of the fame quantity.

Among the Scythes, the Serpents come by great swarms upon their flocks of Sheep and cattell, and some they eat up all, others they kill and fuck out the blood, and some part they carry away. But if ever there were any thing beyond credit, it is the relation of Vitateren, in his twelfth Book of the New-found Lands, wherein he writeth, that there are Serpents of a mile long, which at one certain time of the year come abroad out of their holes and dens of habitation, and deftroy both the Heards and Hend-men if they find them. Much more favourable are the Serpents of a Spinit Island, who do no harm to any living thing, although they have huge bodies, and great strength to accomplish their desires.

In the Kingdom of Sarbos, their Serpents are fo great that they devour whole Beasts, as Goats, and fuch like, without breaking any one of their bones. In Calcbute, they are as great as their greatest Swine, and not much unlike them, except in their head, which doth far exceed a Swines. And because the King of that Countrey hath made a Law, that no man kill a Serpent under pain of death, they are as great in number as they are in quantity: for fo great is his error, that he deemeit as lawful to kill a Man as a Serpent.

All kinds of Serpents are referred to their place of habitation, which is either the earth, or the waters of the earth; and the Serpents of the earth are more in number then the Serpents of the water, except the Serpents of the Sea: And yet it is thought by the moft learned Rafflinis, that the Serpents of the Sea are fifties in the likeneffe of Dragons. Now the places of Serpents abode being thus generally capitulated, we must enter into a farther narration of their habitations, and regions of their native breeding. In the firft place, India nourifheth many and divers forts of Serpents, especially in the Kingdom of Sefelum, and Alcander the Emperor, found among other Beasts, fundry kinds of Serpents in a long Defert, which is on the North-fide of India. But all the Nations of the World may give place to Asia for multitude and variety, for there they gather together on heaps, and lie in compafs like round hills, visibly apparent to the eyes of them that behold them a far off. The like is faid of all Africa, for in Numidia, every year there are many men, women and children destroyed by Serpents. The Island Phaen, is also (by the testimony of the Egyptians) filled with Serpents: The Coafts of Elymais are annoied by Serpents; and the Calipsines are so annoied by Serpents which come swimming in the floods, that men cannot fail that ways but in the Winter.
Of Serpents in General.

Winter time. For from the beginning of the Spring, or equinoctial, they seem (for their number) to approach ravening, like Troops and Armies. There are certain Islands called Oblivion and Elysium, named after Ophir, a serpent, for the multitude bred therein: And there are Serpents in Candy, Ephesus, and all hot Countries; for this privilege hath God in nature given to the colder Countries, that they be less annoyed with Serpents, and their Serpents also less nocent and hurtful: and therefore the Serpents of Europe are tewer in number, letter in quantity, and more refoluble for their weaknesses and strength.

There were a people in Campania called Ofici, because of the multitude of Serpents bred among them: Likewise there are great stores in Lombardy and Ferrara. And whereas we have said, that the most nocent and harmful Serpents are bred in the hottest Regions, where they engender more speedily, and also grow into greater proportions, yet it is not to be understood of any special property appertaining to them alone, for I read in Olaius Magnus his description of the Northern Regions, or Serpents of as great quantity as in any other place of the world; but yet their poison is not half so venomous and hurtful, as in the hotter Regions, especially the African Serpents.

In Bohus near Lomva, there are great stores of great Serpents also, so that the Heerd-men are at continual war and contention with them for defence of their flock: Likewise in the Mountains of Helvetia and Savoy, whereof there are many wonders reported in the World, which I will not stand upon to relate in this place. We read also, that some places have been inhabited, and disepeoled by Serpents, such were the people of Sophisa, called Nouri, who before the war of Darius, were contrived to forishe their soil, because they were annoyed, not only with home-born Serpents, but also with many other which came from other parts: and so the Country remaineth desolate to this present day, the ancient Inhabitants being all removed to dwell among the Budamni. The City Amyca in Italy (as M Varro writeth) was destroyed also by Serpents. And there be certain places of the world, where have received their denomination from Serpents, besides the Ophi-ule near Crete.

The Island Tenos, was called Hydraea and Ophiolus, to were Cremnus, Eolus, and the Expladis. The Mountains Maecrennii, Ebaus, and the long Islands Ophiods in the Arabian coast, which after it had remained along time deferr, was purged and cleared from Serpents by the Kings of Egypt. Nicostas also calleth Cyprus, Ophiolus. And in Panianias, we read of a place named Ophius Phale, the Serpents head. The like might be said of Rivers, as of Crates, called also Ophlies, and Ophis in Pontus, which divideth Ander Celcbis, and the Countrey Thibemina. Ebusus nourisheth no Serpents, and the Earth thereof hath in it a secret verte to drive away Serpents, wherefore it is much desired of all men to carry about them, for that it hath been often proved, that never any venomous beast durst adventure upon any man possetted thereof. The like is said of Ireland, as our own Chronicles do plentifully declare, and therefore I will spare to enter into any narration thereof.

To come therefore to the more particular abode of Serpents, especially of such as are known to us, we must leave off the talk and nomination of Kingdoms, and defend to dens, holes, caves, dungeons, Sleep-throw, valleys, rocks hollow-walls and trees, woods, green pallures, hedges, and such like places, where to make their most abode: And now and then in their Northern parts of the world (and yet seldom) they drive down into the bottom or roots of trees, especially such as are green all the Winter time: For they finde in them a greater heat or warmth, than in other things, where leaves fall off and decay in the cold weather, except in the roots of Birch and by reason of their multitude gathered together at the root of this tree, it falleth out that their breath heateth the fame, and so preserveth the leaves from falling off: Wherefore in ancient time, the ignorant multitude, seeing a Birch tree with green leaves in the Winter, did call it our Ladies Tree or a holy tree, attributing that greenness to mystery, not knowing the former reason, or secret in Nature. Solomon reporteth of such a like Wood in a part of Africa, where in all the Winter time, the leaves of all the trees abide green, the caufe is as before recited, for that the Serpents living at the roots of the trees in the earth, doe heat them with their breath. Neither ought any man to wonder that they should so friendly live together, especially in the Winter and cold time, seeing that by experience in England, we know that for warmth they will creep into bed-thraw, and about the legs of men in their sleep; as may appear by this succeeding discouer, of a true history done in England, in the house of a worshipful Gentleman, upon a servant of his, whom I could name if it were needful. He had a servant that grew very lame and feeble in his legs, and thinking that he could never be warm in his bed, did multiply his clothes, and covered himself more and more, but all in vain, till at length he was not able to go about, neither could any skill of Physician or Chirurgeon finde out the caufe.

It hapned on a day as his Master leaned at his Parlour window, he saw a great Snake to glide along the house side, and to creep into the chamber of this lame man, then lying in bed (as I remember,) for he lay in a low chamber, directly against the Parlour window aforesaid. The Gentleman defirous to fee the issue, and what the Snake would do in the chamber, followed, and looked into the chamber by the window; where he espied the Snake to glide up into the bed-thraw, by some way open in the bottom of the bed, which was of old boards. Strageway his heart riling thereat, be called two or three of his servants, and told them what he had seen, bidding them go take their Rapiers and kill the said Snake. The serving men came first and removed the lame man (as I remember) and then the one of them turned up the bed, and the other two the thraw, ther-
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matter standing without at the hole, whereunto the said Snake had entered into the chamber. The bed was no sooner turned up, and the Rapiere thrust into the straw, but there issued forth five or six great Snakes that were lodged therein: Then the serving-men bellying themselves, soon dispatched them, and call them out of doors dead. Afterward, the lame Mans legs recovered, and became as strong as ever they were: whereby did evidently appear, the coldness of these Snakes or Serpents, which came close to his legs every night, did do bennum them as he could not go. And thus for heat they pierce into the holes of chimneys, yea into the tops of hills and houfes, much more into the botomms and roots of trees.

When they perceive that Winter approacheath, they finde out their resting places, wherein they lie half dead four months together, until the Spring sun again communicating her heat to all Creatures reviveth, and as it were raifeith them up from death to life During which time of cold Winter, as Seneca writeth, Tuto tridedi pefiftera Serpentes potefi, non defunt tunc illi venena, fed torpens: They may be safely handled, without fear of harm, not because they want poiyon at that time, but because they are drouzy, and deadly almonieth. But there is a question, whether when they be in this secretie or drouziness, they awake not to, or else their feep be unto them in liead of food. Olami Magnus affirmeth of the Northern Serpents, that they eat not at all, but are nourisshed with sleep. Cardan faith, that they take some little food, as appeareth by those which are carried up and down in boxes to be seen, and are fed with bran or cheafil. But this may be answered, that Serpents in boxes, are not so cold as those in Woods and Deferts: and therefore seeing cold keepeth them from eating, the external heat of the box-houfe, or humane body which beareth them about, may be a caufe, that incloued Serpents feed in Winter as well as in Summer, and yet the Serpents which live in the fields eat nothing at all, during the time of their Chor or Eisium, that is, their lying hid.

Greewius that learned man proponeth this question, Si Serpentes calidi sunt, quid fit ut integros tres aut quatuor menses, id est tuto ilio tempore quo deltesent, absque cibo vivant? If (faith be) Serpents be hot, how cometh it to pass that they can live three or four moneths without all food, that is, all the time of their lying secret? He maketh (in my opinion) a sufficient anfwer to this question, which for me shall conclude the caufe, saying: Doth it not fall out with Serpents as it doth with some women, who being full of humor, and thicke phlegmatick matter, have but a little and weak natural heat, (yet proportionable to the said humor) do live a great time by reason thereof without food or nourishment? And for this caufe, all the hoasts of Philosophers do define, that Serpents do also abstain from eating a long feaon. For Nature hath clothed them with a more folid skin, and lined them with a more thick and fubflantial flefh, to the intent that their natural heat should not easily vanife away and decay in their bodies, but remain therein permanent, for the feeding and preferving of life. When they feep, they seem to feep with open eyes, which is elegantly described by Philes in thefe Greek verfes:

Oly<ref>kt<ref>ude kai<ref> dokei palin blepein Ophi</ref> te kai <ref> povn</ref> kai thumus pleies leon Epipetata gar ke oblamys ton ummaton

Allum tinas Chitones hapaladrous. Phorarontos autis os deiptra, taks-360.

Which may be Englished thus;

How can the Flare, the Serpent, and the Lion bold,
Both feep, and lie together at one time?
Within their ey-lids, a soft skin their figh doth fold,
Steddling their apples, as glass doth weaken beds.

The food of Serpents that is permitted them by God, is the dust of the earth, as may appear by that firft and juft sentence, which GOD himfelf gave upon them, for reducing our firft Parents, Adam and Eve, Gen. 3. 14. Because thou haft done this thing, thou art occurreth above all the Beasts of the field, for thou haft eaten uncleanly, and eat dust all the days of thy life. And again, Efra 65. 25. Duff fhall be meat to the Serpent. And left that we should think that this curse hath not taken hold upon the Serpent, we may finde the expreff præfcript hereof, Mech. 7. 17. where it is laid of Gods enemies, that they fhall eat the dust like the Serpent. Yet Aristotle affirmeth truly, that Serpents are Omnivorous, that is, devourers of flefh, fift, herbes, or any other things; howbeit, herein they parte their kinde, or else the curfe of God reacheth not to any other kinde then to that alone which deceived our firft Parents.

We have shewed already, how they eat and devour men, women and children, Oxen, Sheep, and Goats, but whatsoever they eat, they retain nothing but the moisture of it, and the refidue they eject whole and undigeffed. Whatsoever is offered them, that they take, either a bird, or a small chicken, or an egge having it, they take hold but of one end, as of the head of a chick, or small end of an egge, and fo fett it directly before them; then do they gather themselves together in as fhort a compass as may be, that fo their bodies which feem long and small, being extended, may appear great and wide, reduced into a fhort and compacfed frame. And furely hereby they open and make wider their paffage and swallow for then they suddenly goble in the beaf or meat before them, without any great ado; and having kept it in their body till it be dryed from all moifteur, they call it out again as they swallowed it up, at another ordinary place. But for birds and chickens, they thrave with them till they have gotten off their feathers, or else, if they swallow them whole, they eject the feathers as they do egge-shells.
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The Serpents of the North do in the Summer time eat the flesh of birds, and herbs, and after the eating of them, they taste of a little water, or milk if they can attain it, or else Wine. For this cause they will suck the udders of Kine, or Goats, or Sheep, as hath been seen in England. Yet is their appetite to drink but small, as is all other creatures, whole livers are jugous, and loit like luppen; and fo are all beasts and creatures which lay eggs. Above all kinds of drink they love Wine, and therefor they be drunk, wherefore in Italy they let pottles of Wine to entrap Vipers: for if once they smell the Wine, they enter the vessel gladly and speedily, and the Wine or Milk whereof they drink, is poiyoned by them. But in those places of Africk where it never raineth, they eat a knede of black moist worm, which hath many legs, as is laid by Theophrastus. And to conclude, their meat and drink is so small, that it is received for truth, NabuLum vernenatam petit famme vel fin, that no venomous beall persiflet by hunger or thirst.

The voyce of Serpents is called Sibilan, a hissing, and their voyce differeth from all other Beasts hissing, in the length thereof: for the hilling of a Tortoise is shorter and more abrupt. Of this hilling voyce speakseth Lucan, saying;

qua sibilat anguis, qua sibilat anguis.

In English thus;

Gnashing and bowing, is the voyce of wilde Beasts,
Long hissing in Snakes and Serpents doth rest.

Among other things notable in a Serpent, this is one, because it calleteth off his old age every year, whereof the Grecians tell this fabulous reason. Once Man-kinde strowe earnestly with the Gods by supplication for a perpetual youth, that they might never wax old: and obtaining their desire, they laid the same to be carrie upon an Afs. The filly Beant waxing sore athirit in his travall, at last came unto a water, and thereof endeavoured earnestly to drink: but the keeper of the same water being a Serpent, denied leave to the Afs to drink thereof, except he would grant him his carriage, which was Perpetual youth: The poor Afs ready to perisht for thirst, easly condefcended thereunto. Whereupon the Serpent changeth her age for youth, and Men their youth for old age; and the Afs for his punishment, is more tormentt with thirst then any other Beall.

But to leave fables, and to come more neer the mark, the Latins call the casting off their skin, Anguis senectus, Serpens Serpens, & vernatio; the Grecians, Ophoer derma, Suphar, Leberis & Gene, the Arabians, Gene & Geula, & Fdeulatib.; the Italians, Spoglia delle Serpi: and the Spaniards, Pelle de la calbra. About this Snakes skin there is great difference among Authors, some affirming it to be the very skin. Other, that it is nothing but a knede of hard Leprosite, grown upon them during the Winter time while they lie hid. Some again say, that they call it twice a year, first in the Spring, and then secondly in the Autumn. But by conference of all together it appeareth, that while the Serpents lie hid, by reason of their drought now in the beginning of the Spring when they come first abroad, they rub off this skin by sliding betwixt two stones, or underneath some root of a tree, or else betwixt some boughs or small trees, beginning at the head, and so continuing to the tail. And within four and twenty hours, that which was raw and bald, beginneth to have another skin upon it; and so as a young childe or beall cometh out of the Secondine both a Serpent come out of the skin.

As concerning their eye-fights, they naturally do take the juycie of Fennel, which they eat, and by that recover their seeing again: and if it happen that they cannot finde sufficient, they rub their dim eyes thereupon. And if it happen that any of his scales be bruised, or fall senseles, then do they rub themselves upon the thorns of Juniper. And whereas it is thought that they call their skins again in Autumn, that is to be attributed either to Vipers alone, which call their skins twice a year, or else to those which are long before they call, and so it falleth off in Harvest or Autumn the first time, which by reason of the unseasonable fisht, is thought to be a second coast. And this have I my selfe often found here in England in the Summer time. The casting off this skin is thus elegantly described by Tibullus:

Crudeler Divi! Serpentes novas exsultan.
Forma non aulan. una dedere morum.
Anguis excisit una cum pelle renibus.
Cur non anguis conditione famus?

Which may thus be Englished;

O cruel Gods, sib Serpent change their yearly age,
And Fates delay not to refine their form,
Sib Serpents with tender skin excuss'd their years enlarge,
Why unto worser hap is Mankind bred?
Of the inward disposition of Serpents, and of their concord and discord with other Creatures.

It is ever to our woe to be remembered, that which the Lord himself hath left recorded in Genesis, that, The Serpent was more subtle than all the beasts which God had made. By which is expressed the natural disposition of this beast above other to subtility and policy: For I cannot approve the saying of them, who think that the Devil at the beginning might as well have used the tongue of an Ass or a Dog to have deceived Man, as well as a Serpents; but fully that old Serpent knew very well, (better then all they which speak the contrary) that he could not have so fit a subject in all the World, as the shape, wit, and cunning of a Serpent. And that this came not into the Serpent at that time when the Devil framed his tongue to speak, may appear by the precept of our Saviour Christ, where he faith; Be wise as Serpents, be innocent as Doves. For if there had not been naturally, some extraordinary faculty of understanding in this beast, as there is of meekness in a Dove, his wifdome would never have sent us to a Serpent perplexed with a Devil, but rather to some other ingenious Beast, whereof there were great store in the World. And therefore I conclude, that subtilty and prudence came not to the Serpent as speaking into Balaams Ass, but rather by nature or creation.

And yet concerning this last sentence of our most blessed Saviour, I cannot but express the words of Teizter, who writeth thus upon it, Serpate capita vfaera, quemadmodum Serpent qui insidit petiti subtilitas, atque indutus habet ad mortem, omnimodae capitis abscondit, sic ventur a tyrannis & implis cruciati, caput servata mibi, iadem vrstram, & ne Drun negetui usque ad ipiam mortem. That is, it is as much as if our Saviour Christ should say; Even as when a Serpent is set upon and broken, by all the means the can the lideth her head, and exposeth all her other parts to blows, referring that found; so you, when you are perplexed by Tyrants, preferve your head, that is, your faith, and deny not your God to death. And this thing is affirmed by all Writers, both divine and humane, which have ever touched this point, that above all the parts of the body the Serpent preferveh his. For Pliny faith, that if his body be cut off but two fingers length to the Serpent as speaking into Basilamis Ass, but rather by nature or creation.

Paulus Fagius writing upon Genesis, faith: It is the opinion of some Hebrews, that the Serpent at the beginning did go upright, and was indulged with all the affections of men: but this Jewish stable is not worthy to be confuted, beacause humane affection cannot proceed but from a reasonable soul, which to ascribe to the Serpent, were blasphemous and absurd. Besides, that then the soul might die, and that God had created such a soul, otherwise than by breathing into the body the breath of life.

Serpents have many Epithets given unto them, as illiberal, peridious, treacherous, venomous, poysonful, llinging, implacable, furious, savage, merciless, devourer, and such like: And indeed the holy Writers, by a Serpent do understand implacable fury: For they are inmitissimum animi genus, a molt ungentle and barbarous kind of all creatures, as may appear by the rage of a little Snake, one of the least of Serpents kinde: for when he perceiveth that he is hurt or wounded, he never ceaseth calling out his poyson, until he have done harm, or die for madness.

Two things I finde to be notable in Serpents, the first is proper to their kinde, the second is common to them with Swine, Rats, and Mice. Firſt, they are above meatiure kinde, not only to their young ones, but also to their Eggs. For Pindarconf æt fastly sweareth, that at Letorum he saw a Serpents Egge taken and cast into a hot furnace, and when it began to fry in the same, whether by natural instinct, or by smell thereof, the old Serpent came, and would have run into the fire to fetch it out, but that he and other strangers hindered her by killing her. And fo likewise, if in a Wood one of them be set on fire, all the Serpents that are within the favour thereof, or within the hearing of the hissing, will instantly gather unto it, even as beasts when they hear one another roar. And fo great is their love one toward another, (as Pliny and Teizter write) that it was a vulgar saying, Serpentum moriatur non petit Serpentes, one Serpent will not bite another. And Juvenal writeth; 

Sed jam Serpentum major concordia—
Scribit, quam hominum inter se.

That is to say; 
Better do Serpents with Serpents accord,
Then Man with Man, who should be their Lord.

I cannot conceal a most memorable History as ever was any in the World: of a fight betwixt the Serpents of the Land and the Water. This History is taken out of a Book of Schiitbergen, a Bavarian, who knew the same (as he writeth) while he was a captive in Turkys, his words are these. In the Kingdom called Genecke there is a City called Sampson, about which while I was prisoner with Balazeta King of Turkys, there pitched or arrived an innumerable company of Land and Water Serpents, compassing the said City a mile about. The Land-serpents came out of the woods of Trienick, which are great and many, and the water Serpents came out of the bordering Sea. 

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There were nine days together assembling in that place, and for fear of them there was not any that durst go out of the City, although it was not observed that they hurt any man, or living creature thereabouts. Wherefore the Prince also commanded, that no man should trouble them, or do them any harm, wisely judging, that such an accident came not but by Divine miracle, and that also to signify some remarkable event. Upon the tenth day these two valiant Troops join'd battel early in the morning before the Sun-rising, so continuing in fight until the Sun-set, at which time the Prince with some Horse-men, went out of the City to see the battel, and it appeared to him and his associates, that the Water Serpents gave place to the Land Serpents. So the Prince and his company returned into the City again, and the next day went forth again, but found not a Serpent alive, for there were slain above eight thousand: all which he caused presently to be covered with earth in ditches, and afterward declared the whole matter to Baculata by Letters after he had gotten that City, whereas the great Turk rejoiced, for he thereby interpreted happiness to himself.

But I have been too long in this first and proper affection of Serpents, namely, their mutual concord; and this example of the Land and Water Serpents, doth not break the common promised rule, because it is to be understood of Serpents that live in the same element. The second property is to preface Petilence, rottenness of air, famine, floods, and ruin of those places wherein they are commorant, and have their abiding: so do they know to chufe a good air, and fore-know fertility of fruits, earth-quoakes and great tempeilts. When Helius was destroyed, five days before, the Serpents, Snakes, Rats, Mice, and Weasels, departed all out of there, being wiser then Men, that misdeeming no harm, although they law and wondered at these removals, yet flood it out to their own utter ruine, overthrow and destruction.

of the friendship and enmity which Serpents keep with other Creatures.

Ev'ry since the Devil entered into the Serpent, it became hateful to all, or the most part of the beasts of the field, for that it may as truly be verified of the Serpent as it was of Eja, that the hands of all Men and Beasts are against him, (except very few) for they are strangers to all, and finde very few or no friends. Yet it is reported, that the Serpent and the Fox will live peaceably together in one cave or lodging. There is a story, not unpleasant, of a Man that found a Serpent enclofed betwixt two stones, and at the inready of the Serpent, he loofed him out of danger, and did him no harm. The Serpent being releas'd and free from death, in stead of other recompence for so good a turn, told the Man that he had been therein a long time inclofed, and was very hungry, and therefore was forced (again his will) to make the best of his fortune, and therefore must needs eat the Man, and bad him prepare himself for death. The Man afftomed at this motion, replied to the Serpent, that he hoped he would not deal so with him, having delivered him from death, now to put his deliverer to death: and said moreover, that he would not be the Judge of his own cafe, but refer the fame to the next they found: and the Serpent also yielded to that judgement, being assured that no creature would quit the Man, let he should caft his own life into peril. Forth then they went and met with an Afs, to whom the Man told the difference betwixt him and the Serpent, how kindly he sav'd the Serpents life, and how unkindly he again would take away his life. And then the Serpent bade the Afs consider what judgement he gave, and for whom he spake. The Afs adjudged it lawful for the Serpent to kill the Man. Lo now, said the Serpent, make you ready, for the matter is judged against you, and withall, began to make force at him with mouth and fling. But the Man faid, that he would not take this Afses deree for reafonable, and therefore prayed the Serpent to tarry yet a little longer, and try once more the next Befft they met withall; and the Serpent thinking himself sure of the booty, yeilded thereunto. Then forth they paffed again, and shortly after met with a Fox, to whom the Man related his cafe, and the benefit he had done to the Serpent: The Serpent again confeded he releas'd him, but withall, denied his cafe to be as the Man had faid, fo delerperate, but only he entrapped himfelf the better to compafs a booty. The Fox having heard them both, (defirous to end the matter for the Mans benefit) would needs go with them both to the place where the Serpent was inclofed, and fo all parties conflented. And when the Fox came thither, he bade the Serpent go into the same place again, that fo he might the better judge of the whole matter. The Serpent went in again betwixt the stones; and was fo incloed as he was before, for he could not flir neither backward nor forward. Then the Fox asked the Man if this were the Serpents cafe, from which he had delivered him? The Man answered yes, in all points. Then he bade the Serpent come out again, as he faid he could, without the help of the Man. But the Serpent called the Man to help him again. Nay, faid the Fox, I found you two at variance, because of your discharge from this place, and seeing now you are as you were before, and the Man as he was before your enlargement, my sentence is, that when you come forth of that place you are in, then fhall you eat the Man: and if he will let you forth again, I will never put him. By this fable is shewed, that Foxes love not Serpents so well as they love Men, and yet they never love Men, but they are afraid, fupicious, and willing to forfake their familiarity.
Some say there is a kind of love between Serpents and Cats, whereof I finde this story in *Penzettus.* There were certain Monks, who all of them fell sick upon a sudden, and the Physicians could not tell how or whence this sickness came, except from some secret poison. At last, one of the servants of the Abbey, faw the Cat which was daily fed at the Monks table, to play with a Serpent; and thereby it was conjectured, that the Serpent having in his sport lost or left some poison upon the Cats skin, the Monks by stroking of the Cat were infected therewith. And the cause why the Cat was not harmed thereby, was for that the received the poison from the fport, and not from the anger of the Serpent.

And this thing surely is not so marvellous, seeing that little Mice and Rats do also play with Serpents, and herein Politicians play the Serpents, who hold correspondence and peace both with the Cat and the Mouse: that is, with two sworn and natural enemies together. The like peace and league they are also said to keep with Eeles, as may more plainly appear by this following History, of a certain Monk called *Rudolphus a Will Monachus Carpathis.*

There was (as this Monk affirmed) one of his fellow Monks, which did often tell him, that being a little boy, and using to sport himself by the water side, he hapned to catch an Eele, which he attempted (for his own pleasure) to carry to another water; and by the way as he went, he paffed through a Wood, at which time when he was within the Wood, the Eele began to hiss and cry mainly, at the hearing whereof, there gathered together very many Serpents round about him, incomphch that he was afraid, and let down his basket halfffd and ran away; afterward he came again and sought for his basket, but he found not the Eele therein, wherefore it was suppos’d, that the Serpents delivered the same Eele out of the basket, by some sleight of nature: the only doubt is, whether Eeles do his or not, seeing they are fishes, and *Omnes pisces muri,* all fishes are mute or dumb. But for answer to this objection, it is most certain that Eeles have a voice, as alll know which use fishing in the night: for I my self, have not only heard such a voice in the night time in Rivers, and other waters where Eeles abounded, but have had it confirmed by divers other, of greater pratiﬁce and experience in fishing. The reason whereof, may be their manner of generation; for they engender not by spawn as other fishes, but by the flame of the earth or water, and differ not from Serpents in their external form, except in their colour, and therefore may be said to partake with Fishes and Serpents in both their natures: that is, having a voice like a Serpent, and a substance like a Fish. Such is their confederacy with living Creatures, and with no more that I ever read or heard of.

But moreover, it is said that they love some Plants or Herbs above measure, as the Fennel and Ivy; and for this later, both *Pline* and *Tusser* do not without great cause wonder, that ever there was any honour ascribed or given to the Ivy, seeing that Serpents (the most unreconcilable enemies of man-kinde) delight so much therein. But herein the Devil blinded their reason, as he did the modest women, that worshipped *Priapus,* or the *Taurus,* which at this day worship the Devil, to the end that he should do them no harm. Thus much I can only say of the friends and lovers of Serpents, by the multitude whereof we may conjecture, how among other parts of the curse of God upon them, they are held accursed both by man and Beall.

Now then it followeth, that we enter into a more particular description, or rather a relation of that hatred which is between them and other creatures, and first I will begin with their arch enemy, I mean Man-kinde. For when GOD at the beginning did pronounce his sentence against the Serpent, for deceiving our first Parents, among other things he said, *I will set enmity between thee and the Woman,* between thy seed and the Woman’s seed. Whereby he did signify that perpetual war, and unappeasable discord, which should be for ever (by his own appointment) between them. And the truth hereof is to be seen at this day, by a kind of secret insinuunt, and natural motion, a man abhorreth the sight of a Serpent, and a Serpent the sight of a man. And as by the tongue of the Serpent, was wrought mans confusion, so by the sritte of a mans tongue, is wrought a Serpent’s affrontment. For indeed such is the Ordinance of God, that Men and Serpents should ever annoy and vex each other. And this *Erasmus* faith shall continue, as long as *meminerimus illius insanificati pomi,* we shall remember that unfortunate Apple.

*Isaurus* faith, that Serpents are afraid of a man naked, but will leap upon, and devour a man clothed. Which thing is also affirmed by *Olaus Magnus,* for he faith, that when he was a boy he often triey that, when he was naked, he found little or no resistence in Serpents, and did safely without all danger combat with them hand to hand. I my self also in my younger time, when I was about ten or twelve years old, used many times in the Spring and Summer time, to wash my self with other my Colleagues, in certain fish-ponds, wherein I have seen and met with divers Water-snakes without all harm; and I did never in my life, hear of any harm they did to any of my fellows being naked, neither did I ever see any of them run away so fast on the land, as they did fly from US in the water; and yet not the Water-snakes les hurtful then the Land-adders. And this was well known to many.

About the beginning or Fountain Springs of *Euphrates,* it is said, that there are certain Serpents which know strangers from the people of the Country, wherefore they do no harm to the natural born Country-men, but with strangers, and men of other Countrys they fight with might and main. And along the banks of *Euphrates in Syria,* they also do the like; saying that if they chance to be trode upon by any of the people of those parts, they bite (like as a Dog doth) without any great harm; but if any other, fortunier or stranger annoy them, they also repay him with malice,
for they bite him, and intolerably vex him. wherefore the Countrey-men nourish them, and do them no harm. Such as these are also found in Tyritius, but they are very little ones, and are thought to be engendered of the earth.

The first manifestation in nature, of Mans discord with Serpents, is their venom: for as in a Serpent there is a venom which poiyfoneth a Man: so in a Man, there is the venom of his fpirit which poiyfoneth a Serpent. For it the falling fprit of a Man fall into the jaws of a Serpent, he certainly dyeth thereof. And of this, thus writeth the Poet Lucretius:

Est utique ut Serpens, kominis qui tecta jactus
Disperrit, ac fefte mandando conjicit ipse.

In English thus:

At Serpent dyeth when fpritle of Man be fiplet,
Gnawing his teeth to eat himfelf he wasteth.

The cause of this, the Philosophers (which knew nothing of Adams fall, or the forbidden Apple) do allign to be the contrariety betwixt the living fouls or spirits of thefe Creatures: for the Serpents life is cold and dry, and the Humane life hot and moist, wherefore either of both abhorreth one the other: and the Serpent leaheth as far from a Mens fpritile, as it would do out of a veffel of scalding water.

Agatharchides writeth, that there was a King in Africa called Pylus, whose Sepulchre was preferred in the greater Syrtes. From this King there were certain people named Pylusians, in whole bodies there was a certain inbred and natural power to kill, or at the leaft to affonith Serpents, Spiders, Toads, and fuch like, and lay them for dead, even by the favour or smell of them. And the manner of these men, to try the chaftity of their Wives, was to take their children newly born, and to call them unto direful Serpents: for if they were of the right line, and lawfully begotten, then did the Serpents die before them, but if they were adulterous, and the children of Strangers, the Serpents would eat and devour them. Pliny affirmeth, that even in his days there were some of those people alive among the Najamant, who destroyed many of them, and did poifeth their places; yet some running from death, escaped. Generally, fuch people were called Manis and Pylis, for the Manis were a people of Italy, defcended of Circum (as is faid) in whom there was a vertue to cure all the flinging of Serpents, by touching the wounded places. Such faith Gratus Pergamenum, are in Helepbren, about the River Parus. And some are of opinion, that at the beginning they were Opbiogenes, born or bred of Serpents; or that some great Nobleman, father of that Countrey, was of a Serpent made man. And Varro fayth, that in his time there were some few men alive, in whose fpritile was found that vertue, to refift and cure the fpoynom of venoumous Beasts.

But having named Opbiogenes, or Anguina, that is, Men bred of Serpents or Snakes, I fee no caufe why it should be judged, that thofe which cure Serpents poiyfon, fhould be fo misjudged; for to cure poiyfon, is not the work of poiyfon, but of an Autodite, or contrary power to poiyfon: and therefore curers and refifters of poiyfon, are without all learning called Opbiogenes, that is, Serpents brood: but rather, that term belongeth more juftly to thoce people, whose nature is fociable with Serpents, and Serpents agree with them, as they would do with their own kinde. Such an one was Exagen the Embaffador of Rome, who at the commandement of the Consuls, (for their experience) was caft naked into a veffel or tun of Snakes, who did him no harm, but ticked him with their tongues, and fo with great miracle, he was let forth again untouched; and yet there is no more reaon to fay, that this man, was born of the linage of Serpents, becaufe thofe Men-enemies did not hurt him, then it was to fay, that Daniel was born of Lions, becaufe that the Lions did not harm him. Or that Ramus and Renus were born of the kindred of Wolves, becaufe the Wolf did nourith them. We do read of many people in the World, which were furnamed of Serpents, all which may as well be deemed to be defcended of fuch creatures, becaufe of their name, as well as the other, who were by GOD for their innocency preferred from death.

Ephus was called Colubraxis, and the people thereof Ophiusse, and in Arabia we read of the Ophiades, both which are derived from Serpents called in Greek, Ophis Esothathis also relateth a fiory of a man called Ophis, which I omit to speak of the Ophis and others: yet thus much I muftneeds fay, that commonly fuch names have been given to Serpents, for fome caufe or accident, either fignifiedly or truly derived from Serpents. So we read of Ophys, a companion of Cadmus, and a builder of Tebes, who was faid to be made by Palus of a Dragons tooth. Likewife the Serpentes were called Ophodraftus of Cadmus Rho., by Pylus, becaufe in a famine they were contrained to eat Serpents.

S. Augufline maketh mention of certain blafphemous Heretiques, who were called Ophites, becaufe they worshipped a Serpent, and faid that the Serpent which deceivd our firft Parents Adam and Eve, was Christ. Wherefore they kept a Serpent in a Cave, whom they did nourifh and worship, which at the charm of the Priet would come out of his Cave, andlick the Oblations which they fet upon his Den; rowling and folding himself round about them, and then would go in again: then did they abominable Hereticks break thefe oblations into the Eucharift, and receive them as fannified by the Serpent. And fuch alfo is the fiory of Cadmus Rho.: where he tearneth the great Devil Ophius, whom both holy Scripture, and ancient Heathen fay, that he fell out of Heaven. But all thefe things are bu but the way, upon occafion of that unnatural conceit of fome men called Opbiogenes: that is, defcended or begotten by Serpents. Therefore I will return where I left,
left, namely, to the hatred of Men to Serpents, and of Serpents to Men again: In testimony whereof, there have been mutual slaughters, namely Men which have killed monstrous Serpents, and Serpents which have killed men again.

Hercules being but an Infant, (as Poets faign) killed those two Serpents which Jupiter sent to his cradle to destroy him; for Juno is said to be much offended at his birth, because he was begotten by Jupiter upon Aleuca; and therefore there was reserved the Image of Hercules at Athens, strangling a Serpent. But Pierius maketh of this fiction a good moral or Hieroglyphick, when he faith, that by Hercules strangling of the Serpents in his cradle, is understood, how those men which are born for any great enterprises, should kill their pleasures while they be young. I need not to stand long upon this point, for it is evident, that to this day there are many Hysers, both men and women, which are not afraid to kill the Serpents brood. But such as have perished by Serpents, I mean men of any note, are also expressed, whereof Ovid writeth of Eneas, the son of Priamus and Deidamias, who following the Nymph Heferia, (with whom he was in love) was suddenly killed by a Snake biting his foot. So were Apeastes, Munitus, Euridyce, Laocoön, Ophites the son of Lycurgus King of Nemes, Orsiet, Idmon, and Mops, slain by Serpents: whereof Ophites, by the negligence of his Nure Hypsibis, leaving him unguarded in his cradle.

It is recorded by Elianus and Pliny, that when a Serpent hath killed a Man, he can never more cover himself in the earth, but in punishment of so vile an offence, wandereth to and fro, subject to infinite miseries and calamities, not being acknowledged by his female if he be a male, nor yet by the male if it be a female; and is forsaken of all his crew or society. The earth it self not daiging to entertain a man-murtherer into her bowels, but contraining him to live Winter and Summer abroad upon the open earth. And thus hath the Divine Providence dispensed his justice, that he suffereth not murther of men to be unpunished among the greatest haters and enemies of men.

What monsters therefore are they which have Serpents in their delights, and admire that in them which should be hated of all men. And how base were those minded Gesicians, which worshipped the Serpent for a God? Or the Athenians, which kept a Serpent in their Temple, for an opinion that the same did conserve their Tower or Castle from all enemy. Jupiter was also worshipped in many places in the shape of a Serpent. And the ancient Burfranci worshipped a natural Serpent of the earth. It is strange to consider the error of the King of Cal skeleton, who doth as severely punish the slayer of a Serpent, as he doth the slayer of a Man; and not only restraineth his subjects from harming them, but also buildeth for them little coats, wherein they safely lodge in the Winter time. And the cause of this error, is their conceit, that they think Serpents are Divine powers dropped out of Heaven, which they prove, because when they fling fiercely, they quickly kill, and dispatch their enemy suddenly. Wherefore they think that no creature can kill so speedily, except an Angel of God. Some of the Heathen had their Opiboeatea Beasts with Serpents heads, which they did worship for a God. And the Poet Virgil hath an excellent description of Eneas his sacrificing to the ghost of his Father Anchises.

And to make an end of this Section, of the Antipathy between Men and Serpents, that whatsoever is of the Woman's feet, may profees himself an enemy to the Serpent, let him but consider how that hateful monster Heligalebus, having by the help of the Marsick Priests gathered together many Serpents, one day in the morning, when the people were gathered together to see some rare and unheard of spectacles, suddenly he let loose the Serpents, and hurt many of the people. Tzetzes telleth another story, of a devil or warlike stratagem, how Serpents by slings or trunks, were sent abroad among the Camps of their enemies. So doth Galen, of Serpents included in an earthen pot, and call like darts among the Tents of the Romans. And so did Hannibal shew to Antiochus, how in a battle by Sea, he might shoot Serpents among the Mariners to his Enemies, and hinder their rowing: for when he did follow the same devil as Prufne, he went away Victor and Conqueror. And thus I will conclude this part, with the Emblem of Alcatus, which he wrote unto the Duke of Millian upon his Arms, being an Infant proceeding out of a Snakes jaws.
Of Serpents in General.

Exilium Infans sinuo est faucibus anguis,
Est Grelitius nobile semina tuo.
Talia Pelleus gifiisse numinum regem
Vidimus, bisque saeum cancelbras, genius.

Out of the mouth of winding Snake,
Great Duke, this is thy Cree,
A leaping Infant making scope
From jaws, a world wide:
The like Caesar did Pelleus King
Upon his silver preye;
As we have seen, the fame to sing
Of Kindreds worthiness.

And the like by the same Author is expressed upon this Themis, That the widflame of man is foolishness with God; therefore upon the unnaturall conjunction of two mortall enemies, framed into one body, he thus writeth elegantly;

Quid dicam, quaestam hoc compellem nomine Monstrum?
Biforme quod non est homo, nec est draco.
Sed sine sere pedibus, summis sine paritibus anguis, Vir angui-potis dici, & hominem anguis potest:
Angume pedes hanc, hominem reddavat & anguis,

That is to say;

What shall I call? or how this Monster rightly name?
Biformed, which nor man nor Dragon, in all the same.
But man unleged, and Snake unbeded: doublef parts,
Man-faue, Snake-man, exceeding humane arts.

Man talit breedes Snake, and Snake a man up-called,
One end is not of man, nor other of wilde beast tajlet.
Such one was Cecrops, learned Athens King,
And Giants such did earthly mother bring,
Mishapen then, an earthily minde expresseth,
Devoid of grace for worlds good only wifheth.

Thus then will I leave to talk of our most juft (and by God ordained) hostility, betwixt men and Serpents, and defend to a particular discovery, how Serpents and other beafts are for manes fakes at the like enmy. And first of all will I begin with the Fowls, and fo defend to four-footed beafts, and Infects, or imperfect creatures.

Eagles are always in warre with Serpents, from an high they espy them, and suddaine flye down upon them, with a greatye nofe or cry, tearing out their bowells, and cutting affide their venom or poyfon. And some (as Albertus) say, that they will in particular deal with Vipers, Tigers, and Dragons, when the feth them hunting thofe small beafts or birds which are their prey. This fight is thus des cribed by Virgil, how the Eagle griping the Serpent in her talons, flyeth into the air.

In English thus;

At Eagle flieth on high, and in her claws a Dragon beareth,
Fledd within her feet, wounded, dying to her talons cleareth.
The Serpent fierce nou windeth round, and with her head ered,
Flying out threats, rough foles softlifted that were dejected,
To fright her fhe, but all in vain, for she with beast doth strive,
And beat the air with wings of force, till Dragon cede to live.

There is in the seventh book of Ælianus History of living Creatures, a notable and elegant story of an Eagle which was almost overcome by a Serpent, and yet preferred and made Conquerour by a man. There was (faith he) fourteen men which were thrashing of corn in the heat of the Sun, by reason whereof they became very thirsty, then they agreed to fend one of their company to a Fountain not far off, to fetch some water for them all to drink; and so the Meffenger coming to the Fountain, found an Eagle almof killed by a Serpent: for whiles from an high he beheld the Serpent, being more greedy of the prey for to feed her young, then wary to avoid danger, fell down upon her botto, which was too strong for her; for the Serpent received her adversary with fell force, power, and preparation to fille, and so indeed she had accomplished, had not by chance this threfter come unto them: for the Serpent had so enflared and wrapped up the Eagle
Eagle with her long body, that she was nearer ad peruncium quam ad peredium, that is, to be killed, then to kill, or get a prey. The Man beholding the fight, with his sickle cut another, and the Serpent, so delivered the Eagle: but how the Eagle required the Man, shall be shewed in the history of the Eagle.

In the Mountains of Morfilium, there are great store of great Serpents, which are very dangerous, but there are also great white Eagles, which do eat and destroy them. Some say that the Vulture doth destroy Serpents, but herein I cannot be satisfied, for all Eagles do not hunt after this game, but only the lesser fort of them. Eagles when they build their nest to breed in, they seek out a certain stone called Actites, the virtue whereof keepeth Serpents from their young, and also make their eggs fruitful, so as it is a rare thing for Eagles to have a rotten egg.

All kinds of great Hawks, Buffalards and Kites, are also enemies to Serpents, Snakes, and Adders, and the Kites will eat them, if they finde them alive or dead, as I myself have often seen by experience. The Storks also do hunt after Serpents, whereof in Theflay, it is as unlawful to kill a Stork as to kill a Man; for they have many deviles to catch Serpents, and all venomous Beasts, and thereof to eat without harming themselves: and not only eat themselves, but give thereof to their young ones, as Juvenal witnesseth:

—Serpente ciconia pullos
Nutrit, & inventa per devinura locusta.

In English thus;
The stork her young ones, according to kinde,
In Serpents and Lizards, do their meat finde.

Sometime they fight together irefully, and the Serpent strangleth the Stork by twyning about her neck; again, the Stork killeth the Serpent by pecking upon her head, and so sometimes they are both found dead together. As the Eagle hath the stone Actites, so hath the Stork Lychnites, to defend her self and her young ones from the rage of Serpents. There is (as Oppianus writeth in his Iscaticus) this vulgar story in Italy. There was a certain Serpent, which came two years together to the nests of divers Storks, and destroyed their young ones, neither could all the Storks make sufficient force against her with all their might to save their brood. The third year the Serpent came again to attempt the like slaughter; but there among the Storks she found a certain strange Bird never seen before, being shorter then the Storks, and yet had a great long sharp bill, as sharp as the point of any sword. This Bird (as it feemeth) was brought thither by the Storks to guard their young ones, when the Parents were gone abroad to forrage for them. Then, as soon as the young ones were hatcht, out cometh the Serpent from his hole, and beginneth to affail the nests of the Storks, but the guardian Bird, (according to the true committed to her) resifted the Serpent, and pecked at her mortally with her sharp beak. The Serpent to end his adversary, nimby advanced himself upright, and endeavoured to reach the Bird, but the wary Bird foared to high above his reach, that the langrel Serpent could not catch him, and so they continued in fight, till at last the Bird killed the Serpent, after that the Serpent had once only fastened his venomous teeth upon the Bird, which afterward so wroght upon this Bird, that all her feathers did flie off from her back.

But of all other Fowls enemies to Serpents, there is no other more or more deadly, then the Bird called ibis, which the Egyptians do wonderfully honour; for when swarms of Serpents come into Egypt, out of the Arabian gulfes and isles, these Birds meet and destroy them: and there is such an admirable fear in Serpents of these Birds, that they do not only tremble, and fall fentilest at their fight, but also at the sight of their feathers: they do harm to no other living thing, except Locuits and Caterpilars, whereof they are very nourished, and called Ismica & populaver Serpentina, enemies and destroyers of Serpents.

All kindes of Pullen, as Cocks and Hens, are likewise enemies to the brood of Serpents. And a good courageous Cock, (as Columella saith) is able to kill and refit a Serpent. For, (as Radosleutis saith) he hath found in the crop or claw of Pullen, young Serpents devoured by them. But from whence Albertus had his relation, that a Hen cannot be hurt that day by a Serpent wherein the layeth an Egg, I cannot tell; and therefore leave it to the Reader to believe or refuse.

And it is also said, that the feth of Hens applied to the bittings of Serpents, doth cure them, or else caue a Hen to fit upon the wounded place; but if the Beast which is wounded, be a Cow with Calf, or any such other famel with young, howsoever it fareth with the old one, surely the young ones shall perish.

There is also another Bird, which for his combating with Serpents, is termed Opiliomus, a fighter with Serpents. Although Gesner be of opinion, that Opiliomus never figifteth a Bird. Of this Bird the Septuagints make mention, Levit. 11. but many of the better learned, do interpret it for a Lizard, or a Locuit, or an Ichneumon. The Peacock also is a terour to Serpents, so as they will not abide within the hearing of his voyce, for it is perpetual with all venomeous beasts. And the Vultur, as we said before, is a terour unto them, inso much as one of their feathers burned will by the favour of the Insoak drive away the Serpent. And to conclude, the Swallows also are at variante with the Serpents brood, for the Snake will creep up to the Swallows nest, and therein suddeenly surprize the young, for the old ones will fly away cluttering, and chirping in morousful fort, not being...
Of Serpents in General.

being able to hinder or rett the chick-devouring foes. But at the last, when they see all their young ones dispatched, as if they could not endure to live for sorrow, or else thinking it possible to fly into the snakes belly to fetch out again their devoured young ones, they fall down upon their enemies jaws, doing what can to make them devour and swallow them up also. And thus much for the hatred betwixt fowls and Serpents: Wherein, although they kill the Serpent, either in their own defence, or else for ravage and prey, yet may we admire the prudence of the most mighty Creator, who hath so disposed of his power, that he causeth the Fowls of Heaven to revenge Mans quarrel upon the Serpents of the earth, by whose subfubitie Man was plucked from Heaven, and they made subject to corruption.

In the next place, God hath also framed an opposition betwixt Serpents, and the Beasts of the earth and water, which live with Serpents in the same Element, that so they might be both annoyed at home and abroad. I will therefore begin with the Dog, who is a notable enemy to the Serpents, as I say, have been seen in England, for he will earneitly seek them out with nose and foot, both in waters, dunghils, and hedges, and when he hath found any one, he will suddenly snatch him into his mouth, biting him about the middle, and so holding it in equal poyle, will fling and shake it about his ears very falt and violently, till he perceive it can firr no more, and then suddenly again lettech it fall out of his mouth to the earth; but if it begin to firr, he snatcheth it up again, and shake it about his ears as before, and so never giveth over till it appear dead: but they seldom kill them, only they affoainih them, and so may a young childe knock out their brains. However, when they fight in defence of their Matters, then they kill them, by biting them in pieces. And yet is it more safe for them, to affoainih them, and leave them for dead, by flaking them about their ears, then by biting them in pieces, for that commonly then, while they thare them aunder, they are strong or bitten by the Serpent. And this I have seen often in mine own experience. But one of the greatest enemies of Serpents are Harts, a timorous beast of all other, and yet greedy to combat with the Serpent, wherefore I will briefly describe this their war and hatred, out of Solinus, Elianus, Plinie, and Opiannus.

The Hart will greedily follow out the path of the Serpent, and finding it lodged in his den or hole, by the vertue of his nose draweth it out of the Earth, and thereof some have derived Elaphot, a Hart, of Elantrin tos ophex, that is, driving away of Serpents. And herein I think it not reason to follow the opinion of Elianus, who intreating of Harts drawing Serpents out of the earth, faith, that the Serpent is inticed and allured out of her hole, by the breath of the Hart, as by a Phil-tere or Cup of love; for seeing that there is so great an hoftility, and antipathy in nature, betwixt their whole disposition, how can it come from any secret sympathy, that the Serpent (which is the subtillforce of all beasts) should be bewitched with the love of his enemies breath? But if it be said that Serpents, which are by nature very cold, can easilly be drawn forth by a warmer breath, as it were by the sweet beams of the hot Sun; how then falleth it not out, that when any other Beasts breatheth upon their lodging, and into their dens, they are not removed? But let it be granted that the warmnesse of the Harts breath maketh him for fake his denyet it cannot be ascribed to any secret in nature, as if there were a fire of love in the Harts throat or bones, but only from the natural concomitant quality of heat, with expiracion, refpiration, and inspiration: and therefore I cannot but conclude, that there is not any possibility or probability in nature, that where the spirits, which take and make the breath, are at such variance, there the breath proceeding from the one adversary, should do the hurt and buide off the other.

But the true cause of this extraction of Serpents out of their lodgings, is, as I conjecture, not her warm breath that allureth, nor yet forsooth and burneth her adversary; but that when the Hart hath found the den of the Serpent, by her violent attraction of the air out from the Serpent, the enforcement for the safegard of life to follow it out of the den. As a vessel is broched, or vended, the Wine followeth the flying air; or as a Cupping-glass draweth blood out of a feared place of the body: and so is a Serpent against her will, drawn to follow the breath of her destroyer. Oriham and Guntrius do subscribe unto this opinion, and take it for most consonant to reafon and truth, and therefore I will not follow it any further: for by the self fame manner do the Sea-Rams draw the Sea-calls out of their lodgings among the Rocks under the earth, when they have found the Calf, they keep it from air, and prevent their refrigeration.

When the Serpent seeth himself so drawn forth by his adversary, he being above measure incendened to rage, flyeth away, and maketh his poyfon more noifome, violent and powerful, for which cause, there was wont to be a Proverbial caveat or warning: Cave ne inideria in Serpentem, quem extrales et lateris anhelitus cervi effugeris, tunc enim propter iracundiam utreminum et uepramenis: Take heed left you meet with a Serpent flying away from the Hart, after she is drawn out of her den by her breath, for then, by reason of her rage, her poyson is more forcible. But I will proceed to the more strange and wonderful combatte betwixt Serpents and Harts. For when the Serpent perceivesthe unavoidable danger, and that the mult needs fight for her life, she hissett strongly, lifting up her head from the earth, even to the throat of the Hart, and thereat catcheth and gnatheth with her teeth; but on the other side, the valiant Hart, (if such a word may be given to a fearful Beast) as it were derid ing his adversaries weak endeavours to harm, suffereath the Serpent to winde about his breast and belly, and to embrace both neck and legs with his long and weak body, that so he may have the more power upon it, for he t reareth it into an hundred pieces.
But the most strange combats are betwixt the Harts and Serpents of Libya, where hatred hath his deepest footing, for there the Serpents watch the Hart when he lieth down to sleep upon the ground, and being a multitude of them set upon him all together, fasting their poyonfull teeth in every part of his skin, some on his neck and breasts, some on his fides and back, some on his legs, and some hanging upon his privy parts, biting him with mortal rage, to end and overthrow him. The poor Hart being thus oppreft with multitude, and affaileth without any warning to the battle, in vain attempteth to run away, for their cold earthy bodies, winding tayls, and pinching teeth, hinder his wonted pace, and overcharge his strength: whereat being forced to quit himself in the best manner he can, enraged, with teeth, feet, and horns affaileth his enemies, whose spears and arrows of teeth and flings, fick to fall in his body; tearing them in pieces which he can touch with his teeth, beating others afunder where he can reach them with his horns, and trampling under his feet thole which cleave to his lower parts: and yet such is the rage and dauntlesse courage, or rather hatred of these enemies, not willing to die alone, (but like Champions to end their lives upon and with their adversary) do still hold fast, and even when their bodies are beaten in pieces, their heads flick close, and hang sharp upon the Harts skin, as though they would grow with him, and never fall off till he should alfo fall down dead. But the Hart feeling some ease, and having by the slaughter of their bodies delivered his feet from thraldome, by a divine natural inclination, flyeth and runneth fast to some adjoyning fountain, where he seeketh for Sea-crabs, whereof he maketh a medicine, that shaketh off their heads which cleave to fast unto him, and alfo cureth all their wounds and poyon. This valiant courage is in Harts against Serpents, never yeelding, tyring, or giving over, and yet otherwise, are afraid of Hares and Coynes by nature.

But what is the caufe of this hollithy betwixt Harts and Serpents? Is it for meat, or for medicin and cure? Surely they would abhorre to eat them, if it were not for health and natural medicine, for sometimes the pores of their body are dullered and shut up, sometimes the worms of their belly do ascend up into the roof of their mouths while they chew the cud, and there cleave fast; for remedy whereof, the Hart thus affiected, runneth about to seek for Serpents, for the eating of a Serpent cureth this malady. Pliny faith, that when the Hart waxeth old, and perceiveth that his strength decayeth, heart changeth, and his body begins to be feeble, then for the renewing of his strength, he first devoureth a Serpent, and afterward runneth to some fountain of water. Whereof when he hath drunk, he findeth a sensible alteration, both in horn, hair, and whole body, And this thing is also delivered by the Writer of the Glossio upon the 42. Plain, which beginneth, Like at the Hart describeth the water springs, so lungeth my soul after my GOD. But for the ending of this question, we must consider and remember, that there are two kinds of Harts, one eateh Serpents, and feeling the poyon to work, straight way by drinking cafltheth up the poyon again, or else cureth himself by covering all his body over in water. The other kinde only by nature killeth a Serpent, but after victory forbeareth to eat it, and returneth again to feed in the Mountains. And thus much for the discorde betwixt Harts and Serpents.

In the next place, great is the variance betwixt Serpents, Dragons, and Elephants, whereof Pliny and Solinus write as followeth. When the Elephants called Serpent-killers, meet with the Dragons, they easily tread them in pieces, and overcome them, wherefore the Dragons and greater Serpents use subtilety in flead of might; for when they have found the path, and common way of an Elephant, they make such devises therein to intrap him, as a man would think they had the device of men to help them, for with their tails they do ensnare the way, that when the beast cometh, they intangle his legs as it were in knots of ropes; now when the beast floppeth down with his trunk to loose and loosen them, one of them suddenly forseeth his poyon full head into his trunk, whereby he is strangell. The other also (for there are ever many which lie in ambush) for upon his face, biting out his eyes, and some at his tender belly; some wounding themselves about his throat, and all of them together, fling, bite, tear, vex, and hang upon him, until the poor beast, emptied of his blood, and sweelden with poyon in every part, fall down dead upon his adversaries, and so by his death kill them at his fall and overthrow, whom he could not overcome being alive. And whereas Elephants (for the most part) go together in flocks and troops, the subtle Serpents do let passe the foremost of every rank, and set only upon the hindremost, that so one of the Elephants may not help another; and these Serpents are said to be thirty yards long.

Likewise, forasmuch as these Dragons know, that the Elephants come and feed upon the leaves of trees, their manner is to convey themselves into the trees, and lie hid among the boughs, covering their foreparts with leaves, and letting their hinder parts hang down, like dead parts and members; and when the Elephant cometh to browse upon the tree-tops, then suddenly they leap into his face, and pull out his eyes, and becaufe that revenge doth not satisfie her, thirsting only after death, she twineth her gable-long body about his neck, and so strangelleth him.

It is reported that the blood of Elephants is the coldest blood in the world, and that the Dragons in the scorching heat of Summer, cannot get any thing to cool them except this blood: for which cause they hide themselves in Rivers and Brooks, whither the Elephants come to drink, and when he puttheth down his trunk they take hold thereof, and instantly in great numbers leap up into his ears, which only of all his upper parts are moist naked and unarmed, out of which they suck his blood, never giving over their hold till he fall down dead, and so in the fall kill them which were the procurers of his death. So that his and their blood is mingled both together, whereof
Of Serpents in General.

whereof the Ancients made their Cinnabaris, which was the best thing in the World to represent blood in painting: Neither can any devise or art of man ever come near it; and beside, it hath in it a rare vertue against poison. And thus much for the enmity betwixt Serpents and Elephants.

The Cato by Albertus is said to be an enemy to Serpents, for he faith he will kill them, but not eat thereof; howbeit, in her [ sic ] killing of them, except the drink incontinently, the dyeth by poison. This relation of Albertus cannot agree with the Monks of Mifian their relation about their Abby-cat. But it may be that Albertus speaketh of wilde-cats in the Woods and Mountains, who may in ravin for their prey kill a Serpent, which followeth with them the same common game.

The Roes or Roe-bucks do also kill Serpents, and the Hedge-hog is enemy unto them, for sometimes they meet both together in one hole, and then at the sight of the Serpent, the Hedge-hog foldeth himself up round, so as nothing appeareth outwardly, fave only his prickles and sharp bristles: the angry Serpent fetteth upon him, and biteth him with all her force; the other again, irritateth herelf above measure, to annoy the Serpents teeth, face, eyes, and whole body: and thus when they meet, they lie together afflicting one another, till one or both of them fall down dead in the place. For sometimc the Serpent killeth the Hedgehog, and sometimc the Hedge-hog killeth the Serpent, so that many times the carrieth away the Serpents flesh and skin upon her back.

The Weasels also fight with Serpents with the like furious: the cause is, for that one and other of them live upon juye, and so for their prey or booty, they fall together in mortall warre. Herein the Weasel is too cunning for the Serpent, because, before the fightheth, the feeketh Rue, and by eating thereof quickly discomforteth her adversary. But some fay, that the eatheth Rue afterward, to the intent to avoid all the poison the contracted in the combat.

The Lyon also and the Serpents are at variance, for his rufing mane is discouraged by the exctoll- ed head of the Serpent to his breath. And therefore as S. Ambroje faith, this is an admirable thing, that the Snake should run away from the Hart, the most fearfull of all other beastes, and yet over come the Lyon, King of all the residue.

The Ichnammon or Pharaoh Mouse is an enemy to Serpents and eatheth them, and because he is too feeble to deal with a Snake alone, therefore when he hath found one, he goeth and calleth as many of his fellows as he can finde, and so when they find themselves strong enough in company, they feet upon their prey, and eat it together; for which cause when the Egyptians will signific the weaknesse they paint an Ichnammon. Andmerely likewise is also a protected terror, and courage to Snakes and Adders, and they will not endure neer those places where they hear their voice. The Swan and Swine, do also hate and abbhor Serpents, and the little Sorex hath most advantage against them in the Winter-time, when they are at the weakest. To conclude, the Horse is wonderfully afraid of all kindes of Serpents if he see them, and will not go over, but rather leap over a dead Snake. And thus I will end the warre betwixt Serpents and Four-footed beasts and Fowles.

Now left their curfe shoul not be hard enough unto them, God hath also ordained one of them to destroy another, and therefore now it followeth to shew in a word the mutuall discord betwixt themselves. The Spider, ( although a venomous creature ) yet is it an enemy to the Serpent; for when the feeth a Serpent lie under her tree in the shadow, the weaveth or twillet a thred down from her web upon the head of the Serpent, and suddently biteth into his head a mortal wound, so that he can do nothing but only roul to and fro, being ftricken with a Megrim, whereby he hath not so much power as to break the Spiders thred hangeing over his head, until he be dead and overthrown. The Cockatrice is eac a enemy to some kindes of Serpents, that he killeth them with his breath or hissing.

The Lizard a kinde of Serpent is most friendly to man, and very irefull against Serpents, to the uttermost of his power, whereof Erasmus ( in his book of Friendiship ) telleth this story: I saw ( faith he ) on a day, a very great Lizard fighting with a Serpent in the very mouth of a Cave, at the first fight whereof I marvailled at the matter, for the Serpent was not visible out of the earth: there was with me an Italian, who said, that surely the Lizard had some enemy within the Cave. After a little while the Lizard came unto us, and shewed us his fide all wounded, as it were craving help, for the Serpent had bitten him fore, for of green he made him appear red, and this Lizard did suffer himselfe to be touched of us: Thus faith Erasmus.

Again, in the same place he faith, that when a Lizard saw a Serpent lie in wait to set upon a man being asleep, the Lizard ran to the man, and never ceased running upon the mans face, stretching his neck and face gently with his clawes, until he had awaked the man, and so submissive to him his great danger. The Loculli also fighteth with a Serpent, and killeth him when he lufeth, for he geteth hold with his teeth upon his lower chap, and so destroyeth him: but this is not to be understood of everie kinde of Loculli, but only of one kinde, which for this cause is called Ophiomacism genus.

The Serpent is also an enemy to the Chamaeleon, for in the extremity of famine, the fetteth upon them, and except the Chamaeleon can cover her self from his rage, he hath no defence but death. Albertus calleth a certain Worm, Spisator colubri, because ( as he faith ) it will take faiith hold upon a Serpents neck underneath his jawes, and never give over till he hath wearied and destroyed his adversary. The Tortoises are enemies to Serpents, and will fight with them, but before they enter combat, they arm themselves with wilde Marjoram or Pennroyall.
Of Serpents in General.

But there is not any thing in the world that figheth more earnestly against Serpents then Sea-crabs and Creavies; for when the Sun is in Cancer, Serpents are naturally tormented with pains and feavers, and therefore if Swine be rung or bitten with Serpents, they cure themselves by eating of Sea-crabs. There is a great water near Ephesus, at the one side whereof there is a Cave full of many noyfome and unclefual Serpents, whose bitings by often probation, have been very deadly both to men and beasts. These Serpents do often times endeavouer to crawl over the pools; now on the other side, there are great flore of Crabs, who when they see the Serpents come crawling or swimming, they instantly put out their crooked legs, and as it were with tongs or pinfers, reach at the flying Serpent, wherewithall the Serpents are so deterred, that through their fight, and often remembrance of their unhappy faceffe with them, they turn back again, and never dare any more adventure to the other side. Where we may see the most wise providence of the Creator, who hath set Sea-crabs the enemies of Serpents, to guard both men and Cattell, which are on the opposite side: for otherwife, the inhabitants would all perife, or else be drove away from their dwellings. To conclude, not only living Creatures, but alfo some kinde of earth, and Plants are enemies to Serpents: And therefore most famous are Ebulus and Creet, as some fay, although Belonius say, that there are Solipendiaeres Vipers, and Slow-worms in Creet, yet he fay they are without venom: and there are very few in England and Scotland, but none at all in Ireland, neither will they live if they be brought in thither from any other Country. This antipathy with Serpents, proceedeth from living to dead and vegetable things, as trees, herbs, and plants, as may be feen by this discourse following.

There is fuch vertue in the Aft-tree, that no Serpeft will endure to come neer either the morning or evening shadow of it, yea though very far diftant from them, they do fo deadly hate it. We let down nothing but that we have found true by experience: that a great fire be made, and the fame fire enclosed round with Aften boughs, and a Serpent put beath the fire and the Aften boughs, the Serpent will sooner run into the fire then come near the Aften boughs. Thus faith Pliny; Olaus Magnus faith, that thefe Northern Countries have great flore of Aft-trees, do want venemous beafts, of which opinion is alfo Pliny. Callimachus faith, there is a Tree growing in the land of Triaconias, called Smile, to which if any Serpents do either come neer or touch, they forthwith die. Democritus is of opinion, that any Serpents will die if you call Oken-leaves upon him. Pliny is of opinion, that Athlabiunum, which is a kinde of wilde Bugfloe, is of the fame ufe and quality; and further, being chewed, if it be spit upon any Serpent, that it cannot possibly live. In time of thefe solemn Feafts which the Athenians dedicated to the Goddeffe Ceres, their women did use to lay and threw their devils with the leaves of the Plant called Agnes, because Serpents could not endure it, and because they imagined it kept them chale, wherupon they thought it very pleasant. The herb called Rosemary, is terrible to Serpents.

The Egyptians do give it out, that Polydamna, the wife of Thrace their King, taking pity upon Helen, caufed her to be fet on fhole in the Illand of Pharos, and belowed upon her an hearb (whereof there was plenty) that was a great enemy to Serpents; whereof the Serpents having a felling fenfe (as they fay) and fo readily known of them, they ftraiightways got them to their lurking holes in the earth: and Helen planted this herb, who coming to the knowledge thereof, the percieved that in his due time it bore a feed that was a great enemy to Serpents, and thereupon was called Helenium, as they that are skilfull in Plants affirme; and it groweth plentifully in Pharos, which is a little ille againft the mouth of Nilus, joyned to Alexandria with a Bridge. Rue, (called of some Herb of grace) efpecially that which groweth in Lybia, is but a back friend to Serpents, for it is molt dry, and therefore caufing Serpents foon to flay and lofe their courage, becaufe (as Simocatus affirme) it induceth a kinde of heavinesse or drunkenneffe in their head, with a vertiginy or goddines, through the exces of his drincks, or immoderate ficcity. Serpents endue not the ftrength of Rue, and therefore a Weafeil when she is to fight with any Serpent, eateth Rue, as a deffenative againft her enemy, as Ariftate, and Pliny his Interpreter are of opinion.

The Countrie-people leaving their Veffels of Milk abroad in the open fields, do befieem them round about with Garlick, for fear left fome venemous Serpents fhould creep into them, but the smell of Garlick, as Efedim faid, driveth them away. No Serpents were ever yet feen to touch the herb Trifolue, or Three-leaved grasse, as Aedonius would make us believe. And Cardan the Phyfitian hath observed as much, that neither Serpents nor any thing that is venemous, will lodge, dwell, nor lurk privy neer unto Trifolue, becaufe that it is their bane, as they are to other living Creatures: and therefore it is fown to very good purpofe, and planted in very hot Countrie, where there is most flore of fuch venemous Creatures. Arnoldus Villanovanus faith, that the herb called Dresnue killeth Serpents. And Florentinus affirme, that if you plant Wormwood, Mugwort, and Sothernwood about your dwelling, that no venemous Serpents will ever come neer, or dare enterprie to invade the fame. No Serpent is found in Vines when they flourifi, bearing flowers or blossoms, for they abhor the smell, as Ariftote faith. Aiden an Arabian Phyfitian, faith, that Capers doe kill Worms in the guts, and likewise Serpents. If you make a round circle with the herb Betony, and therein include any Serpents, they will kill themselves in the place rather than firve to get away. Galbanum killeth Serpents only by touching, if Oyl and the herb called Fennel-giant be mixed withall. There is a shrub called Therionarca, having a flower like a Rofe, which maketh Serpents heavy, dull, and drowifie, and do killeth them, as Pliny affirme.

Albertus
Of Serpents in General.

Albertus and Arianus affirm, that there is a certain Tree in Asia, called Hyperdicus, which foundeth as much as against the right hand, with whole sweet fruit Doves are delighted; but there are Serpents which are fore enemies to the Doves: so lying in wait for them, and not being able to abide the smell & shadow of the tree, the Doves notwithstanding very safely do there in the tree seek their refuge, and finde food wherewith to sustain themselves. Kafir (who practished Physick one hundred years) affirmeth, that if any man do melt Sal Ammoniac in his mouth, and then spit it into a Serpent's mouth, that he will die of it.

Of the Medicines made and taken out of SERPENTS.

It is manifest, that if any man be wounded of a Serpent, though the wound seem incurable, that Remedies to be

the bowels or inward parts of the same Serpent, being applied to the wound, will cure the bad and taken

fame; and those that have eaten the liver of a boyled Viper at any time, shall never after be

wounded of any Serpent. Neither is a Snake venemous, unless at some time of the Moon, when

she is thoroughly moved or angered. And a live Snake or Serpent being caught, if the bitten place

be bathed, loked, or washed with the Snake being bruised in any water, it is of notable effect.

Befides, they are thought to be very sovereign against many infirmities, and therefore (as Pliny

faith) they are dedicated to AEolapius.

Ajax, faith, that if any be troubled with the Leprosie, he is to be cured by taking a black Serpent,

and being exconated, he must be buried so long till there breed Worms of him, and then

be is to be taken forth of the earth and dried, and so to be given to the leprous perfon for three

days together, the quantity of one dram at every time, with syrup of Hony. Pliny, and with

him agreeeth Cornutus Celsus, affirmeth, that if any one do eat the middle part of Snakes or Ser-

pents, calling away the heads and tails, they cure Strumen, which we in English call the Kings-evil.

There is a disease called Elephantia, or Elephantiasis, which is a kind of Lepry, proceeding of me-

ancholy, choler, and phlegm, exceedingly adult, and maketh the skin rough, of colour like an Ele-

phant, with black wanne spots, and dry parched scales and scurf: This disease (I say) go grievous,

and Strumen, are exceedingly holpen by eating often of Vipers and Serpents, as John Tegnetis in his

Irish Book Influen, Chirurg, hath assured us.

Pliny, faith, that if you take out the right eye of a Serpent, and so bind it about any part of you

that it is of great force against the wathering or dropping of the eyes, by means of a rheum

slung out thereat, if the Serpent be again let go alive. And so he faith, that a Serpents or Snakes

heart, if either be bitten or tyed to any part of you, that it is a present remedy for the tooth-

ache: and be addeth further, that if any man do taste of the Snakes heart, that he shall never after

be hurt of any Serpent.

Paulus Venetus in his second Book, Chap. 40. wrieth, how that in the Province of Caratian,

here be Serpents of exceeding greatnese, which being killed, the inhabitants of the Country

to pull out their gall, which they use to prize at a very high rate when they fell any of it, for it is

very medicinal: so that they which are bit of a mad Dog, if they take inwardly in any drink

but the quantity of a penny weight of this gall, they are presently cured. And if a woman be in

her travail of child-birth, if the taffe never so little of this gall, the birth will be the more speedy.

So if any be troubled either with the Pyles, or Hemorrhoids in the fundament, if that the place

be anointed with this gall, after a few dayes he is set free from his disease. Hippocrates giveth the

eed of Serpents as a remedy against the suffocation of the belly.

Nicolaus Myrsipus preferreth this medicine against strains and hardnesees. Take a dead Ser-

pent and put him into a new pot, luting it very well with Cyprum, then set it in a furnace that it

may be burnt, after that, commixe the ashes of a Serpent with an equal quantity of the seeds of

arum, so being wrought up with Attick Hony, and throughly digested, anoynt the place

affected. And with him agreeeth Pliny, who expressly affirmeth, that the ashes of Snakes and Ser-

pents, being anoynted upon Strumen, either with Oyl or Waxe, is a singular medicine. And like-

wise to drink the ashes of a Serpent that is burnt to powder in a new earthen pot, is very good:

but it will be the more effectuall, if the Serpents be killed between two tracks or furrowes that are

made with Cart-wheels. The ashes of a Serpent burnt with salt in a pot, being put with Oyl of

alamis into the contrary ear, helpeth the tooth-ache.

An unguent against the Morphue, prescribed byonus Magnus. Take of the ashes of a Serpent

burnt in a new pot, and well covered, two ounces, Liubarre, Galbanum, Ammoniacum, and Opoponax,

dissolved in Vinegar, three ounces, boil them until the Vinegar be consumed, then strain them,

putting to them of Turpentine three ounces, Frankincence, Mallick, and Sarccolla three ounces,

asforn two ounces, working them with a Spathtuler till they be cold. The powder of a burnt Ser-

pent, is likewise good against Fihulasa. The fat of a Snake or Serpent mixt with Oyl, is good against

strumen, as Pliny faith. The fat of Snakes mixt with Verdegrease, healeth the parts about the eyes

that have any rupture. To which agreeeth the Poer, when he faith:

Anyhain crepitis adipes argyrae mine,  
Hi putent us acutum jngere partes.

Which may be thus Englished;

The fat of Snakes mingled with Iron rust,  
The parts of eyes doth mend, which erd were burst.

G g g 2
It is certain that barrencnes cometh by means of that grievous torment and pain in childe-birth; and yet Olympos of Thebes is of opinion, that this is remedied with a Bulls gall, the fat of Serpents, and Verdigrase, with some Hony added to them, the place being therewith anointed before the coming together of both parts. When a Woman is not able to conceive by means of weakness in the retentive vertue, then there is no doubt, but there must needs grow some membra in the belly entrance, for which it is not amifs to make a Poffary of the fat of a Serpent, Verdigrase, and the fat of a Bull mixt together, &c. and to be applied, Hippocrates in lib. de Sterilit. &c.

Hippocrates had a friend who signified to him by his Letters, that the fat of a Serpent was sent to him from those fulphureous bitches which were neer unto Camaeriacum, and was fold at a very dear rate, namely, twelve pounds for every ounce, and sometimes dearer. They use to mix it with the emplater of John de Vigo, (that famous Chirurgeon) for all hardnesse, and other privy and unfeeuable (though not unfelt) torments proceeding of the Spanifh pox. They use it yet further, against leprous swellings and pimples, and to smooth and thin the skin. Mathildius faith, that the fat of a black Serpent, is mixt to good purpose with those Ointments that are prepared against the French or Spanifh pox. And Pliny mixeth their fat with other convenient medicines, to cause hair to grow again. The suffmigation of an old Serpent, helpeth the monthly course. Michael Allosius faith, that Oyl of Serpents decocted with the flowers of Cowflips, (ever remembering to gather and take that which swimmeth at the top) is singular to anoint podagrical persons therewith.

Now followeth the preparing of Serpents: Take a Mountain Serpent, that hath a black back, and a white belly, and cut off his tail, even hard to the place where he fendeth forth his excrements, and take away his head with the breadth of four fingers; then take the residuo and squeeze out the blood into some vesel, keeping it in a glafs carefully, then flew him as you do an Eele, beginning from the upper and groffer part, and hang the skin upon a flack and dry it, then divide it in the middle, and reserve all diligently. You must waft the flesh and put it in a pot, boyling it in two parts of Wine, and being well and throughly boyled, you must feast the broth with good Spices, and Aromatic, and Cordial powders, and so eat it. But if you have the bene to roft it, it must be fo rofted, as it may not be burnt, and yet that it may be brought into powder and the powder thereof must be eaten together with other meat, becaufe of the loathing, and dreadful name, and conceit of a Serpent: for being thus burned, it preferveth a Man from all fear of any future Lepry, and expelleth that which is present. It keepest youth, caufing a good colour above all other Medicines in the world; it cleareth the eye-sight, garded furily from gray hairs, and keepteth from the Falling-ficknefs. It purgeth the head from all infirmity, and being eaten (as before is said) it expelleth fcbabines, and the like infirmities with a great number of other difeafes. But yet such a kind of Serpent as before we have described, and not any other, being also eaten, freeth one from deafnes.

You may also finely mince the heads and tails of Serpents, and feed therewith Chickens or Geefe, being mingled with crums of Bread or Oates, and thefe Geefe or Chickins being eaten, they help all to take away the Leprofie, and other founlness in Mas body. If you take the dryed skin, and lay it upon the tooth on the inner fide, it will mitigate the pain thereof, specially if it proceed from any hot caufe. In like forte, the fame skin wafted with fipttle, and with a little piece of the tail laid upon any Impollume, or Null me tangere, it will tame and muffen the pain, caufing it to putrefie more easily and gently, and fcarceely leaving behind any cicatrice or skar. And if a Woman being in extremity of pain in Childe-birth, do but tie or binde a piece of it on her belly, it will caufe the birth immediately to come away. So the skin being boyled and eaten, perfometh the fame effects that the Serpent doth.

The blood of a Serpent is more precious then Balsamum, and if you anoint your lips with a little of it, they will look pafing red: and if the face be anointed therewith, it will receive no spot or feld, but caufeth to have an orient or beatifull hew. It repleffeth all fcbabines of the body, finking in the teeth and gums, if they be therewith anointed. The fat of a Serpent, speedily helpeth all renefs, fports, and other infirmities of the eyes, and being anointed upon the eye-lids, it cleareth the eyes exceedingly. Iem, put them into a glaffed Pot, and fill the fame with Batter in the Moneth of May, then lute it with well with Paffe, (That is, Muel well kneaded) fo that nothing may evaporate, then fet the Pot on the fire, and let it boil well the half a day; after this is done, drain the butter through a cloth, and the remainder beat in a mortar, and drain it again, and mix them together; then put them into water to cool, and fo referve it in filver or golden boxes, that which is not evaporated, for the older, the better it is, and fo much the better it will be, if you can keep it forty years. Let the fick Patient, who is troubled either with the Gout, or the Pallsie, or anoint himself often againft the fire with this unguent, and without doubt heall he freed, especially if it be the Gout. All these prefcriptions, were taken from the writings of a certain namelefs Author.

Hippocrates faith, that a Hart or Stag having eaten any Serpents, the worms in their guts are thereby expelled. And Albusius hath the fame words, that Harts by eating of a Serpent, do kill and expell worms from their guts. Hierolets, to a certain medicine which he prepared for the Strangulation in a Horfe, mingled the dung of a Lyzard, and Stearbergou, (that is, as I interpret it) the fat of a Serpent, the bloude of Dove, &c. Laurence Ruffle faith, that it is good to give the flesh and decoction of Serpents to madde, biting, and flirking Horfes. And that the fat of a Serpent, &c.
doth cure the puffing or swellings that arise in Horses backs, which come by means of any compre-
ッション, or close fitting and thrumming down.

Item, The unguent that dropeth from a Serpent, while it is rolled on a spit, is highly comm-
ッション for Fiffuhas that are in Horses hoofs. *Galen* and *Rafus* do counsel us to cut in pieces a 
Snake or Serpent, and to lay the fat thereof upon a flick, and to anoint the outward parts of the 
hoof of any Horse. *Horse-leaches*, live Mice, the green Lizard being burned, if they be given to a 
Hawk in her meat, they do cause a speedy mutation of her feathers or wings; and the fame effect 
have little River-fishes, finely beaten or flamped, if they be cast upon any meat.

Item, the Serpent that is speckled, and of divers and sundry colours, of all others hath the least 
poyerons; and in the German tongue it is called *Huf* (peradventure it is that which we call a Snake) if 
(I lay) you take this Serpent, and boil it with Wheat, and give the fame Wheat to a Hen to feed upon, 
being mungled amongst her meat and drink with the venom of a Serpent: a Hawk being fed with 
the flesh of such a Hen, forthwith caileth her fick feathers, and is freed from any other disease, if 
the have any at all, as *Albertus* faith.

The old skin of an Adder or Snake, that he casts off in the Spring time, if it be rubbed upon the 
eyes, cleareth the fight, as Phiny faith. And Galen biddeth us, if any be troubled with blood-shotten 
eyes, to take the old cast skin of Serpents, &c being beaten with Sea water, to anoint them therewith. 
And *Gardon* faith, that the cast skin of a Snake, if the eyes be rubbed therewith every morning, that 
they will never be very dim of sight, nor yet ever have any pin or web in them. Amongst com-
positions that are made for the eyes, they use to mix the cast skin of Snakes, as *Diosets* affirmeth, 
adding further, that the old age, or cast skin of a Snake being boiled in Wine, is an excellent 
help for pain in the ears, if a little thereof be dropped into them. Boyl the cast skin of a Snake with 
tops of Poppy, and drop a little thereof into the ears, if any be troubled with pain thereof, and 
this is an excellent remedy, as Galen in his third Book, *De Compottis medicamentis s. loca*, hath taught 
us, having himself learned the fame from *Archigenes*. The cast skin of Serpents being burned in a pot, 
or on a hot burning tyle-hard, if it be mingled with Oyl of Rofes, and do dropt into the ears, is 
proved to be very effectual against all fores, and ficknesles of the ears; but especially against the 
flinking favour of them: or if they be purulent or full of matter, then to be mixt with Vine-
gar. Some use to mingle Bulls gall therewith, and the juycie of the flesh of Tortoifes being boyled. 
*Marcellus* faith, that if you take the gall of a Calf, with a like quantity of Vinegar, and mix 
them with the cast skin of a Serpent, if then you dip a little Wooll into this medicine, and put it 
to the ear, that it helpeth very much, especially if with a plunge being foked in warm-water, 
you first foment the ear. *Disaroides* and Galen do affirm, that the cast skin of a Serpent, if it 
be boiled in Wine, doth cure the tooth-ach, if the pained place be wafhed therewith. But yet, in 
tolerable pains of the teeth, this is proved more fingular. Take the cast skin of a Serpent and burn 
it, then temper it with Oyl till it come to the thicknes or confiflence of hard Honey, and cover the 
tooth/being first foured and cleafned therewith, anointing all the near places to the fame, and put 
some of it into the hollownes of the tooth. And as *Archigenes* faith, if you lay the cast skin of 
a Snake unto the teeth, not being burnt, they will all fall out. It cureth likewise the lowlie 
evil called *Pithritis*. And Galen prefcribeth this cast skin of Snakes or Serpents, for a re-
medy against the Colick, if it be put into a bras pot with some Oyl, and be burnt to pow-
er; if then it be dissolvd in Oyl, and the place therewith anointed, it is of great vertue. And if it 
be boiled in a Tin veffel with some Oyl of Rofes, it remedieth the Bloody-fix, and 
such as be troubled with Tenife, which is, a great defire in going to ftool, and yet can do 
nothing.

*Arnoldus de Villa nova*, in his Breviary faith, that if you take the cast skin of a Serpent, *Opoppaix*, 
Myrrhe, *Galbanum*, *Cafforeum*, yellow Sulphur, Madder, Pigeons or Hawkes dung, and incorpo-
rate them with the gall of a Cow, they being fift pulverized, and the fume thereof received through 
a tunnel at the lower parts, it bringeth forth either the dead or living birth. *Gardon lib. de Subtilit* 
faith, that the cast skin of a Serpent burned in the full of the Moon, and entering into the first de-
gree of *Aries*; if the ashes thereof be sprinkled on the head, that thereby terrible and fearful 
dreams will follow. And if the face be anointed or wafhed therewith, being fift laid in water, that it 
caueth one to look very fearfully and horribly: and if it be held under the tongue, it will make 
one very wyue and eloquent: and if it be kept under the foals of the feet, it maketh one very gracious 
among Princes, Magiftrates and Great men. And another faith, that this cast off skin being pul-
verized when the Moon is in her increase, and in the first degree of *Aries*, if the powder thereof be 
set on the table, in a wooden or metaline dish; if any poeyon be therein, it will be dispersed and 
do no hurt, and yet the powder will remain safe and whole: and if given to a Leprous person, his 
difeafe will spred no further. And if you put a little of this powder into any wound, it will cure it 
within three days. I have feen (faith Galen) Goats that have eaten of the boughs and leaves of Ta-
marisk, and I have found them without a Spleen: alfo I have feen other Goats that have lick up 
Serpents after they had cast their skin; and I have proved, that after that, they have grown very 
white, and to have kept their young years a great while; so that it was long before they waxed old.
Of the way to drive away Serpents. Of their poyson and bitings.

A certain and sure way to cure those who either have been poisoned, invenomed, or bitten by them.

To expell and drive farre away any venomous Creatures, we use to make fumigations of the root of Lilies, Harts-horn, and the horns and hoofs of such beasts as be cloven footed: likewise of Bay-leaves and berries, Calamint, Water-cress, and the ashes of the Pine-tree. The leaves of Vitex, Bitumen, Galfortum, Melanthium, Goats-horns, Cardamomum, Galbanum, Propolis, which may be called Ben-glew, the herb called Horstrange, Panax, Opopanax, Flethure, the thaynings or frapings of the Cypresse or Cedar-tree being steeped in Oyl, the Jet-stone, Sagginum, the herb called Pley, Fern, and all other things that have a strong or vehement ill favour, being cafl on the coals for a fumigation, do with their vapour chafe away venomous beasts. For whereas all venomous Creatures have the passages or pores of their bodies very flat and narrow, they are very eafily and fafted, and are quickly flopped and fufficient by fuch like fents and smells.

Sextus in his thirteenth Book fettefth down an excellent fume after this manner. Take of Galbanum, of Sandracha, Butter, and of Goats-fat, of every one alche much, they make them into Pills, and ufe them for a fumigation. Nicander in Theriacs fettefth down fome make, for them into Verfes.

The breadth or vapour that iffeth from Serpents is fo poifent, that it killeth all young chieffins, as Calamella faith; and for preventing of this milchef, it is good to burn Harts-horn, Woman's hair, or Galbanum.

The breath or vapour that iffeth from Serpents is fo poifent, that it killeth all young chicks, as Calamella faith; and for preventing of this milchef, it is good to burn Harts-horn, Woman's hair, or Galbanum.

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Of Serpents in General.

The powder of a Cedar tree, put forth to flight venomous Serpents, as Virgil in the third of his Georgics witnesseth.

Dolce & odoratum stabulis ascenderet Cedrum,  
Galbanoque agiari gravet nidor celydro.  
Which may be Englished thus;

Learn how of Cedars, fire in thy fold to make,  
And with Galbanante savour, put to flight the Snake.

Things that are throtted or laid under us, both in our houses and in high-ways or beds, William defend and from venomous creatures: as for example; Southernwood, Dittander, Fleabane, Calamin, Gentian, Hufaft regia, Sage, Nightshade, S. Johns wort, called of some Fuga demon., Marjoram, Origan, wide Rue, wide Thyme, Bay-leaves, the shavings or tops of the Cyres or Cedar-tree, Cardamum, Penroyal, Wormwood, Mugwort, Lysmachia, called in English Loofe-strie, and Rosemary. And if we cannot lie upon such a bed;

Tunc justa virides sineuis vorticis alvus,  
Amnicolum nepetam per dehis colice ripar.  
Aut ubi celia faxis, pulchro quae foere remeis,  
Prebeat, infratae fuctum fronde grautam.  
Sicquique montum petillum, cujas grave firmans  
Horret odor, nemensque sciam quae debit obtinens.  
Herba, & ab Excina que fertur oreignon urbe,  
Quacunque illius dicenepant oblique, profect.  
Quin eitiam multis per-optica cumbina fines.

In English thus;

Then by the winding banks of crooked streams,  
The Water, nay take up, which under foot is tread,  
Or the cloud Offic, whose faire flower bath beams  
And leaves, scarce from serpents make thy bed.  
The Mountain Paly, whose strong smelling breath  
The makes abour, & that which doth th hydra name,  
The Origan which comes from Euxmus earth,  
Do profit all against Serpents, if you bear the same.

Rident abronum, pecorige ingrata petillum  
Pabula perplum, multi quod passitur borto.  
Prasfit item exiguam circumlimb plantas,  
Urticaque omnes, & spinas anagros;  
Sir & panicea fuisse eis arbore ramis,  
Regalisque amplis erit haffa frondibus urti.  
Acipe ism invocato medicaeque frigore firosum,  
Arque in vasa pigit Syra prions aera pulchritus.

Nicander.

In like fort, to sprinkle the place with water, where in Sal Ammoniacum is dissolled, driveth away Serpents, as Avicen affirmeth.

If any one appoint himself either with Dears-sweat, the fat of Elephants or Lions, Serpents will shun that persifon: and there be some, (as Philo faith) that for fear of Serpents, do anoint their bodies with the seeds of Juniper. The juice of the black Vine extracted from the root, and anointed on the body, performeth the like. For preservation from Serpents, Nicander compounded this ointment. Take two Vipers about the end of Spring time, Deer-fewt thirteen drams, Unicertas thirty six drams, crude Oyl of Olives as much, comin them with nine ounces of Wax, boil the Serpents till the fielth fall from the bones, which you must cast away because they are venomous.

They that will yet be more assured, let them anoint their bodies with a thin erat, made of Wax, Oyl of Rofes, a little Galbanum, some powder of Harts-horn, or else Cummin-seed of Ethiopia, &c. Actius. If a man carry about him the tooth of a Stag, or those small bones which are found in his heart, he shall be secured from Serpents. If any one do bear about him wide Buglos, or the root of the wide Carot, he cannot be wounded of any Serpents. Grevisium is of the mine, that the Jet-flone, besides other manifest qualities, hath yet this as peculiar to it self, that he which carryeth it about with him, need neither to fear Serpents, nor any other poysons.

Now for venomous beasts, which are found in any houses, the belt way is to pour scalding water into their dens and lurking holes. And if any man (contraried by necessity) can finde no other place to sleep, but such a one as where Salamanders, the Spiders called Phalangii, or the like Serpents do abound it is good to stop the holes and corners with Garlick beaten with water, or some of those herbs which before we have spoke of. But yet men now adays hold it the safest course, to pour unquenched Lime sprinkled with water into their dens and secret corners.

As they are bitten by a mad Dog, so all such persons be wounded by venomous creatures, are in exceeding great danger, unlefe at the first they receive speedy help and succour: The safest way therefore to cure the poyson, is by attractives, which draw from the more inward parts to the surface, and not to make too much pollhaft in closing up the wound. But if any one hath swallowed down, and taken inwardly any poyson, the belt way is (as Dioscorides writeth) to vomit often; but if any be wounded by biting, then it is belt to use scariification, and to fallen Cupping-glafses upon the place affected, to draw out the poyson. Some use to suck the venom out, and others to cut off and dilimber the part. And this is to be observed, that if any one will undertake to suck out the venom, the party that attempteth must not be falling; and besides, he must with his mouth with
Of Serpents in General.

some Wine, and after that, holding a little Oyl in his mouth, to fuck the part, and to spit it presently forth. And before Cupping-glasses be applied, the part must first be fomented with a Spurge, then scarified deeply, that the venomous matter may the more speedily be drawn out from the more inward parts; and yet cutting off the flesh round in a compass, doth more good then any scarification.

But if the place will admit no section or incision, then cupping-glasses, with deep scarification, with much flame, must needs be used: for by attraction of the bloud, and other humors with windines, the poyfon it self must of necessity follow. And Aetius in his 13. Book and tenth Chapter, counselth that the sick perfon be kept from sleep, and so sit still, until he finde some ceasing or releas-

ing from his pain. Besides, the member which is envenged, ought to be bound round about, that the poyfon may not too easily convey it self, and penetrate into the more noble and principal parts, as the heart, liver, or brain. And in this manner having applied your Ligature, you must by the advice of Fumanellus, let on your Cupping-glasses, and they being removed, apply the herb Cala-

mint upon the place, and to give the patient some of the root of Mugwort in powder, or the best Treacle, and such Cordials as do corroborate the heart; and for this intent, Buglofs, Borage, Balm, and any of their flowers are much commended.

A Dove or Pigeon being divided in the midle, and applied hot to the place affected, attracteth poyfon to it self, and healeth. And the same effect and virtue have other living creatures, as namely, Hens and Chickens, young Kids, Lambs and Pigs, if they be fet to in the beginning, immediately after the Cupping-glasses be removed, for being as yet hot and warm, they draw away the poyfon, and mitigate pain. But if neither any one for love or money can be found, that will or dare fuck out the venom, and that no Cupping-glas can be provided, then it is best that the patient do sup of Mutton, Veal, or Goose broth, and to provoke vomiting. Yet they that will more effectually and speedily give help, use to kill a Goat, and taking out the entrails, with the warm dung there-

in found, forthwith bind to the place.

The learned Physitian Mathiobus, in his Comment upon Dioscurides, faith; to avoid the danger that cometh by sucking out the venom, men now adays use to apply the fundiment of some Cook or Hen, or other Birds after the feathers are puld off, to the wounded place, and the first dy-

ing, to apply another in the same order, and so another and another, until the whole venomous matter be clean driven away: whereof one may be certainly assured, if the last Hen or Bird so ap-

plied, do not die. Avicen, the Arabian faith, that the Physitians of Egypt, in which Countrey there be infinite flour of venomous Beasts do haften to burn the part with fire, as the safest and surest remedy, when any this way is endangered: For fire not only expell eth poysons, but many other grievances. But the way how they used to burn with fire, was divers in these cases: For sometimes they used to fear the place with a hot Iron, and other whiles with a cord or match being fired, and sometimes scalding Oyl, and many other devises they had with burning medicaments, to finish this cure as faith Hieron.Mercurialis in his first book De Murb.Venenaetis writeth, and John Taz-

gault, Inflit. Chrurg. lib. 2. faith, that the wound must first be feared with a hot Iron (if the place can endure it) or else some cautick and vehement corrodung medicine must be used: for all such wounds are for the most part deadly, and do bring present death, if speedy remedy be not given: and therefore, according to Hippocrates counsel, to extream griefs, extream remedies must be applied; so that sometimes the safest wayes to take or cut off that member, which hath either been bitten or wounded.

Neither am I ignorant (faith Dioscurides) what the Egyptians do in these cases: For when they reap their Corn in Harvest time, they have ready at hand prepared, a pot with pitch in it, and a string or band hanging at it; for at that time of the year they are most afraid of Serpents, which then chiefly do hide themselves in dark holes, and caves of the earth, and under thick clots and turffs, for Egypt aboundeth with such venomous and poysonful creatures. When as therefore they have wounded either the foot or any other part, they that are present, do put the string into the pot of pitch, and binding the place, they cut it off with some instrument round in compass as the string is yed, after this done, they pour in of the pitch a sufficient quantity, then untying and loofing the band, they laftly anoynt it with Garlic and Onions.

A certain Countryman being bitten of a Serpent, perceived by and by his foot to swell, and by little and little the force of the poyfon to swell up higher, and nearer to the heart, the Calf of life: who being taught and instructed of an old woman, to bury his foot under the earth, and to cut a hole in two parts to apply to the wound, and to the Hen the wished him to lay a live Frog, who continually sucking the bloud from the Hens flesh, might by this means at length attract and draw all the poyfon into it self. So when he had held his foot a whole night covered and buried under the earth, and finding no abatement, but rather an increasement, at length by the advice and direction of a certain Noble Matron, he drank a good draught of Turcine and Hen's tempered in Ale, and so after a few hours fell on a great and continual vomiting, by which means he was perfectly freed from the pains of the upper parts of his body, his feet notwithstanding continuing in their former swelling: which was also taken clean away, only by drinking the milk of a black Goat, so much in quantity at a time as once Egge-shell would contain, his foot in the mean time being held or plunged in a sufficient quantity of the same milk. From which there issued and ran a foul stinking glutinous and finewly matter, and this he was admonished to do by a certain Priest. But yet afterwards by chance, waisting himself in a hot sunny day in a certain River, and
Of Serpents in General.

and sitting upon the bank, his feet hanging down into the water, and he falling fast asleep, (he knew not well how long time he so continued) at length awaking, he plainly perceived the water that was neer, on all sides to be filthy, tainted and polluted with much thinking matter, and as it were dreggy, refuse and feculency, and from that time forwards, he remained well and lusty, and as found as a Bell.

Another time a Maid being bitten of a Serpent, laid presenty upon the wound some fresh Cheefe made of the milk of a white Goat, and pouring or sprinkling her foot with the milk of the same Goat, as a defensive for that part, by this means restored to her former health, as a certain learned man testified in his Letters written to Geffier.

\textit{Vegetius} affirmeth, that if any living creature be bitten and wounded of venomous Beasts, the place which is hurt, must first of all be suffumigated with Hen's Egg-feels burnt, which first ought to be infused in Vinegar, with a little Harts-horn, or \textit{Galbanum}. After fomentation, the place must be scarified, and the bloud must be let out, or else the place must be feared with a hot Iron, so far as the venom extreemeth. And this care must be had, that the Cauteur be never applied and laid either above the joints, or finewy parts at any time, for the feines or joints being feared and burnt, there must of neccellity a continual weakness and debility follow. Therefore great diligence must be used, that neither a little above, nor a little beneath the nerves and joynets, we lay any Cauterizing medicine, yea, although neccellity biddeth us. But it is also requisite that every one thus wounded, go gently and easily provoke sweating with warm clothes cast upon him, and afterwards to walk up and down, and to take Barley-meal in his meat, with some leaves of the Afn-tree, and the white Vine added to it. And to the wound it is good to apply \textit{Attick} Honey, or Cummin heated and parched, and so mixed with old Wine. Some use to mix new Hogs dung and \textit{Attick} Honey tempered together with Wine, and so be warmed, to apply it as a Cataplasm, adding to it some urine of a Man.

I have said before, that young Chickens being dissetted or cut in pieces when they are warm, ought to be laid to the flinged part: and some there be that yeild this reaason why they should be good for this purpose, because (say they) there is a natural antipathy betwixt them, and venomous creatures. But this reason is reafonless, and I think rather, that Hen's or young Birds, being of a very hot nature and complexion, do easily concoct and digest notable poyson, and their flocks make consume both dry and hard feeds, which the strongest man living cannot do; which may easily also be proved by this argument, that many times by their ravening, they swallowing down, and little fiones, which they do easily diffuse, and their crops very soon discharge, without any offence to them at all. And therefore the spirits of an innavenous person, being helped and refrehed with the lively and strong natural heat of these fowls thus applied, and receiving and acquiring strength from the part wounded, and so healthily leaping out as it were, and quickly Sparkling forth, they do expel, shunt and draw out the poyson.

Now, after we have described the general method of curing this mischeulous evil, we will now descend to particular remedies, observing over this rule and order, that first I will speak of such means as are topical, or such as are outwardly applied; and next of such as be taken inwardly, and in both of them I will first describe compound, before I speak of simple medicaments. This one Lesson you must carry with you, that many remedies are prescribed and set down, which be not only good for the bitings of Serpents, but also for the bitings and flingings of all other venomous creatures, as Scorpions, Tarantulaes, Spiders, and the like. But yet, sith these do properly respect Serpents, I will in this place fet them down: beginning first (according to my promise) with such compounded medicines, as are applied outwardly for the help against the flingings of Serpents.

\textit{Thurisca Andromachi} applied Plaitier-wife, is notable for this purpose. So there be other vehement strong Plaitiers, whose vertue is to attract, expel, and disgust venom, of which are those which are made of Salt, Niter, Mustard-feed, and Rosemary-feeds, Dittany, or Dittander, and the root of Chamalexon: and this that followeth is of singular vertue. Take of the fum, froot, or fponge of Silver, one pound, Cerufe, and of the bell Turpentine, of either as much as of the former, old Oyl three pounds, Wax fix ounces, \textit{Ammoniacum Thymiama}, four ounces, and of \textit{Galbanum} as much: boil the Cerufe, the fum of Silver, and the Oyl fo long, that they will not cleave unto the hands, then melting the other ingredients, incorporate them all together, and use them when need is for any bitings, &c.

There is an Empaitier fathered upon one \textit{Epigenes}, and bearing his name: for this \textit{Epigenes} being in close Prison, and condemned to die, for revealing this Medicine had his Pardon granted him, and was freely discharged, because he therewith healed the daughter of the Emperor \textit{Marcellus}: for being formerly wounded by a Serpent in her breast, and all other Physicians defpairing of help, yet with this the she was recovered. It is also good for all new and old Ulcers, and for such as are either bitten by any kind of venomous creeping Worms and Serpents. Take of \textit{Squama erus}, (which is the scales and offal of Beals, blown from it in melting) of \textit{Ammoniacum}, \textit{Alcis brachia}, Verdigrisse, of \textit{Elium}, of Frankincense, \textit{Sal ammoniacum}, \textit{Arthesis arosanda}, of every one half an ounce, Turnep-feeds three scruples, of the root of Dragon-wort half an ounce, feed of Mugwort nine scruples, pure Wax five pound, of \textit{Colubrina} one pound, old Oyl three ounces, sharp Vinegar half a spoonful, Mustard-feed three scruples, \textit{Spadin} nine scruples, Stone-allum and \textit{Oppianus}, of either half an ounce: Infule the metalline ingredients for three days space in Vinegar,
Vinegar, and beat and powder them together, melting those that are to be melted, then sprinkle on those that are dry; and all of them being thoroughly wrought and made up, according to the form of an Emplaiter, use them where necessity requireth.

Antonius Emanuellus, a late Physitian, prescribeth an experiment, and (as he calleth it) a divine Oyl against any poyfon taken into the body, or the biting of any venomous Beasts and Serpents, whether it be received inwardly by drinking it down, or anointed outwardly upon the body, and this is it that followeth. Take of Oyl of Olives one pound, the flowers and the leaves of the herb called S. Johnswort bruised, boyl them for the space of three hours, and strain them, then boyl again other fresh flowers and leaves of the same herb and strain them hard, and do again the third time, then add to them of the roots of Gentian and Tormentil, of either one ounce, boyl and strain them as you did before, and reserve this Oyl for your use.

Andreas Matthioli in his Commentaries upon Disforides, doth exceedingly commend Oyl of Scorpions, because being anointed upon the pulse outwardly, it is (as he affirmeth) a singular remedy, not only against any poyfon taken inwardly into the body by the mouth, but for the bites and stings of any venomous creature whatsoever. The way to prepare and make it, he describeth at large, in his Preface upon the first Book of Disforides, which I think needles here to describe to avoid tediousness; therefore if any one be desirous to know the composition of it, let him read Matthioli in the place before cited. Unquenched Lime mixed with Hony and Oyl, and applied to the place the thickness of a corset, is good against the wounds that come by any venomous Beasts biting.

Now I think it meet to set down those simple medicaments which are used outwardly, to be either by laying on, or by anointing, against the gling and venomous biting of Serpents. It is best first to foment the fore part of the wound with hot Vinegar, wherein Catamin hath been boyled, and in a lead of Vinegar, one may take Salt-water, or Southernwood, Maidenhair and Garlic, either in drink, meat, or to be used as an Ointment. The root of Aram, and Althoerge, and the leaves of the true Daffadil, and Oyl of Balm, is most effectual: also Bdellium, and the root either of the white or black Beet, is good against the bites of Serpents.

Betony, Coleworts, especially the wilde Coleworts, Calamin, the leaves of the wilde Fig-tree, Century, Onions, Germander, Chamaleon, the herb called Fleabane, wilde Carrers, Rocket, Heath, Fennel, Figs, Winter Cherries, Enula Campa, Barly-meal, the Day-lilly, Hytop, the Flower-deluce-root, Horehound, Balm, Water-cresses, and Sage, Origan, Plantine, Leeks, Turneps, Madder, Rue, Verven, Mulhard-feed, Siaious, and Saint Johnswort, all these plants are greatly praised among the Writers of Phyfic, for the mitches above said.

Pliny is of opinion, that the bowels or entrails of Serpents themselves, being applied, will surely cure the wounds of all other Serpents, although they seem incurable. A live Serpent being caught, if it be bruised, beaten and stamped in water, and the hurt place fomented therewith, will assuage help and do much ease.

Quae nocet Serpens, furtur eaptit illuniapiV
Vulneribus jungis, sanat que suacid aptus;
Ui Larissae curatvs Telephus hosla. Qua Serenvs.

Which may be thus thus Englished;

What Serpent burneth, Men say by long experience,
His head applyed doth cure: for where the wound,
The help is also made, as in Telephus senfe,
Harm'd by Larillus speqr, by it was cured found.

And Guli. Varignana faith, divide or cut a Serpent, and lay it upon the place, and it will mitigate the anguish and pain. The seed of Thropsi and of Tithimal (which is a kind of spurge) is greatly used for this; Tithimalis astra, vulmar que utaperungat. Some befides these, do put the root of black Hellebore into the wound, because it draweth out the poyfon, as I by mine own experience can tell thee, faith Matthioli.

There be also sundry Antidotes and Preparatives which are taken inwardly, that are very effectual against the bites of Serpents and venomous beasts, as namely that, which is called Thervica Andromachi, or Mithridate, and the like compositions. Galien in his Book De Tervica ad Pummonem pretterreth Thervica Andromachi before all other medicines either simple or compound, for virulent wounds; because it perormeth that effect for which it is miftried. For it was never as yet heard, that ever any one perished of any venomous hurt or biting, who without any delay forthwith drank this medicine: and if any man had taken it before he received any such dangerous hurt, if he were fed upon and assailed by any poyfous creature, it hard not lightly been heard that he hath dyed of the fame. There be many Antidotes described by the Anciennes, which they set down to be admirable for these purposes: As for example, that which Avicen termeth Thervica mirabilis, whose composition is as followeth. Take of Opium and of Myriste, of either of them a dram, Pepper one dram and a half, the root of Arholotheca longa and rotadi, of each of them three drams, Wine two drams; make them up with Hony and Rocket water, so much as is sufficient for an Elecuary: the quantity to give, is four scruples, relented in some fit and convenient decoction.
Of Serpents in General.

King Antiochus, furnamed Magnus, had a kinde of Zopyrus which he used against all poisons, which is described by Pliny in his 20 Book and last chapter in this wise. Take of wide Thyme, Opponanx, and the herb called Gromel, of each a like much, two drams; Trifolium one dram, of the seeds of Dill, Fennel, Smallage, Anise, and Anemon, of every one alike fix drams, of the meal of Orosom twelve drams; all these being powned and finely feared, melt with Wine a sufficient quantity, be made into Trochiches, whereby every one mult weigh one dram, give thereof one dram at a time in a draught of Wine. There is another Antidote and prefervative against any poison, described by Paulus Argimen- nates, much like unto this, which is thus: Take of Bryony, Opponanx, of the root of Iris Ilicer, and of the root of Rosemary, and of Ginger, of each of these three drams, of Anisopodaria five drams, of the bell Turpentine, of wide Rue, of each three drams, of the meal of Orosom two drams; make them into Trochiches with Wine, every weighing one scripule and a half, or two scripules to be given in Wine.

Galen in his second Book De antidotis, chapter 49, discourseth of a certain Theriacal medimento, called Zopyra antidotis, (to taking the name of one Zopyra) which was notable against all poisons, and bitings of venomous creeping creatures. This Zopyra in his letters written unto Mithridates, solicited him very much, that he would make some experiment of his Antidote; which as he put him in mind he might easily do, by causing any one that was already condemned to die, to drink down some poyfon aforehand, and then to take the Antidote: or else to receive the Antidote, and after that to drink some poyfon. And put him in remembrance, to try it also in those that were wounded in any manner of way by Serpents, or thofe that were hurt by Arrows, or Darts, orpoisoned by any destroying venom: So all things being dispatched according to his promition, the Man (notwithstanding the strength of the poyfon) was preserved safe and found by this alepharmacetical medicin of Zopyra.

Matthiæus in his Preface upon the fifth Book of Dioscorides, entretaining of Antidotae and prefervatives from poyfon, faith; that at length, after long study and travell he had found out an Antidote whose vertue was wonderful and worthy admiration; and it is a certain quinlence extracted from many simples, which he fetiteth down in the fame place. He faith it is of such force and efficacie, that the quantity of four drams being taken either by it self, or with the like quantity of some sweet fenting Wine, or else with some distilled water, which hath some natural property to stregthen the heart; if any perfon hath either been wounded or strucken of any venomous living thing, and that the patients life be therewith in danger, so that he hath loft the use of his tongue, feeing, and for the most part all his other senses, yet for all that, by taking this his Quinlence, it will recover and raife him as it were out of a dead sleep, from ficknefs to health, to the great astonishment and admiration of the fadors by. They that defire to know the compofition of this rare prefervative, let them read it in the Author himfelf, for it is too long and tedious to describe it at this time.

There be besides these compounds, many fimple medicines, which being taken inwardly, do per- form the fame effect, as namely the Thiffle, whereupon Serenus hath these verities following:

Cardam & nordum detis fumonibus optum.
Ex illo radix repido potatis in amni.
That is to fay;
The root of Thofl young, for Fullers yet unfit.
Drick in warm water, venom out doth fitte.

That Thiffle which Qu. Serenus here underfandeth, is properly that plant which of the Greke is called Stolonys. Yet it is taken sometymes for other prickly plants of the fame kinde, as for both the Chaemalons, Dipace, or Labrun Venenis, Spina aika, Erygium, and fome other. But Dioscorides attributeth the cheefe vertue againft poifons, to the Thiffle called Chaemalena albus, and to the Sea-thiffle called Erygium marinum, which fame call Sea-hul, or Halver; for in his third book and nine chapfer,entretaining of Chaemalena albus, be faith thus; The root of it taken with Wine inwardly, is as good as Treacle againft any venom: and in the 21 chapter of the fame Book, Erygium, is (faith he) taken to good purpose with fome Wine, againft the biting of venomous creatures, or any poyfon inwardly taken. And the fame Serenus adscribeth to the fame vertue to the Harts curd or rennet, as followeth.

Cervino ex satu committae coagula vino
Sumantur, queres membris agit atra venena.

In English thus;
Wine mixt with Rennet taken from a Hart,
So drunk, doth venom from the members part.

He meaneth a young Hart, being killed in the Dams belly, as Pliny affirmeth also the fame in his 8. Book and 30. chapter in these words; The cheefe remedy againft the biting of Serpents, is made of the Coagulum of a Fawn, kill'd and cut out of the belly of his Dam, Coagulum, is nothing else but that part in the belly which is used to thicken the Milk.
Of Serpents in General.

Proderit & caulem cum vino baurire (ambics).

Which may be Englished thus; In drink, the powder of an Elder-stalk,
Gainst poison prostheth, as some men talk.

That vertue which Serenus here giveth to the stalk of Dwarf Elder, (for that is meant in this place) the same effect Diocletianus attributed to the root in his fourth Book, and Pliny to the leaves. The herb called Betony is excellent against these foreaid affects, and by good reason, for the great-est part of poisons do kill through their excess of coldness, and therefore to overcome and refit them, such means are necessary, by which natural and lively heat is stirred up and quickned, and so the poison hindered from growing thick together, and from coagulation.

Again, all men do agree, that those medicines are profitable which do extenuate, as all those do which have a property to provoke urine, and Betony is of this quality, and therefore being taken with Wine, it must needs do good in venous bitings, and that not only in the bitings of Men and Apes, but in Serpents also. Radifh also hath the same quality, being taken with Vinegar and Water boiled together, or else outwardly applied, as Serenus affirmeth.

Sive homoeo, sec familis turpifima beftia nobis
Vulnora dente dedit, viam simul intimi atrum,
Vetaniam ex dolo prodest affirmere Bactho. In English thus;
If Man, or Ape (a filthy beast most like to us)
By biting wound, and therein poison thrift,
Then Betony in hard Wine steeped long,

There be certain herbs and simples, as wilde Lettice, Vervin, the root called Rhubarb, Agrick, Oyl of Oliander, and the leaves of the same, the seeds of Petony, with a great number a little before described, that being taken either inwardly or outwardly in juice or powder, do cure poisons, yes though it be received by hurt from envenomed arrows, shafts, or other warlike engines and weapons: for the Arabians, Indians, the Greeks (now termed French-men) and Scythians, were wont to pouyon their arrows, as Pau lin Orosius in his third Book telesinth of the Indians, where he writeth, how Alexander the Great, in his conquering and winning of a certain City, under the government of King Ambros, took the greatest part there of his whole Army with envenomed darts and quarrels. And Celso in his fifth Book faith, that the ancient Galles were wont to anoint their arrows with the juice of white Hellebore, with which they did great mischief. Pliny affirmeth the fame to be used of the Scythian Nation. The Scythians (faith he) do anoint their Arrow-heads with the corrupt, poisonous, and filthy stained dreggy bloud of Vipers, and with Mans bloud mixed together: so that the wound seemeth to be incurable. And to this alludeth Quintus Serenus.

Cuspidat non quisquam, longa arcusque cade furris,
Fumigne mungaudi, vulnora nec selle jagitae
Quam cito Vipero potis est affigiter istus:

dare apeam diemamus opem, ficcusque manente.

Which may be thus Englished;

There is no Man with Spear or Lance-Point,
Sharp edge of Sword, or swift Arrows might,
To kill so soon, as Vipers force doth dint:

Then fit is the aid and means that it acquire.

There is a certain kinde of people to whom it is naturally given, either by touching or fucking, to cure the woundinge of venomous Serpents, called Pylli, (a people of Lydias) and Maris, people of Italy, bordering upon the Sammites, and Epi-clustania, and those that were called by the Ancient Writers Obiogens, which dwelt about Hellespont, as both Pliny, Aelius, and Euseus Sylvius do witness.

Cellus in his tenth Book of the history which he wrote of Aegaeae is the Saracen faith, that if any man were bitten of a Serpent, if either a Lybien by birth, or any Pyllas, whose body was accounted venom to Serpents, was either purposely sent for, or came that way by chance, and saw the wound but indifferently, and not so very tormenting the Patient, that if he did lay but a little of his spittle upon the biting or stroke, that presently the aching and pain would be mitigated. But if he found the sick Patient in great and intolerable anguish and pain, he took this course in his curation, that first he would suck and draw up into his mouth a great deal of water, and first rafe and wash his own mouth therewith, and after this, pouring it all out of his own mouth into a cup, he would give it to the poor wounded person to sup off. Lastly, if the malignity and strength of the venom had crept and spread it self very far and deep into the body, so that there was danger of death, then would he strip himself stark naked, and so lie and spread his body upon
Of Serpents in General.

upon the naked body of the sick person, and so by this way of touching, break the malice and quality of the poisons, and give perfect cure to the man. For more confirmation hereof, Nicander Colophonius, is sufficient authority, whose verses I will here describe.

Andreus Libycus Pyllos, quos afferat Syrtes Serpentumque ferax patria alit populus, Non cura infilvium dirae, marifque venenum

Which is in English thus:

The people Pyllos bred in Lybia Land, Neer Syrtes, where all Serpents do abound, Are never stung not bitten by that band

Some of the Greeks have left in writing that the Idolatrous Priests and Prelates of the God Vulcans, that dwelt in Ile Lemus, had a special vertue given them to cure those who were wounded by Serpents: whereupon it is said, that Philostratus being wounded by a Serpent before the Altar of Apollo, went thither to be remedied of his hurt. Cornelius Celsus saith flatly, that the people called Pyllos had no such peculiar gift in healing them that were hurt of Serpents, either by fucking or touching the place, but being boldly adventurous, had presumed thereby to attempt and do that, which others of less courage had no stomach to do: for whatsoever dutif so confident are, as to follow their example, should himself be out of danger, and assure the other safe and free from fear of further hurt.

Galen in his book De Theriac ad Pifanem, manifestly saitheth, that the Marsi, who lived in his days, had no such special quality against the poisons of Serpents, but that with their crafty dealing, and knavish tricks, they beguiled the common people. For faith, those Juglers and Deceivers do never hunt Vipers at any convenient time, but long after the prime of the year and Spring, wherein they call their skins, when as they are weak, and have left their strength, and are very faint: then do they take them, and do by long use and continuance, teach them, and inure themselves one to another, and bring it to, so that they will feed them with strange and unaccustomed meats to their nature; yea they will permit them to taft of flesh; and constrain them to be continually gnawing and biting of the fame, that by their so labouring and thriving; their poisons may by little and little be spent, and purged out of their bellies. Besides all this, they give them a kind of bread made of milk and flour, that by this means the holes in their teeth may be stopped: and so by this laborious course of dieting them, they bring the matter so about, that their bitings are very weak, and do small annoyance to any that they strike at. So that the feers and lookers on, account it a thing exceeding common reason and nature, and blaze it abroad for a miracle.

Matthiolius also, a Physician of late days, agreeeth with him in this point, affirming expressly, that these kinds of crampetres and crafty fetches are much put in practice in these times, by such bold and impudent Quack fathers, Mountebanks, and coulumens of plain Country people, who dare face it out, lie, faign and cog, that they are descended from the race and lineage of Saint Paul, wherein they fwear themselves notorious liars, &c. Thus far Matthiolius.

Serpents do sometimes creep into the mouths of them that are fast asleep, wherein a certain Poet saith:

Non mihi tune libet darsa jactisse per berbam.

Which may be Englished thus:

There would I not upon the gras,
Lye on my back where Serpents pas.

For if a man sleep open mouthed, they filily convey themselves in, and winde and roll them round in compasse, so taking up their lodging in the stomache, and then is the poor wretched man miserably and pitifully tormented; his life is more bitter then death, neither feel he any releafe or mitigation of his pain, unless he by feeding this his unwelcome guest in his gueft-chamber, with good flore of milk, and other such meats as Serpents delight of. The only remedy against this mischief, is to eat good flore of Garlick, as Erafmus in his Dial. De Amicitia saith. Cardan saith, how that it was reported for a certain, that a Viper entering into a Mans mouth being asleep and gaping with his mouth, the venomous Worm was expelled only with burning of Leather, and so receiving the flaming fume at his mouth, the Viper not enduring it, he escaped with life. But of this more in our discourse of the Viper.

A certain man called Cifca, being very devout in the service, and much addicted to the worship of the God called Serap, being treacherously wound in and intrapped, by the crafty wilnes of a certain woman, which first he loved and afterward married, when by her means he had eaten some Serpents egges, he was miferably vexed, and torn and rent with diuifit and torment through all his body, so that he seemed to be in great hazard of present death. Whereupon, forthwith repairing and praying heartily to this his God, for his help and deliverance, he received answer, that he must go and buy a live Lamprey, and thrust his hand into the vegetable or place where it was kept and preferred, which he forthwith did, and the Lamprey caught fast hold on his hand, biting hardly, and holding fast by the teeth; and at length, when he was pulled from her hold, the skine and grievous torment of his body was plucked away, and he freely delivered from that threatening danger. Thus far Aelianus.
The Conclusion of this General Discourse of SERPENTS.

Having thus discourse of the medicinal qualities in Serpents, and the remedies which Almighty God in nature hath provided against their venom, now for a conclusion, I will add some other natural uses of them, and shew up all in Morals, and in sundry ways to take them.

There were certain Amazons, as Pictius note, that in their warlike preparations and Arms, did use the skins of Serpents. And to the intent that this may not seem strange, the Etrusks did eat Serpents and Lizards, for they lived in Caves in Head of Houses, and their voyce was not a significant voyce, but a kind of shrieking, like gnashing. And for these causes, Serpents are very much afraid of any one of this Nation. Likewise certain of the Cynolists were called Ophiophagi, that is, Eaters of Serpents; and one part of the people of Arabia eat Snakes. But in India, Ethiopia, and an Island in the Ocean, found out by Jambolan, there are Serpents which are harmless, and their flesh very sweet and pleasant to be eaten: So are there in Maximian, a Province of Asia. In Manaz in the upper India, and Carasia, they fell the flesh of Serpents in open Markets. These Serpents are called Cuane, and the common people are forbidden to eat them, because they are very delicate, even as Pheasants, Partridges and Peacocks are in France. Yet is there but one way to dres them, which is, to roast them in Lard, and so to eat them. For first they bewail them, then wash them and fold them up together round, putting them into a pot no bigger then to receive their quantity; upon them they call Pepper with water, and so eat them upon wood and coals that will not smoke.

With this Lard there is made a broth sweeter then any Nectar, which they use in many banquets of great account.

But for the taking of Serpents, I will yet add one or two more experiments, wherein the Ancients revenged themselves upon these irreconcilable enemies of Mankind. They did use to set in to the earth a deep pot, whereunto all venomous creatures would gather and hide themselves, then came they suddenly and stopped the mouth of this vessel, whereby they inclosed all that were taken, and, making a great fire, cast the said pot of venomous Serpents into the same, which consumed them all. Otherwise they took a living Serpent, and digged in the earth a deep Well or pit so deep as nothing at the bottom could climb up to the top thereof, into this pit they would cast the Serpent, and with her a brand of fire, by means whereof the enclosed Serpent would fall a hissing for her life, at the hearing whereof, her fellows of the same kind, were thereby easily invited to come at her call to give her relief. (As we have th ewed elsewhere) who finding the noise in the bottom of the pit, do slide down of their own accord, whereby they likewise intrap themselves in the same pit of destruction.

But the Juglers or Quick-falvers take them by another course: for they have a taffe flat at one end like a pair of tongs, those stand open by a pin, now when they see a Serpent, Viper, Adder or Snake, they set them upon the neck near the head, and pulling forth the pin, the Serpent is inevitably taken, and by them looled into a prepared vessel, in which they keep her, and give her meat.

It is reported, that if a Serpent be stricken with a Reed, the banded thill at the first blow, as if she were altonished, and so gathereth herself together; but if she be so stricken the second or third time, as one delivered from her astonishment and fear, she recolseth her wits, and strength, and flideth away. The like observation unto this, is that of the Ancients, that a Serpent cannot be drawn out of her den by the right hand, but by the left: for they lay, if one lay on her tail by the right hand, she will either slide farther into the earth from him, or else suffer herself to be pulled in pieces, never turning again, and therefore saith mine Author, Non creditur tantos, fed elatiur fugiens, aut corte abruptar, the yeeldeth not to him that draweth her, but flideth away, flying from him, or else suffereth herself to be pulled in pieces in the combate.

The sundry Hieroglyphicks, statues, figures, Images, and other moral observations about Serpents, are next here to be expressed, which the Ancients in their Temples, Shields, Banners, Theatres, and publice places had erected for their honours and dignity. And first of all in the Temple of Deiphor, near the Oracle, there was placed the Serpent which provoked Apollo to fight with him, wherein it was by him slain. And the Hermopolitanus did referre the Image of Typhon, in a Sea-horse, whereupon for fighting a Hawk and a Serpent: by the Sea-horse they signified the Monster Typhon, by the other beasts, as namely the Hawk and the Serpent, how by this principality and government, which he had gotten by violence, he troubled both himself and others.

Hercules had in his shield certain Serpents heads, pictured with these verses.

Bis fam hic video, fridentibus orefa flamia,
Colla venenata velut maculae draconum.

Tom magis offus, forantia guttare vixim,
Quam magis Alcides effeis jarque pugnat.

Which may be Englished thus:

Of Draught heads twice fix me mails thou fixe,
Raging amongst the flames with posioned foated face:
Casting most venom forth when they enraged be,
As when Alcides saw his blood disfis alope.

And
Of the Adder.

And so Virgil of Aventinus.

Clypeus insignis parentem
Centum anguis, cintamque gerit Serpentibus Hydra,
That is to say,
Hit shield an hundred Snakes, his Fathers crest,
An Hydra in their compass is enfeft.

Ofus which reigned among the Tyrrhenians, gave in his Standard and Coat of Arms a Serpent. Also, the people Ofii (from whom it may be he was sprung and derived) lived in Campania in Italy, as we have shewed already.

In ancient time we read, that when hoftility began to be compounded, they had Heralds and Embassadors of Peace, which they called Caduceators, which carried upright a certain Rod or Staff called Caduceus; this Rod was very straight, and at the either side were artificially joyuned two Serpents figures, winding and crooking into each other as the manner of Serpents is. This Rod was so faced, that it was a great offence to violate or offer any injury unto it: for by the straight Rod, was signified Perfect and Upright Reafon or Understanding; by the two crooked Serpents at either side thereof, was figured the two Armig;es invading and affailing the Upright Understanding, yet not prevailing: For this paffed through and betwixt them without harm, by truce and entreaties of Peace. This Rod was therefore consecrated to Mercury, the tails of the Serpents reaching down to the handle or half of the Rod, where they were adorned with winged wings. Aciatus made these Emblematical verses upon the Caduceus.

Anxibus implicitis, geminus Caduceus alis,
Inter Amathos cornua retus eedit.
Pellenll se mente viri, sancepe peritos
Judicat, at raram copia multa bect.

In English thus:
Twixt Ceris borns the Rod of Peace doth stand
Upright with winding Snakes, and double-winged tails,
To shew that minde and tongue with Learning's brand,
Are blest with plenty in all worldly soils.

But having thus entred into the Hieroglyphical Emblems, if I should say so much as I finde made ready, and squired for the architecture of this discourse, I might lose my self in a voluminous world of matter, therefore I will but give the Reader a tafe hereof. By the Serpent in holy Writ, are many obserbative figurations; and first, that the Devil himself, which is Malus Deus mundi, an evil God of an evil World, should be teard and express'd by a Serpent. The cause of which, is, in lingua materna, the continual and never ceasing motion of a Serpents tongue: and so the continual and ever-working perswations of Diabolical tentations, and a true mixture and limb of this old Serpent, speakes the other wise with his tongue, then he thinketh with his heart. Therefore it is also said, that a natural Serpent hath a cloven or twysted tongue.

Clementy is, truly, that Serpents do also signifie Men given over to sins, and fraudulent impostures or malices, Omnis hybridos bo ophidae, Iudas agris bo pleonctico, Ias opis bo aputans, that is, There is an imbolent and an interperate Afs, there is a raging Wolf which is covetous, and there is a Serpent which is an Impofor and fraudulent. The same learned Man saith, that Riches are like to a Serpent: For as when an ignorant Man thinketh to take a Serpent without harm by the tail, she turneth back again and biteth him; but if he take her by the neck, she cannot execute any part of her malice: even so when a Wife Man hath the managing of riches, by vertue of his discretion he doth charmeth them, that there is not in them any harm at all: But the foolish Man is mortally flung by his imprudent possiflion and dispensation of them.

Of the A D D E R.

I t falleth out in the particular Discourse of Serpents, that I express the most known Serpent to us in England, in the first place, according to alphabetical order, that is, the Adder. For although I am not ignorant, that there be which write it Nadder, of Natris, which signifieth a water Snake, yet I cannot confent unto them fo readily, as to depart from the more vulgar received word.
of a whole Nation, because of some likelihood in the derivation from the Latine: For whereas Nadder may seem not improperly to be derived of Natix, and Natix of Natando, that is, swimming in the water, the first conjectural derivation is destroyed by the latter, because this Serpent whereof we now treat, haunteth not the waters, except for drink in her time of thirst, and therefore I mil-like the writing of Nadder for Adder: and rather take that word to signify a Land Snake. And yet it there be any good argument of derivation in English from Latine, I would not have the Reader think, but that the Adder may as well be derived a terrae, from the earth which it uiteth, or of ater, black, which is the colour that it beareth, or from ateros, fierce, (for there is no Serpent of that quantity, more fierce, angry, or hurtful,) as well as Nadder from Qutix.

The Latins do express this kind of Serpent by the word Coluber, whereof some give fundry reasons either because colis umbra, it haunteth and liveth in the hedged and shadowy places, or else a libriscus etaldus, of his winding pac or path. Gelenius deriveth it of the Greek word Koloboura, which signifies wanting a tail, because the Snakes which are about houses, are sometimes found without tails, which have been bitrook off by men: but this opinion hath no reason for the Adder, which is not domestical. Indeed I confess that Pliny ueth Coluber for a general word for Serpents, when he faith Coluber in aqua vivissim, which deceived Theophrastus and Grecians, applying it to the water Serpent. And so Erasmus and others, tranlate Opibus coluber, that is, the general Greek word for a Serpent, an Adder. There is also Colubra, as in Lucilius, Uran, & Nomius Marcellinus appeareth; whereunto agree Horace, Virgil, and Cornelius Celsus. The Italian call this Serpent La Serpiente, Scasufr, Calubra, la Scouzzana, la Scouzana. The French, Colemure; the Spaniards, Calubra, and at this day the Greeks, Naphilus, and thus much for the name; except I may add these verbes of Virgil in his Georgics.

Aat tellt ofssetum Coluber succedere & umbra
Pefis acerba boun, prorue argerfere virus
Feuit hommum. Cape jaxa marn, cape robota paflor.
Tollemتمر minors, & fibilica cotta tumentem

Dejicte, jamque fuga tumidum caput addibit alis
Cum medit inux, extremque aqunia caudae
Solvuntur, turdofae rabit simus ultimus orbes.

In English thus;

Or when the Adder suling bone or shade
Bred in the earth, the bane of Shep and Neat,
Then stepheade take both stone in hand and blade,
To quaff hit swelling neck and hissing threat.

This is usual to call a Water-adder, a House-adder, a Land-snake, and such other, but catchrelli-
cally confounding one kind with another. And thus much for the name of this Serpent. The parts differ not from the general description before recited, it is long like an Eeie, and hath many Epithetis, as umbres calberis, green Adders, long, rough, venomous, divers coloured, sweling, fliding, winding, bloew, terrible, secret, hurtful, Medusam, Cyniphian, Gorgonian Lybifine, biting, spotted, wreathing, black bending, heavy, scaly, and divers such other, as the Grammarians have observed. But concerning the colour hereof, it is most commonly black on the back, sometimes greenith and yellowith. The scales of it are more sharp then of the Snake, and therefore the Egyptians were wont to say of the Thesburan Adders, that they had a certain appearance of horns upon them, as we shall shew more at large in the story of Cerdips, or the horned Serpent.

Vitibus speaking of the great worms which are bred in Mens bellies, both call them Coxas Colubras, blinde Adders; but otherwise, the Adder which is proper to the earth, is not blinde, but seeth as sharply as any other Serpent either by day or by night. They are hotter then the Snakes, and therefore live more in the shadowes, and liye for the most part round, folded up together like a rope, as the Poet noteth saying;

Hirtus & at coluber, nodosare gramine tellus
Ventre cubat flore, semper collectus in orbem.

In English thus;

At the rough Adder in knotty grafs is covered,
Lyth on her belly, and round in cirle gathered.

They are a crafty and subtill venomous Beast, biting suddenly them that pass by them, whereupon Jacob said that his son Dan should be Coluber in vis, an Adder biting the Horfe-heels. When the hath bitten, with her forked or twitted tongue the infufeth her poiyon, whereof and the remedy serving thereunto, there is this Hilvary in Ambrosius Paragas. At what time (faith he) Charles the ninth lay at Moines, I and Doctor Le Feure the Kings Phyffian, were sent for to cure a certain Cook of the Lady Gaftropersues, who was bitten by an Adder, as he was gathering wilde Hops in a hedge. The Cook affoon as he was bitten in the hand, fucked the wound with his mouth, thinking thereby to mitigate the pain, and draw out againe the poiyon; but affoon as his tongue touched the wound, presently it fo swelled that he could not speak: and besides, his arm or shoulder swelled into a high bunch or tumour, which did put him unto painful torments, infomuch that he Founted twice in our prefence; his face and colour changed as though he would prefently die: Whereat we all depaired to cure him, yet did not forfake him, nor left to try
some means to ease his torments. Then we washed his tongue with Triacle, mixed with an equal proportion of white Wine and Aqua vitae; then also I cau'd the arm to be bandi'd all over, and lanced the place where the Adder had bitten him, out of which flowed abundance of corrupt matter blood. Then we washed the wound with Triacle and Mithridate, in Aqua vitae, so we cau'd him to be laid into warm bed, there to sweat and command'd to keep him awake, which was done accordingly; and so the next day the swelling was abated, and the malignant symptoms were all evacuated: so we gave order to keep the wound or lanced place open, and afterward the Cook began to be well again. This one example in hea'd of many, I thought good to insert into this place, that hereby the general cure may be learned and followed.

It agreeth with all other Serpents in the changing or putting off the skin; for after that by falling it hath made his flesh low and abated, then by hiding through a narrow passage, whereas of Vogi thus writeth.

Qualis ubi in lucem caluber, melo graminis postumus,
Labrica comoda subiete pedere terego
Frigida sub terra, tumidum quern brama tegens:

Which may be Englished thus,

Even as the Adder in the Spring is fed and lean,
Leaves her winding limbs, holding up her breath,
When Winter cold and white her earth made snow,

S. Jerome saith, that when the Adder is thirsty and goeth to drink, the first of all at the water sidecasteth up her venom left that by drinking it defendeth into her bowels, and so destroyeth her soul; but after that she hath drunk, she licketh it up again; even as a Souldier re-armed after he was disarmed. The voyage of this Serpent is higling, although it be very feldom heard. And it is said, that when Caesar undertook to wage war with Cyren, the Suburbs of Saratii were all filled with Adders, which were devour'd afterward by Horfes in the passages. Whereat the King and people were not a little moved: But the Priests, after consultation with the Oracle, told them that it signified, how strangers should devour the people of that City; because that Adders were bred in those coasts; therefore they took them to signify natural Inhabitants, and because Horfes came from other Countries, therefore strangers, (as Cyren and his Soldiers) should be thereby signified. And this is to be noted, that all the enemies of this Serpent, are the fame that are common to other, and the Hart above all other beasts of the earth. Yet this Serpent (sai'th S. Ambrof) will killa Lion and run away from a Hart.

The Medicines arising out of this Beast, are briefly these; The water wherein an Adder is Pliny. preserved alive, is a remedy against the poyson of a Toad: Alfo Adders or Vipers included in a pot Silvius, with the scrapings of Vines, and therein burnt to ashes, do help the Wens or Kings-evil. And Pliny also affirmeth, that if a Man which hunteth Crocodiles, bear about him any part of the fat of an Adder, or the gall mixed with the herb Pomamigitus, he cannot be hurt by that Beaffe.

Serpents and Adders, especially deal Adders, signify unrepentant wicked men, and also discord as Virgil, the Poet describeth it, when Acest sent a Serpent, Snake or Adder, to move contention in the family of Amata. Libro 7. Ennida. And thus much for the Adder.

Of the AMMODTYE.

His Serpent I call after the Greek name, Ammodytes, an Ammodyte. It is also found to be called Ammodyte, and Centrieis, or rather Centria, or Centriiis, because of the hardenes of their tails, which are also cloven on the upper side. The Italians call it Apide del carne, because it hath upon the upper chapp a hard Wart like a horn. The head of this Serpent is longer and greater then a Vipers head, and her chaps wider; besides the late express'd difference upon the upper lip: and yet it may well be tearmed a kinde of Viper. It is Invennis is a, a fierce wide Beaffe, in length not above a cubit, having divers black spots upon the skin, and certain appearances of skakes or small lines upon the back. The colour of the other parts is ever like the hind wherein it keepeth and maketh abode, according to these verses of Lucan.

Concolor exquisitis, atque indiscretus arnis
Ammodytes.
In English thus;

The Ammodytes, indiscreet on the Land,
Dost hold the colour of the burning hind.

The Countries most of all annoyed with these Serpents, are Lybia, Italy, and Libya, especially about Gortinium, and the Mountains of Lampidi. Their harms are not inferior to the flinging and poyson of Aips, for Matthiibus writeth, that he hath known some to die thereof within three hours after the wound received. And if they do not die within short time, then doth the blood issue forth in abundant manner out of the hurt, and the wound swelleth. Afterward, all is turned into

Hh b 3

matter,
matter, and then followeth durlnes in the head, and diuration in the minde; they live long which endure it three days; and it was never known that any lived above seven days: this also being observed, that those that be hurt by a female do die sooner. For together with their biting, they influe a vehement pain, which caueth swelling, and the fore to run.

I finde the cure hereof in Aris to be thus, firft of all Triacle must be given to the sick person to drink, and also laid upon the wound, allo drawing or attractive Plaisters, and such Poultelles which are fit for running Ulcers. But firft before the Plaisters, firifie all the places about the hurt, and binde the upper parts hard, then launce the fore a little with a Pen-knife, and let him drink sweet water with Rungwort, Gourds, Caftoreum, and Gaffia. Arisven prefcribeth in the cure of these Serpents venom Castoreum, Cinamon, the root of Centory, of each two ounces with Wine, and the root of long Hartwoode, of Afpes, the juice of the root Gentian. And for emplaister, Homy rod and dryed, and so pounded, the roots of Pomgranates, and Centory, the seed of Flax, and Lettuces, and wilde Rue: And fo I conclude with Doctor Gefner, Ferussin ab Ammoniye festinet ad remedium, sine quo nemo affurgere, He which is hurt by an Ammoniye, let him make haill for a remedy, without which never Man escaped death.

of the ARGES and ARGOLÆ.

Here is mention made in Galen and Hippocrates, of a Serpent called Arges: Now Arges signifieth in Greek white, swift, idle, ill mannered.: of this Serpent Hippocrates telleth this story. There was a youth he a young man drunk, which lay asleep upon his back in a certain house, gaping: Into this Mans mouth entered a Serpent called Arges, the young Man perceiving it in his mouth, strived to speak and cry, but could not, and so suddenly gnashing his teeth, devoured and swallowed down the Serpent. After which he was put to intolerable pains, his hands stratching and quivering like as a Mans is hanged or strangled, and in this fort he call himself up and down and dyed. It seemeth therefore that this Serpent hath his name from the sudden destructive he bringeth to the creatures it smitteth, and therefore in ancient time we read that Mercury was called Argiphan, for killing of Serpents.

The Argile are only mentioned by Suidas, for he faith, that Alexander brought them to Alexandria from Arges, and call them into the River to expel and devour the Apses: where they continued a long time, till the bones of the Prophet Jeremy were brought out of Egypt unto Alexandria, which flew them, (as the same Author writeth:) And thus much of these two kindes of Serpens.

of ASPES.

In Hebrew as appeareth, Deut. 32. the Afp is called Pethos, in Psal. 58. Akicub, in Isa. 59. & 62. Ziphren, an Afp or a Cockatrice, worfe then a Serpent. The Arabians, Phoso, and Hasos; the Greeks, Apsi; the Romans, Apsi, and Apsides: the Spaniards, Bivora; the French, Un Apsi, the Germans, Ein Schlange, and the Latines, Apsi. About the notation or derivation of this word, there is some difference among Writers. Arystophanes deriveth it from Alpha, an intensive Particle, and Spiza, which signifieth to extend; either by reason of his sharp shrill hissing, or for the length of his body. Others derive Apsi from Hios, which signifieth venom or poyson, and therefore saith the Scripture; The poyson of Apsi, because that is a predominant poyson. The Latines call it Apsi, quod venenum apsperit mortis, because it sprinkleth abroad his poyson when it biteth. Besides we read of Apsi a Buckler, an Island in the Lybian Sea, a Mountain in Africk, and there is a fashion of camping Souldiers in the field called Apsides.
Of the Asp.

The Epithets declaring the nature of this pestiferous Serpent, are  

"Laskreta, rejoicing in poisons,  

Eliskes, winding, Lichemes, putting out the tongue, Smerdace, tearful, Phoinesfa cruelly killing.

Likewise in Latine, dry, fleeing, drouthie, deadly, swelling, and Asp or Aps, a Pharian Asp, so called of the Illiad Phorbus, where they abound. It is said that the Kings of Egypt did wear the Pictures of Col. Rubid Alsps in their Crowns; whereby they signified the invincible power of principality in this Creature, whose wounds cannot easily be cured: And the Priests of Egypt and Ethiopia did likewise wear very long Caps, having toward their top a thing like a Navel, about which are the forms of winding Alsps, to signify to the people, that those which fulfill GOD and Kings, shall perish by irreclaimable violence. Likewise by an Asp stopping his ear, was figured and understood a Rebel, obeying no laws or degrees of the Higher power: But let us leave this discourse of moralities, and come nearer to the natural description of Asps. There are many kinds of Asps after the Egyptian division, for one kinde is called Aspis, a dry Asp. This is the longest of all other kindes, and it hath eyes flaming like fire, or burning coals, another kinde is called Asps, which doth not only kill by biting, but also by putting, which it fendeth forth while it fetheth his teeth hard together, and lifteth up the head. Another kinde is called Lymno, because of the similitude it keepeth with Swallows, for on the back it is black, and on the belly-white, like as is a Swallow. We read also in Albertus of Aspis Hispaniae, and Hippophaes, but it may be that both these names signifie but one kinde. This Hispades killeth by sleeping, for after that the wound is given, the Patient falleth into a deep and sweet sleep, wherein it dyeth: and therefore Leucigenius saith: Iam suffe, ex cura veneno sibi Cleopatra jam unam mortem conficit; it was the fame which Cleopatra bought to bring upon her self a sweet and easy death. There is also an Asp called Aberus, which is of divers colours: But I do consider that all the kindes may well be reduced to three, that is, Pyas, Chersio, and Chelidion; Pyas hurteith by poysoning mens eyes, by spittin forth venom, Chersio liveth on the land, and Chelidion in the waters.

The Asp is a small Serpent, like to a land Snake, but yet of a broader back, and except in this difference not much from the Snake, their necks dwell above meafeure, and if they hurt in that passion, there can be no remedy, for the strowk of their eyes are exceeding red and flaming, and there are two pieces of flesh like a hard skin which grow out of their foreheads, according to these Veres of Nicander:


Pratera gemina calli infrar fronte cornuca  

Hertens, fanguinae simulint dimina flammas.  

That is to say;

At hard as Braun two bunches in their face.

Do grow, and flaming bloody eyes grace.

And the dry Asp, so called because it liveth in mid-lands, farre from any water, hath a vehement strong fiiight, and these eyes both in one and other are placed in the Temples of their head. Their teeth are exceeding long, and grow out of their mouth like a Boars, and through two of the longest are little hollowes, out of which he expresseth his poyson: They are all covered with thin and tender skins, which slide up when the Serpent bitcheth, and so suffer the poyson to come out of the holes, afterward they return to their place again. Of all which thus writeth Nicander:

Quatuor buis intra Marilla conscava dentes,  

Radias sivee fas, quae jandha quibusdam;  

Pellicula tuncia obductis, triste unde venenum  

Esfindit, si forte突如其来 opprimit hosti.

In English thus;

Within the hollow of their cheeks, fiery teeth are seen.

Fast rooted, which a coat of skin doth join and over-hide.

From whence sad venom issueth forth when she is keen;

If that her foe she chance to touch as she doth glide.

The scales of the Asp are hard and dry, and red, above all other venomous Beasts, and by reason of her exceeding drought, she is also accounted dead. About their quantity here is some difference among Writers: For Aelianus saith, that they have been found of two cubits length, and their other parts answerable: Again, the Egyptians affirm them to be four cubits long: but both these may stand together, for if Aelianus say true, then the Egyptians are not deceived, because the greater number containeth the better. The Asp Pyas is about two cubits long; the Chersioan Asps of the earth, grow to the length of five cubits; but the Chelidonian not above one, and this is noted, that the shorter Asp killeth soon, and the long more slowly: one being a pace, and another a fathom in length, Nicander writeth thus:

Tam proceram exenta quamrunt quam brachia duob,  

Tumque crassities efi, quantum missile telon;  

Quod faciens hostias dolet; fuber expoliit arte.
The History of Serpents.

Which may be thus Englished;
As wide as arms in force out-stretched,
So is the Asp in length,
And broad even as a casing Dart,
Made by a wise Smiths strength.

The colour of Asps is also various and divers, for the Irundo Asp, that is, the Chelidonian, resembleth the Swallow; the Pyror or spitting Asp resembleth an Asp colour, flaming like Gold, and somewhat greenish: the Cherfan Asp of an Asp-colour or green, but this latter is more rare, and Pietum faith, that he saw a yellow Asp near Beulam: Of these colours writeth Nicander:

Squalidus interdum color albet, sape nitenti,
Cum macula sape est cinere imitate figura,
Nonnullus ardentis veluti succenditur igne,
Thus overtherwise;

And spots which do the Asp resemble,
Some fiery red: in Aship black Asps are seen,

The Countrys which breed Asps, are not only the Regions of Africk, and the Confinces of Nilus, but also in the Northern parts of the World (as writeth Olam Magnus) are many Asps found: like as there are many other Serpents found, although their venom or poyfon be much more weak then in Africe; yet he faith, that their poyson will kill a man within three or four hours without remedy. In Spain also there are Asps, but none in France, although the common people do style a certain creeping thing by that name. Lucan thinketh that the Original of all came from Africe, and therefore concludes, that Merchants for gain have transported them into Europe, laying;

Ipsa coloris agens, gelidum non transi in orbem
Sponde sua, Niloque tenus metitur arenas.
Selquis erit nobis lucri pudor? Inde petuntur,
Hoc Lybice mortes & securum Aspida merces.

In English thus;
The Asp into cold Regions not willingly doth go,
But near the banks of Nilus warm, doth play upon the sands.
Oh what a frame, of wicked gain must we then undergo,
Which Lybian deaths and Aspish waves have brought into our lands?

Their abode is for the most part in dryest soyles, except the Chelidonian or Water Asp, which live in the banks of Nilus all the year long, as in a house and safe Cell, but when they perceiveth that the water will overflow, they forsake the banks fides, and for safeguard of their lives, betake them to the Mountains. Sometimes also they will ascend and clime trees: as appeareth by an Epigram of Ambologus. It is a horrible, fearfull, and terrible Serpent, going flowly, having a weak sight, always sleepy and drowsie, but a shrill and quick fenfe of hearing, whereby she is warned and adverted of all noyse, which when she heareth, presently she gathereth her self round into a circle and in the middes lifteth upon her terrible head: Wherein a man may note the gracious providence of Almighty GOD, which hath given as many remedies against evill, as there are evils in the World. For the dunneffe of this Serpents sight, and flownife of her pace, doth keep her from many mischiefs. These properties are thus exprest by Nicander;

Formidabile cui corpus, tardamque volumen,
Quandoquidem transuerfa via eft prolixaque ventris,
Spira, veteremque nivere videntur occili.
At simul ac facili fortes observavit aure

In English thus;
The scaring Asp hath flow and winding pace,
When as her way on belly she doth traverse,
Her eye fromeak in her bead, winking appear in face,

Vel minimum strictum, signet & corpore fomnos
Excertit, & terreret simum faxa apera traubam,
Hortendiamque caput, porcellaque pedos atollat.

This scaring Asp hath flow and winding pace,
When as her way on belly she doth traverse,
Her eye fromeak in her bead, winking appear in face,

Till that some raise her watchfull ear doth receife,
Then steep sheek'd off, round is her body gathered,
With dreadful head, on mounted neck vp lifted.

The voice of the Asp is hisling, like all other Serpents, and felidome is it heard to utter any voyce or found at all, except when she is endangered, or ready to set upon her enemy. Whereupon faith Nicander;

Grave silsilat ipsa
Besilia, dum certam vomit ira concita mettem.

In English thus;
This beast doth hisse, with great and loudest breath,
When in her mood she threatneth certain death.

That
Of the Aps.

That place of David, Psalm. 58. which is vulgarly read a death Adder, is more truly translated A of Aps, which when he is enchanted, to avoid the voyage of the Charmer, the hoppeth one of her ears with her tail, and the other the holdeth hard to the earth: And of this enchantment thus writeth Vincentius Bohemensis: Viurit quaorumdem verborum incantatam Aps, ne venemintemut, vel ne quidam dicatur ut quieta capi posset, et gemma de fronte ejus austerit, que natur alter in omnis, that is to say, The Aps is enchanted by vertue of certain words, so as the cannot kill her by poion, or as some say, be taken quietly without resistence, and so the Gem or precious Stone be taken out of her forehead, which naturally groweth therein. And from the words of the Psalm aforefaid, not only the certain and effectual use of charming is gathered by Pliarius, but also by many justified in the cafe of Serpents. Would not I have already given mine opinion in the former general Treatise, unto the which I will only adde thus much in conclusion, which I have found in a certain unnamed Author: Dominus diurnum jurn verbor ad Serpentes: & infidiae interior bec faciant, ut Serpentes ad naturam voram movantur, ac sine lefione tradantibus exhibantur: Which is thus much in effect: Devils run up and down with words of enchantment to Serpents, and by an inward or secret infection, they bring to pass that the Serpents dispose themselves after their pleasure, and so are handled without all harm. And indeed, that it may appear to be manifest, that this incantation of Serpents is from the Devil, and not from God, this only may suffice any reasonable man: because the Psalmist plainly expresseth, that the Serpent thirsteth it off, and avoideth Periculum miftantum incantationes, the most skilful Charmers. Now if it came from the unresistable power of Almighty God, it should pass the resistence of them or Devils; but being a falsity of the Devil, the Serpent (wiser in this point then Men that believe it) easilie turneth it against it: and in this thing we may learn to be wise as Serpents, against the enchanting temptation of the Devil or Men, which would beguile us with shadows of words and promises of no valuable pleasures.

It we may believe Pindar, Alciatus, and Philarchus, the Egyptians lived familiarly with Aps, and with continued kindnesse with them to tame. For indeed among other parts of their savage beastlines, they worshipped Aps even as household Gods, by means whereof the stubil Serpent grew to a senibile conceit of his own honour and freedom, and therefore would walk up and down and play with their children, doing no harm, except they were wounded, and would come and lick meat from the table, when they were called by a certain signification, made by knocking of the fingers. For the guests alter their dinner, would mix together Hony, Wine, and Meat, and then give the sign, at the hearing whereof they would all of them come forth of their holes; and creeping up, or lifting their heads to the table, leaving their lower parts on the ground, there licked they the said prepared meat, in great temperance and little with little without any ravening, and then afterward departed when they were filled. And so great is the reverence they bear to Aps, that if any in the house have need to rise in the night time out of their beds, they stirr all give out the sign or token, left they should harm the Aps, and so provoke it against them: at the hearing whereof all the Aps get them to their holes and lodgings, till the perfon uttering be laid again in his bed.

The holy kindes of Aps they call Thermastis, and this is used and fed in all their Temples of Isis with the fat of Oxen or Kine. Once in the year they crown with them the Image of Isis, and they say that this kind is not an enemy to Men, except to such as are very evil, whereupon it is death to kill one of them willingly.

It is reported of a certain Gardiner making a ditch or trench in his Vineyard, by chance and igno- rantly, he let his horse upon one of these Thermastis Aps, and so cut it auster, and when he turned up the earth, he found the hinder part dead, and the fore-part bleeding and uttering: at which sight his superfluous heart overcome with a vain fear, became so passionatly distrest, that he fell into a vehement and lamentable frenzy. So that all the day time he was not his own man, and in the night, in his mad fits he leapt out of his bed, crying out with pitifull and eager complaints, that the Aps did bite him, the Aps did wound him, and that he saw the picture of the said Aps (by him formerly thin) following him, and tearing his flesh, and therefore most instantly craved help against it, saying full he perifhed by it, he was mortally wounded. And when he had now (faith Alciatus) continued a while in this superfluous fury and disafe of the mind, his kindred and acquaintance brought him into the house of Serapis, making request unto that famed God to remove out of his fight that spectre and apparition; and so he was released, cured and restored to his right minde. This kind of Aps they also say is immortal and never dyeth, and besides it is a revever of sacrifice, as may appear by such another History in the same place. There was a certain Indian Peacock sent to the King of Egypt, which for the goodly proportion and feature thereof, the King out of his devotion consecrated to Jupiter, and was kept in the Temple. Now there was (faith he) a certain young Man which set more by his belly, than by his God, which fell into a great longing for to eat of the said Peacock: and therefore to attain his appetite, he bribed one of the Officers of the Temple with a good sum of Money to feast the said Peacock, and bring it to him alive or dead. The covetous wheaten enraged with the desire of the Money, sought his opportunity to feast away the Peacock, and one day came to the place where he thought and knew it was kept, but when he came, he saw nothing but an Aps in the place thereof, and so in great fear leaped back to save his life, and afterward dislofed the whole matter. Thus far Alciatus.

The domifical Aps understand right and wrong, and therefore Philarchus tellet a story of such an Aps, which was a female, and had young ones: in her absence one of her young ones killed a child
child in the House: When the old one came again according to her custom to seek her meat, the killed child was laid forth, and so the understanding the harm: Then went the and killed that young one, and never more appeared in that house. It is also reported, that there was an Afp that fell in love with a little Boy that kept Geese in the Province of Egypt, called Hurkute, whose love to the said Boy was so fervent, that the Male of the said Afp grew jealous thereof. Whereupon one day as he lay asleep, set upon him to kill him, but the other seeing the danger of her love, awaked and delivered him.

There is much and often mention made of Apfs in holy Scripture, beside the forenamed place, Psal. 58, as in Esa. 59. the fers are compared to Apfs, and their labours to Spiders webs. And Esa. 11. The jutting childi shall play upon the hole of the Afp. Whereupon a learned man thus writeth; Qui

Suidas.

Pliny.

Selus eam pois efte Ichnemon vintere peflern,
Cun grave cuncta ei bellum parat, editis: &ca,
Sue fover in multorum hominum insuperabilis lebum,
Omnis fraltda terit, mardarq; dente lacift.

That is to say;

Ichnemon only is of strength, that left to overspuell,
Gainst whom in wary wife his war be doth prepare,
Her reptes, a deadly death to many men, in fand be doth out smell,
To break them all within his teeth, this nimbre beast doth dare.

Pliny, Cardan, and Constantine affirm, that the herb Arum, and the root of Winterberry, do so aflonish Apfs, that their presence layeth them in a deadly flep: and thus much of their concord with other creatures.

Gal en writeth, that the Marsians do eat Apfs without all harm, although as Mercurial faith, their whole fleeth and body is fo venomous, and so replact with poyfon, that it never entereth into medicine, or is applied to fick or foue upon any Phyfical qualification: the reafon of this is given by himself and Fraccorius, to be either, because Apfs under their Climate or Region are not venomous at all, as in other Countries, neither Vipers nor Serpents are venomous: or else because those people have a kinde of sympathy in nature with them, by reafon whereof they can receive no poyfon from them.

The poyfon of Apfs faith Myfet, Deut. 32. is crudele venenum, a cruel poyfon, and Job, 30. cap. expressing the wicked mens delight in evil, faith; That be shall fack the poyfon of Apfs. For which caufeth, as we have theved already, the harm of this is not easily cured. We read that Canopus, the Miner of Menelaus ship, to be bitten to death by an Afp at Canopus in Egypt. So also was Demetrius Philocles, a Scholar of Theophras, and the Keeper of the famous Library of Ptolemæus Soter. Cleopatra likewise to avoid the triumph that Augustus would have made of her, suffered her felf willingly to be bitten to death by an Afp. Wheepon Propertius writeth thus:

Brachia
Bracta fvečavi sacris admoso colubris,  
Et trahere occultum membra sparsit iter.  

In English thus;  

Thus I have from these wounded arms,  
With seas'd Snakes bitten deep,  
And members draw their poison'd harms,  
Treading the way of death's found sleep.

We read also of certain Mountebanks, and cunning Juglers in Italy, called Circulators, to perifie by their own devices through the eating of Serpents, and Aps which they carried about in Boxes as tame, using them for ostentation to get Money, or to fell away their Antidotes. When Pompeius Rufius was the great Master of the Temple-works at Rome, there was a certain Circulator or Quack falsely, to shew his great cunning in the presence of many other of his own trade, which fell to his own Aps, presently he sucked out the poyfon out of the wound with his mouth: but when he came to look for his preservative water, or antidote, he could not finde it; because whereof the poyson fell down into his body, his mouth and gums rotted presently, by little and little, and so within two days he was found dead. The like story unto this is related by Amb. Parame, another, which at Florence would fain fell much of his medicine against poyfon, and for that purpose suffered an Aps to bite his flesh or finger, but within four hours after he perifh'd, notwithstanding all his antidotical preservatives.

Now therefore it remaineth, that we add in the conclusion of this History, a particular discourse of the bitings and venom of this Serpent, and also of such remedies as are appointed for the same. Therefore we are to consider, that they bite and do not sting, the females bite with four teeth, the males but with two, and when they have opened the flesh by biting; then they infuce their poyfon into the wound. Only the Aps Pijar, killeth by fplitering venom through her teeth, and (as Aesop faith) the favour or smell thereof will kill, but at the least the touching infecteth mortally. When an Aps hath bitten, it is a very difficult thing to epy the place bitten or wounded, even with most excellent eyes, as was apparent upon Cleopatra aforefaid; and the reason hereof is given to be this, because the poyfon of Aps is very sharp, and penetrateth suddenly and forcibly under the skin, even to the innoin parts, not slaying outwardly, or making any great visible external appearance. Yet Galen writing to Pij, affirmeth otherwife of the wound of Cleopatra; but becaufe drownines and feep, followeth that poyfon, I rather believe the former opinion: and therefore Lucan calleth the Aps, Somnifera, that is, a sleep-bringing Serpent. And Pelioius also subfcribeth hereunto.

A pida & morfa lefum dormire fatentur  
In mortem, antidum nec valdeffc scrutu.  

Which may be Englished thus;  
He that by rage of Aps tooth is bitten or is wounded,  
They say with sleep until his death cureless, he is confounded.

The pricks of the Aps teeth, are in appearance not much greater then the prickings of a needle, without all swellings, and very little blood issueth forth, and that is black in colour, straightway the eyes grow dark and heavy, and a manifold pain ariseth all over the body, yet such as is mixed with some fene of pleafure, which caused Nisander to cry out, Perimitque virum abfioque dolores, it kills a man without pain. His colour is all changed, and appeareth greenish like grapes. His face or forehead is bent continually frowning, and his eyes or eye-lids moving up and down in drownines without fene, according to these verses following.

Neo tamen ullcis vides impressi vulnera morfas,  
Neo dignus fars tumor illum corpus adorit.  
Sed qui lefus homo oft, citra omnem fat als dolores  
Claudet, & ignavo moriens torpore fatificit.  

Which I tranflate thus;  
Wounds of impressd teeth, none canst thou see,  
Nor tumour worth the naming, smitten body burning,  
But yet the hurt man painfuls takest deftiny,  
And sleeping dyeth, flaggylye hie turning.

The true signes then of an Aps biting, is stupeur or alonishment, heavinesse of the head, and flothinesse, wrinking the fore-head, often gaping and yawning, and nodding, bending the neck, and Convulsion; but those which are hurt by the Pijar, have blindness, pain at the heart, deafnesse, and swellings of the face. And the signes of such as are hurt by the Chaladian or Chefean Aps, and the Terrestrial are all one, or of very little difference, except that I may add the Cramp, and the often beating of the pulse, and frigidity of the members or parts, or pain in the stomack, but all of them in general, deep sleep, and sometimes vomitting. But by this, that the blood of the place by them bitten turneth black; it is apparent and manifie, that the poyfon of the Aps mortifieh or
or killeth the natural heat, which is overcome by the heat of the poiyson outwardly, and the dark-
ness or blindnese of the eyes proceedeth of certain vapours which are infected, and ascend up to
the disturbance of the brain: and when the humors are troubled in the stomac, then followeth
vomiting or else the cramp, and sometimés a loosenesse when the knuckles are drawn in by the ve-
nomous biting, or the infected humors falling down into the in trial. To conclude, for great is the
tablish effect of this poiyson of Aps, that it is worthily accounted the greatest venom, and most
dangerous of all other; for also, his Serpent venomenum cum pelliferorum fub, tunc muto apud pellif-
entur, the poiyson of all Serpents is pelliferous, but the venom of the Aps most of all. For if it
touch a green wound, it killeth speedily, but an old wound receiveth harm thereby more hardly. In
Alexandria, when they would put a Man to a sudden death, they would fet an Aps to his bosom or
breath, and then after the wound or biting, bid the party walk up and down, and fo immediately with-
in two or three turns he would fall down dead. Yet it is reported by Pliny, that the poiyson of
Aps drunk into the body doth no harm at all, and yet if a Man eat of the flesh of any beast slain by
an Aps, he dyeth immediately.

But concerning the cure of such as have been, or may be hurt by Aps, I will now entreat, not
spending any time to confute thofe, who have wrote that it is incurable: on the contrary it shall
be manifelt, that both by Chirurgery and Medicines, compound and fimple, this both hath been
and may happily be effectecl. First, it is neceffary when a Man is flung or bitten by a Serpent, that the
wounded part be cut off by the hand of fome skilful Chirurgeon, or else the fried round about the
wound, with the wound it felf to be circumcified and cut with a fharf Razof; then let the hotteft
burning things be applied, even the fearing Iron to the very bone. For then the occasion being taken
away from the poiyson to spread any further, it muft needs die without any further damage. Then
also the holes in the mean time before the ejection muft be drawn, either with Cupping-glaifes or with
a Reed, or with the naked rump of a Ring dove or Cock; I mean the very hole fet upon the bitten
place. And because the hole is very narrow and small, it muft be opened and made wider, the blod
be drawn forth by scarifications, and then muff fuch medicinal herbs be applied as are moft oppofite
to poiyson, as Rue, and fuch like. And because the poiyson of Aps doth congeal the blod in the
veins, therefore againfit the fame muff all hot things made thin be applied, as Habitodatum and Tri-
acle dissolved in agua viva, and the fame also dissolved into the wound; then muf the Patient be
ufed to bathings, iricasing or rubbing, and walking, with fuch like exercises. But when once the
wound beginneth to be purple, green, or black, it is a fign both of the extinguiting of the ve-
nom, and alfo of the fuffocating of natural heat, then is nothing more fafe than to cut off the mem-
bers, in fo alfo be able to bear it. After Cupping-glaifes, and Scarifications, there is nothing that
can be more profitably applied then Century, Myrrh, and Opium, or Sorrel after the manner of a
Plafier. But the body must be kept in daily motion and agitation, the wounds themselves often
fearched and prezifed, and Sea-water used for fomentation. Butter likewise, and the leaves of
Yew, are very good to be applied to the bitings of Aps. And in the Northern Regions, (as witneffeth
Oian Magnus) they use nothing but Bran like a Plafier, and their Cattle they anoint with Triacle and
Salt all over the bunch or swelling. And thus much for the Chirurgical cure of the biting of Aps.
In the next place, we may alfo relate the medicinal cure, especially of fuch things as are compoud,
and received inwardly.

First, after the wound, it is good to make the party vomit, and then afterward make him drink
juice of Yew and Triacle, or in the default thereof, Wine, as much of the juice as a great weight,
or rather more. But for the tryal of the parties recovery, give him the powder of Centory in
Wine to drink, and if he keep the medicine, he will live, but if he vomit or caft it up, he will dye
thereof. But for the better avoidance and purging out the digefted venom, diftributed into every
part of his body, give the party Garlic beaten with Zythum, until he vomit, or else Opomone in
Wine allayed with water: also Origan dry and green. After the vomit, the former antidotical me-
dicines may be ufed. And the Northern people use no other Triacle then Venetian. Whereas there
are abundance of all manner of Serpents in the Spanifh Islands, yet never are any found there to ufe
Triacle, neither do they account it of as of a thing any whit vertuous, but inledref thereof they ufe
the bearded 1bopif, Gilly-flowers, and red Violets, and the herb Ambra, boiled in Wine Vinegar,
which that may be gotten, and a found mans Urine, wherewithall they bath the wounded
part, although much time after the hurt received. But faith Amb. Fereu, it is much better for the
Patient to drink thereof fasting, and before meet two hours, three ounces at a time. And by the
help of this notable experiment, the Inhabitants of thofe Islands are nothing afraid to offer their
bodies to be bitten by the moll angry Aps. And thus much for compound medicines in general.

It is laied, that the firft and cheifteft easie remedy for fuch as are bitten by Aps, is to drink to much
of the sharpell Vinegar, as he can fenfibly perceive and feel the fame upon the right fide of his mid-
riff, because that poiyson firft of all depriveth the liver of fene. For Pliny faith, that he knew a
man carrying a bottle of Vinegar to be bitten by an Aps, whiles by chance he faw on the fide, but
as long as he bore the Vinegar and did not fet it down, he felt no pain thereon, but as often as to
eafe himfelf he fet the bottle out of his hand, he felt torment by the poiyson, which being related
to the Phyficians, they knew thereby that Vinegar drank into the stomack was a foeveraign antidote
againft poiyson. Yet fome fay, that the firft knowledge of this vertue in Vinegar, grew from the
neciffity which a little boy bitten by an Aps had of drinking, and finding no other liquor but a
bottle of Vinegar, drank thereof a full draught, and was eafeed of his pain. For the reafon is,

Of the Bee.

that it hath both a refrigerative, and also a dissipating vertue, as may appear when it is pored upon Cor. CoEas. the earth, because it yeeldeth a froth, and therefore when it cometh into the stomack, it dissipeth all the infected humors.

The Northern Shepheardes do drink Garlick and itale Ale against the bitings of Asps. And some hold an opinion that Aniseed is an antidote for this fore. Others use Hart-wort, Apium seed, and Wine. Arun being burned, hath the vertue to drive away Serpents, and therefore being drunk with Oyl of bays in black Wine, it is accounted very soveraign against the bitings of Asps. The fruit of Ballam, with a little powder of Gentian in Wine, or the juice of Mints, keepeth the stomach from the Creeph after a Man is bitten by an Afp. Others give Caforum, with Lynum Coffee, and some the skin of a Thrush stomach or maw. There be certain little filthy and corrupt Worms bred in rotten wood or paper, called Cimies, these are very profitable against poysion of Asps, or any other venomous biting beast, and therefore it is said that Hens and other Pullein do earnestly seek after these worms, and that the flesh of such fowl as have eaten thereof, is also profitable for the same purpose.

Ahernum also wright, how certain Thieves were condemned to be caft to Serpents to be destroyed, now the morning before they came forth, they had given them to eat Citrons; when they were brought to the place of execution, there were Asps put forth unto them, who bit them, and yet did not harm them. The next day, it being suspected, the Prince commanded to give one of them a Citron, and the other none, so when they were brought forth again the Asps fell on them, and flew them that had not eaten Citron, but the other had no harm at all. The Egyptian Clematis Pliny, or Patring drunk in Vinegar, is very good against the poysion of Asps; so likewise is Corral in Orpiment. Wine, or the leaves of Yew. Henbane bruised with the leaves thereof, and also bitter Hops have the same operation. The urine of a Tortoise drunk, is a medicine against all bitings of wild beasts, and the urine of a Man hurt by an Afp, as Marcus Varro affirmed in the eighty ninth year of his age, according to the observation of Serenus saying;

Si vero borreandum vulnus fera fecerit Afpis,
Urinam cedens propriam conculcere potu:
Varonis fuit ifia senis sententia, nec non
Pliniu ut memorat, fumpti juxta imber aceti.

Which may be Englishted thus;
If that an Afp a mortal wound do bite,
It's thought his urine well doth cure again,
Such was the saying of old Varro bright,
And Pliny too, drink Vinegar like drops of rain.

But it is more safe to agree with Pliny in the prescrifion of Mans urine, to restrain it to them that never had any beards. And more particularrly against the Afp called Pyas, and Matthiolus out of Distoverdi faith, that the quinteunce of Aqua vitae, and the usual antidote, both mixed together and drunk, is most powerful against the venoms of the deaf Afp. And thus much for the antipathy and cure of Asps biting venomous nature, whereunto I will add for a conclusion,that proverbial speech, of one Afp borrowing poysion of another, out of Tertullian against the Heretick Murcetion, who gathered many of his absurd impieties from the unbelieving Jewes. Definatum nec hereticum & Judaeus alpis quad aliqui A Vpere mutuari venenum, that is, let the heretick nowe caufe to borrow his venom of a Afp, as the Asps do borrow their poysion from Vipers. And true it is, that this proverb hath eipical use, when one bad man is holp or counselld by another; and therefore when Digests law a company of women talking together, he faid merrily unto them, Afpis par' echidnus pharmacon dami-zerai,that is, the Afp borroweth venom of the Viper. Thus much of the Afp.

A Mongst all the forts of venomous Infests,(or cut-wafted creatures) the soveraigne and preheminence is due to the Bees, who only of all others of this kinde, are made for the nourishment of mankinde, all other (cut-wafted) serving only for medicinal use, the delight of the eyes, delection of the ears, and the ornament, trimming, and sething forth of the body, which they perform at the full. They are called of the Hebrews, Devarob; the Arabians term them, Albara, Naba-bolea, and Zabar: the Lyrians and Seleouianis, Wetzilla; the Italians, Ape, Api, Uma sticha, Melicatella, Ape or Scoopa, Pecchi; the Spaniards, Abeia; Frenchmen, Moufchis au miel; the Germans, Eer yxte, open. The Flemings, Biz; the Polonians, Pazzota; the Irish men, Camilli. In Wales a Bee is called Gwenis. Amongst the Greecians they have purchased fundry names, according to the diversity of Nations, Countries and places, but the most vulgar name is Melis, and in Hermodus, Melis. Otherformes call a Bee Plafris, a fingend, or framming. Some again Ambledon: and of their colour, Xanthai. Of their Offices and charge, Eggomes, ab imperando, from governing, Sirenes, of stavi canus, from their sweet voyce. The Latines call them by one general name, Apiis and Apes. Vetrovartimes termes them Aves, but very improperly, for they might better be named Polacres, not Aves. So much for their names, row to the definition.

Of the Description and differences of B E E S.

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Iii A Bee
A Bee is a cut-wafted living creature, that can fly, having four wings, and bloudleffe, the only Crafts-master of Hony-making. Their eyes are somewhat of a hornye subfiance; bid deep in their bodies, as is also their fling: they want neither tongue nor teeth, they have four wings, being of a bright and clear colour, growing to their shoulder-blades, whereof the two hinder-moat are the lefter, because they might not hinder their flying: and out of their short feet or fumps there grow forth as it were two fingers, wherein they carry a little flone, for the poifing and making weighty their small bodies in fiorrey, tempeftuous, bluttering or troublefome weather, for fear left they might be driven from their houfe and home, by the contrary rage and violence of the windes.

They do not breath (by Plinix good leave) but either pant, move, or flir (as the heart or brain doth) and by tranfpiration they are comforted, refreshed, and made lively. Their flomach is contexted and framed of the thinnest part of all their members, wherein they not only retain, but alfo digife, purifie, and clene it, which is the true and only reafon, why the Honey of Bees is longer kept pure and fine, than any Manna or Meldow, or rather it is not at all subjett to corruption.

Bee, even by nature are much different: for some are more domelical and tame, and other again are altogether wilde, uplandish, and aperitiue. Thofe former are much delighted with the familiar friendship, custom and company of men; but these can in no wise brooke or endure them, but rather keep their trade of Honey-making in old trees, caves, holes, and in the ruders, and rubbiffh of old walls and houfes. Of tame Bees again, fome of them live in pleasant and delightful Gardens, and abounding with all sweet fenting and odoriferous plants and herbs; and therefe are great, foft, fat, and big belled. Others again, there be of them that live in Towns and Villages, whose fuddy and labour is to gather Honey from fuch plants as come next to hand, and which grow farther off, and therefe are leffer in proportion of body rough and more unpleafant in handling; but in labour, industry, wit and cunning, far surpassing the former. Of both forts of thefe, fome have flings (as all true Bees have:) others again are without a fling, as counterfeit and baftardly Bees, which (even like this idle, fluggifh, lither, and ravenous cloyster Monks, thrice worse then thieves) you shall fee to be more gorbelled, have larger throats, and bigger bodies, yet neither excellent or markable, either for any good behaviour and conditions, or gifts of the minde. Men call thefe unprofitable cattle, and good for nothing, Fust, that is Drones; eithe because they would seem to be labourers, when indeed they are not: or because that under the colour and pretence of labour (for you shall sometime have them to carry wax, and to be very办te in forming and making Honey-combes,) they may eat up all the Honey. Thefe Drones are of a more blackifh colour, and some what fhining, and are easily known by the greatneffe of their bodies. Besides fome Bees are defcended of the Kyngly race, and born of the blood Royal: whereof Arebile maketh fuch two forts; a yellow kinde, which is the more noble, and the black, garnifhed with divers colours. Some make three Kings, differing in colour, as black, red, and divers coloured. Memareus faith, that thofe who are of fundry colours are the worfer, but in cafe they have diversity of colour with some blackifh, they are efteemed the better. He that is elected Monarch Cæsar, and Captain General of the whole Swarm, is ever of a tall, perfonable, and herculean nature, being twice as high as the reft, his wings shorter, his legs ftraight, brawny, and strong, his gate, pace, and manner of walking is more loftly, latefly, and upright, of a venerable countenance; and in his fore-head there is a certain red spot or mark with a Diadem; for he far differeth from the popular and inferior fort in his comlineffe, beauty, and honour. The Prince of Philofophers confoundeth the fex of Bees, but the greatest company of learned Writers do dilguifh them: whereof they make the feminine fort to be the greater. Others again will have them the leffer, with a fling: but the founder fort (in my judgement) will neither know nor acknowledge any other males, befores their Dukes and Princes, who are more able and handfome, greater and stronger then any of the reft, who flay ever at home, and very feldom (unlike to the whole Swarm) they flir out of doors, as thofe whom nature had pointed out to be the fitfell to be fander-bearers, and to carry ancients in the camp of Venus, and ever to be ready at the elbows of their loves to do them right: Experience teaching us, that thofe do fitt on Eggs, and after the manner of birds, do carefully cherish and make much of their young, after the thin membrane or skin wherein they are enclosed is broken.

The difference of their age is known by the form, flate, and habit of their bodies. For the young Bees have very thin and trembling wings, but that they are a year old, as they that are two or three years.
years of age are very trim, gay, bright-shining and in very good plight and liking, of the colour of Oyl.

But those that have reached to sevenen years, have layed away all their flatness and smoothness, neither can any man afterwards either by their figure and quality of their bodies or skins, judge or discern certain their age (as we by experience in Horses:) For the elder fort of them are rough, hard, thin and lean scraws, flourlings, losthome to touch and to look upon, somewhat long, nothing but skin and bone, yet very notorious and goodly to fee to, in regard of their gravity, hoariness and acieney. But as they be in form and shape, nothing fo excellent, fo yein experience and industry they fall out-fit the younger fort, as those whom time hath made more learned, and length of days joyed with ule, hath sufficiently instructed and brought up in the Art or trade of Honey-making.

The place likewise altereth one whiles their form, and sometimes again their nature, (as their sex and age do both.) For in the Islands of Molucca, there be Bees very like to winged Pinnates, but somewhat leffer then the greater Bees, as Maximianus Transfiguratus, in an Epistle of his written to the Bishop of Saltspurgh, as large relate it. Andrew Boret in his book that he wrote of the New-found World, Chap 31. amongst other matters reporteth that he did see a company of flies or Honey-bees about a tree named Vibebafyn, which then was green, with the which thefe Honey-bees do live and nourish themselves: of the which trees there were a great number in a hole that was in a tree, wherein they made Honey and Wax. There is two kinds of the Honey-bees, one kinde are as great as ours, the which cometh not only but of good smelling flowers, alfo their Honey is very good, but their Wax not fo yellow as ours. There is another kinde half fo great as the other: their Honey is better then the other, and the wilde men name them Hira. They live not with the others food, which to my judgement maketh their Wax to be as black as coals, and they make great plenty, specially near to the River Vajfes, and of Plate. The Bees called Chalcoder, which are of the colour of brats, and somewhat long, which are fayd to live in the Island of Coza, are impalacable, great fighters and quarrellers, excelling all others in their wings, and more cruel then any others, fo that with their wings they have chaid the Inhabitants out of their Cities; the remainder of which Bees do remain and make their Honey-combes (as Elianu Leith) in the Mountain Ida. Thus much of the differences of Bees, now it remaineth to discourse of the Politick, Ethical, and Oeconomick vertues and properties of them.

Bees are governed and do live under a Monarchy, and not under a tyrannical State, admitting and receiving their King, not by succission or caiting of lots, but by respective advice, confident judgement, and prudent election; and although they willingly submit their necks under a Kingly government, yet notwithstanding they still keepe their ancient liberties and priveledges because of a certain Prerogative they maintain in giving their voices and opinions, and their King being deeply bound to them by an oath, they exceedingly honour and love.

The King as he is of a more eminent stature, and goodly corporature (as before we have touch'd) then the reft: fo likewise (which is singular in a King) he excelleth in midnes and temperatenes of behaviour. For he hath a fling, but maketh it not an instrumen of revenge, which is the caufe that many have thought their King never to have had any For these are the laws of nature, not written with Letters, but even impressed and engraven in their conditions and manners: and they are very flow to punifh offencers, becaufe they have the greatest and Sovereign power in their hands. And although they seem to be slack in revenging and punifhing private injuries, yet for all that they never suffer rebellious persons, refractorious, obinate, and such as will not be ruled, to eleape without punifhment; but with their pricking things they grievously wound and torment, so as they dispatching them quickly. They are fo tindus of peace, that neither willingly nor unwillingly they will give any caufe of offence or displeasure. Who therefore would not gratefully be displeased with, and hate extremly those Dismal Dan Tyrants in Sicilia, Clearisius in Hierachia, and Apodorus the Theif, Peiter and fooper of the Caffandrius? And who would not detest the ungratioufnes of those lewd claw-backs, and Trencher-parafites, and flatterers of Kings, which dare impudently maintaine, that a Monarchy is nothing else but a certain way and rule for the accomplishing of the will, in using their authority as they list, and a fience or skilful trade, to have wherewith to live pleasantly in all sensual and worldly pleasure: which ought to be far from a good Prince, who whilst he would seem to be a Man, he them himself to be far worser then these little poor winged creatures. And as their order and course of life is far different from the vulgar fort, so also is their birth; for they of the Kingly race are not born after the manner of a little Worm, as all the Commonalty are, but is forthwith winged, and amongst all his younglings; if he finde any of his sons to be either a fool, unhandsome, that none can take pleasure in, rugged, rough, Ioon angry, fumifh or too realty, ill shaped, not beautiful or Gentleman-like, him by a common confent, and by a Parliamentary authority they destroy, for fear left the whole Swarm should be divided and distracted into many minides, and so at length the Subjects undone by factions, and banding into parts.

The King prefereth laws and orders to all the rest, and appointeth them their rules and measures: for some he straitly chargeth and commanndeth, (as they tender his favour, and will avoid his displeasure) to fetch and provide water for the whole Camp. He enjoineth others to make the Honey-combes, to build, to garnish: and trim up the house well and cleanly, to diminish perfectly the work, to finde and allow, to promote and shew others what to do. Some he sendeth forth
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Nymphi due regum facies, due corpora gentis

etr sunt muculis auro squamibus argento,

et utiles squamis, insignis & ore.

Eadar est alter mullo, quum putare aballo

Quam venit & facto terram fructus arcvator.

Defidia latamque travers in longiore aluam—Hunc
desc neci, melior vacua fine regnet in aula.

In English thus;

The two apells of Kingly Bees, two Nations do destine,
One of them, Golden light red, burning with pale brow,
And having foales bold red and clear, and great about the nose,
The other filthy to behold like dust, for it is true,
Which burnes finest upon dry land, whenull is crusty and prey,
In stilt bely broad, doth travail worser then the leaff,
Him kill, let the other reign,
Aline, in empty Court, do not disdain.

And thus hitherto have we spoken of their Kings and Dukes: now will we bend our discourse to the common fort of Bees.

Bees are neither to be accounted wilde, nor altogether calm and quiet creatures, but of a nature betwixt both: and of all other they are esteemed most serviceable and profitable. Their fling giveth both life and death to them, for being deprived of it, they surely die: but having it, they repel all hostility from their swarms. Of these there are none idle, although they be not all Honey-makers, neither are the most sluggish of them all, like unto the Drones in their inclination and manners: For they do not corrupt and mar the Honey-combs, neither do they lie in wait by treachery and deceit to fitch Honey, but are nourished by flowers, and fleeing forth with their fellows, do get their living with them: although some of them want the skill to make and lay up the Honey finely and safely, yet notwithstanding every one hath his proper charge and business to use and prafche; for these bring witter to the King, and to the older Bees that cannot travail.

The elder part if they be of a strong and robustous constitution, are chosen for the guard of the King person, as the fittest persons to be about him, in regard of their approved worth, faithful dealing, and uprightnes of conscience, for the ordering and disposing of all matters. Some give Physick to those that are sick, by making and giving to them a medicinal alement of Honey, that is drawn from Amlie, Saffron and Hymecomes. But if any through age or sickness chance to die, then they whose office it is to carry forth the dead bodies to burying: do forthwith flock together, carrying the dead body of their brother on their shoulders, as it were on a Beere, left the pure Honey-combs might be tainted with any uncleanliness, flink, or malminess.

Bees have also their Ambassadors and Orators, sent with commission or authority, and put in trust to deal in their Princes affairs, their old hested Souliders, their Pipes, Trumpeters, Horn-winders, Watchmen, Scout-warches, and Sentinels Likewise Souliders ever in a readi-
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readiness to defend, and look to their Honie-wealth and goods, as if it were a City committed to their truft and valiancy, and there do punish, torment, and throw to the ground all flying Theevs and Worms, that dare invade secretly by any cunning passage, or mine into their mansions. And that they might bear the world in hand, that they are no priu or secret Theevs in their flying, they make a noyse and humming, which together with their flight, is heard both to begin and end: Which found, whether it proceedeth from the mouth, or from the motion of their wings, Aristotle and Hesychius do much vary and contend.

Their Pipers and horn-blowers do edere Zingos, as Helcchius faith (the Englishmen term it Sing) and that they make to be the watch-word and priu token, for their watch and ward, sleep, and daily labour. They love their King so entirely, that they never suffer him to goe abroad alone, but their Army being divided into two parts, and by heaps winding themselves round, do as it were enclose and fence them on all sides. If in any journey the King hap to wander from his company, and cannot be found, being driven away by the force of some horty winde or weather, they all forthwith make a priu seach, and with their quick-venting, periule and follow the chafe so long, until he be certainly found; and then because he is tyred with flying, and the tediousnes of temptells, the common fort lift him upon their wings, and so triumphantly convey him home as it were in a Chariot. But if he die by the way, then they all mournfully depart, every one to his own place separating themselves, or peradventure for a while, they work up their Honeycombes not yet finished, but never make any more Honie; So that at length, growing to be lazy, sickly, waited, conumed and disannam with their own fifth and corruption, they all miserably perih. For they cannot possible live without a King, against whom, none is so hardy as to lift up his finger to offer him any violence, much les to compire his destruction, unlehe he (after the fashion of Tyrants) do overthrow and turn all things upside down, after his own will and luft, or neglecting carfully the Weal publique, feteth all upon fix and feven. Yea, if he acceptum himself to go often abroad, (which he cannot do without the great hurt and prejudice of his Citizens) they do not by and by kill him, but they take from him his wings, and if he then amend his life and look better to his office, they singularly affect and honour him.

When the King by flying away hath left his Bees, they fetch him again, and being a fugitive from his kingdom, they follow him amain by his smell, as it were with hue and cry, (for amongst them all the King smelth beall) and so bring him back to his Kingly house. None dare venture out of his own lodging first, nor seek his living in any place, except the King himself first going forth, do rect them the way of their flight. For I am hardly of a srisfates minde, who affirmeth that the King never cometh abroad, but when the whole iwarm dooth, which is seldom seen. But if by reason of his tyranny, cruelty, and violent rule, they be forced to seek some other dwelling places, then a few days before the time appointed, there will be heard a solitary mournful, and peculiar kind of voice, as it were of some trumpets, and two or three days before they fly about the mouth of the Hive; so when all things are in a readiness for their flight, being all assembled, they flee all speedily away, and kill the Tyrant (whom they left behind) if he attempt to follow them But a good King they never forfake; and if at any time he pine and fall away by reason of ficknesses, any plague, or murrain, or through old age, all the meaner fort do make mone, the whole rout and multitude of Senators and Aldermen do greatly bewail him, not conveying any meat into their Hives, nor yet looking out of doors for meer grief, filling the whole house with sorrowful hummings and laments, and gathering themselves by heaps about the carkass of the dead King, they do with great noise tragically mourn for him. Neither doth continuance of time mitigate or take away their grief, but at length all of these faithful friends, partly through grief, and partly through famine, they are clean conumed and brought to death.

Whilest they have a King, the whole iwarm and company is kept in awful order, but he being gone, they go under the protection of other Kings. They have not many Kings at once, neither can they endure usurpers, overthrowing their houes, and rooting out their flock and family. And if in one iwarm there be two Kings, (as sometimes it falleth out,) then one part adhereth to the one King, and the other fide cleaveth to the other, so that sometimes in one hive you find finde Honeycombs of sundry forms and fashions: where they behave themselves so honestly and neighbourly, that one the meddith not with the others charge and busines, having no minde to enlarge their Empire, to entice, draw, or win by fair means the subjects of the other side, but every one being obedient to his own King without contradiction. They honour him so highly, that being loft they complain; being deceit, they prefervre and keep him; being weary, they carry him round about with them; being dead, they bewail him with all funerall pomp and heaviness, yeading up at length even their very lives for an affurance of their loves and faithful dealings. Oftentimes they arear beat deadly war against strangers born, for the Honie that they have stolen from them, as for the catching and snatching up afore-hand thofe flowers whereon they purposed to fit on; so that sometimes the quarrel is determined by dint of sword in a just battall. Oftentimes again they wrangle about their Honey-combes and dwelling houses, but then the deadly and unappeasable war is, when the contention is about the life, crown, and dignity of their King, for then they behirr themselves most eagerly, defending him most valiantly, and receiving the darts or things that are bended against him, with an undaunted courage, by the voluntary and thick interposing of their own bodies, betwixt the darts and the person of their King.
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Neither are Bees only examples to men of Political prudence and fidelity, but also preudets for them to imitate in many other virtues. For whereas Nature hath made them Zoos opelae, that is, creatures living in companies and swarms, yet do they all things for the common good of their own rout and multitude, excepting ever the Drones and Theeves, whom if they take tripping in the manner, they reward with condign punishment. Their houses are common, their children common, their laws and statutes common, and their country common. They couple together without question as Cams do, privily and apart by themselves, which whether it proceed of modesty, or be done through the admirable instinct of Nature, I leave it to the dispute and quaint resolution of those grave Doctors, who being laden with the badges and cognizances of learning, do not flick to affirm that they can render a true reason even by their own wits, of all the caufes in nature, though never so obfure, hid and difficult.

Flies and Dogs do far otherwife, whole impudence is fuch, that having no regard of times, perfons, or places, they will not give place, or be disjoyned. Yea the Muficks (as Herodotus writeth) having their quiver of arrows on their cars, they dealt with their wives very unfeafonably, and though all men beheld it, yet they most impudently contempted it. And that which is worfer, this beastly faction is crept amongst the ufurpers, or at least profesffors of the Christian name, who shame not openly to kiss and embrace, yea even to play and meddle with filthy whores and brothely queans. Bees farely will condemn thefe kinde of people of beafial impiudency and wanton flanelefnes; or caufing them to fluth if they have any grace, will teach them repentance. Neither are they altogether such creatures as cannot endure or away with Mufick, (which is the Princefh of delights, and the delight of all theunlearned) as many unlearned people confen, but who procede delightfully with tune in any harmony wherein is no jarring, so the fame be simple and unaffectted.

And although they have not the skill to daunce according to due time, order and proportion in Mufick, as they say Elephants can, yet do they make twifter or flower their flight, according to the Trumpetors minde, who with his tharp and thrill found caufeth them to beftir themselves more speedily; but befting flowing and not fo loud upon his brafen instrument, maketh them more flow, and to take more leisure. Neither hath Nature made them only the most ingenious of all living creatures, but by discipline hath made them tame and tractable. For they do not only know the hand and voice of the Honey-man, or him that hath the charge and ordering of the fame, but they alfo affuer him to do what liketh him felf: which every man muft needs confefs to be an argument of a generous and noble disposition, thus to undergo the rule of their Over-feers and Surveyors, but the hand and discipline of a stranger they will by no means endure.

As for economical virtues they excel alfo, and namely for moderate frugality and temperance, not profutely and prodigiously wasting and devouring the great flore of Honey which they gathered in the Summer feafon, but they fulfill themselves therewith in Winter, and that very sparingly: And fo whileft they feed upon few meats, and thofe of the pureft fort, they purchafe long life, (the reward of fobriety.) Neither are they fo niggardly and fordidious minded, but when as they have gathered more Honey then their number can well fpend, they communicate and impart some very liberally amongg the Drones. As for their cleanlines there may be certain arguments, that they never exonerate nature within their hives, (except contrainfained thereto by fome ficknes, foul weather, and for fome urgent neceffity) that they convey away the dead caftaffles, that they touch no roten nor flinking fheel, or any other thing, no herb that is withered, nor no ill fenfing or decayed flowers.

They kill not their enemies within their hives, they drink none but running water, and that which is thoroughly defepted: they will not dwell in houfes impure and foul, finifh, black, or full of any feculent or decy, efufe, and the excrement of the labourers and fickly, they gather on a heap without their pavilions, and aflon as their leifure felfeth it is carried clean away. Concerning their temperance and challices (although it hath been partly touched before,) yet this I will add, that it is wonderful what fome men have obferved. For whereas all other creatures docouple in the open light of men, the Elephant only excepted, and Wafps likewise not much differing in kind, do the fame: yet Bees were never yet been fo to joyn together, but either within their hives very modeftly they apply themselves to that bufines, or else abroad do it without any witneffes. And they are no less valiant then modest and temperate, *Dum corpora bellos objecunt, pulchrameque petunt per suillum larvalens.* Their war is either civil or forain. Of the former there be divers caufes, that is to fay, the multitude of their Dukes or Captains lying in wait to betray both King and Kingdom: scarcity of victual, ftraightnes of place and room, corruption of manners and idlenes. For if they have no Dukes, then it is expendient (as other whiles it happeneth) they flay the overplus, left the number of them growing too great, either violence might be offered to the King, or the Commons drawn to some feditidion.

They kill them molt of all, when as they have no great flore of young Bees to plant any new Colones, overthrowing and spoiling withall their Honey-combs (if they have any:) They execute alfo Theeves and Drones, fo often as they have not room enough to do their bufines in, (for they hold the more inward part of the Hive,) fo taking from them at one time, both their Honey-combs and meat. The fcarcity and lack of Honey, caufeth them alfo to be at deadly feud,fo that the fhort Bees do encounter the long with might and main. In which the bickering, if the fhort be Conquerors, it will be an excellent Swarm, but if fortune smile on the long Bees side, they live idly, making neuer any good Honey. Whofoever getteth the day, they are fo given to rapine and re-venge,
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venge, as they take no prisoners, nor leave any place to mercy, but commit all to the sword.

Now concerning their longain wars, I must say they give place to no other living creature, either in swiftness, or hardy venturing: and if either men, four-footed beasts, birds, or Wasps, do either hinder, dispute, or kill any of them, so that they be not well contented, against all these they oppose themselves very hourly, according to their power wounding them. They have extremely audacious and fierce, and such men as be in armed with any Ointment, those that have curled or clipped hair (as also all unfaithful and bafe raskally people) and all those that wear any red clothes of the colour of blood: as concombrise they love and reverence exceedingly their Maiters, Keepers, Tutors, Defenders, and Maintainers: so that fitting upon their hands, they do rather tickle and lie them in sporting wife, then either wound or hurt them; though never so little with their wing. Yea their men may safely without any touch of hurt, and without any covering to their hands, gather together the swarms in a very hot Summer; yea, handly, place them in order, heap up together, sit or stand before their Hives, and with a flick take clean away Drones, Theeves, Wasps, and Horses.

If any Souladay looth his wing in fight, like one that had his Sword or Spear taken from him, he presently is discouraged and despaires, not living long, through extremity of grief. Going forth into the field to fight, they lay till the watchword be given, which being done, they flock in great heaps about their King (if he be a good one) ending all their quarrel in one feet barrel. In their order of fighting, how great vertue, courage, strength, and nobleness these poor creatures have, as well we ourselves can cete him, and they better who have assurred us by their writings, that whole Armies of armed men have been tamed by the flings of Bees, and that Lions, Bears, and Horfes, have been slain by means of them. And yet (how fierce and warlike soever they be, by,) they are appeased and made gentle with continual or daily company, and unless they be too much netted and angered, they live peaceably enough without any great trouble, never hurting any one maliciously or deceitfully, that standeth before their Hives. If I should go about to declare at large their ingenuity, natural inclination, cunning workmanship and memory; I should not only give unto them of Virgil: Patricianum urae divinae, but also bauful mens abtree, and (tefet Etybogoric errore,) the Metempscyphous of that ingenious Philosopher. For after that they are inclosed in a clean and sweet hive, they gather out of gum and moist liquor yeelding trees a kind of glutinous fluid, thick, clammy and tough, (called of the Latin, Chemonis, and of the Greeks, Mytis,) especially from Elms, Willows, Canes or Reeds, yeas even from Rones; and this they lay for the first foundation of their work, so covering it all over as with a hard crust as firft, bringing to it afterwards another layer of Piffecres, which is a kind of juice of Wax and Pitch, made with Gum and Robin, and over that again they lay Propolice, which we call Bee-glew.

In that same three-fold title, and sure ground-work thus artificially begun, they do not only laugh to corn, jet at, and mock the eyes of the over-curious spectators of their Common-wealth and works, but that which no man considers, they do hereby defend both themselves and theirs, against rain, cold, small vermin and beasts, and all their enemies. Then after this they build their Combes, with such an Architectonic prudence, that Archimedes in respect of them seems to be no body. For if of all they set up the cells of their Kings and Princes in the higher place of the Honey-combes, being large, fair, tumpous, flately and lofty, being cunningly wrought, of the most tried, purest and refined Wax, trenching them round for the greater defence of the Regal Majesty, with a mould and enclosure as it were with a strong Wall, Bultwark, or Rampiere.

And as Bees in regard of their age and condition, are of three sorts, so likewise do they divide their Cells: for to the most ancient they appoint houses next to the Court, (as those that are the fittest to be of his privy Counsel, and guardians of his Person) next to these are placed the young Bees, and those that be but one year old. And they of middle years and stronger bodies, are lodged in the utmost rooms, as those that are fittest and best able to fight for their King and Country. Yet Aristotle, faith, that Bees in the making of their Tents or Cells, do first of all provide for themselves, and next for their King and his Nephews, and lastly for the Drones. And as in the fabricature of their Honey-combes, they make the fashion according to the magnitude and figure of the place, fashioning it either orbicular, long, square, sword-like, or foot-like, &c. according to their own liking, running out sometimes in length eight foot: so their little Cells contrariwise, are framed after a certain form in a Geometrical proportion and measure: for by rule they are justly Sexangular, and capable enough to hold the tenant.

The whole Combe containeth four orders of Cells: the firft the Bees occupy; the next the Drones poifeel; the third, those that are called of the Greeks, Chadones; of the Latines, Apum taboles, (call them if you please Sabadones.) The laft is appointed for the room of Honey-making. There be some who contently aver, that the Drones do make combes in the same hive the labouring Bees do, but that they lack the skill and power of mellification, it being uncertain whether this comes to pass either through their grossefnes and big-bellied fatnes, or through their feld and natural lazines. And if through the weightines of the Honey the combes begin to shake and wag, and to lean and bend as though they were ready to fall, then do they rear them up, and under-prop them with pillars made Arch-wife, that they may the more readily dispatch their business, and execute their charges, (for it is necessary that to every combe there be a ready way.)
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In some places, as in Pergamum, and in the City of Amisus, Bees make white Honey, without any combs at all, but this is seldom seen. And if a man would consider the rare and admirable contexture and fabric of their Honey-combes, far excelling all humane Art and concert, who would not subscribe with the Poet, Exe Ammian partem divina memine, & longue aliter esse? who will deny them (I say) either imagination, fantasy, judgement, memory, and some certain glimpse of reason? But I will not dispute of this, neither am I of Pythagoras minde, who conceived that the souls of wise men, and of other ingenious creatures, departed into Bees. But whoever will diligently examine how they divide their labours, as some to make up the combs, some to gather Honey, to keep together their meat, to trim and dress up the houles, to cleanse the common draught, to under-shore the ruinous walls, to cover those places wherein any thing is to be kept, to draw out the very strength of the Honey, to digg it, to carry it to their cells, to bring water to the thirsty labours, to give food at last and appointed hours to the old Bees that fit to defend their King with such over-flight and painful regard, to drive away Spiders, and all other enemies; to carry forth the dead, (that no stink or ill favour hurts,) every one to know and go to his own proper cell, and generally, all of them not to stray far from home to seek their living; and when the flowers arespent neer their lodgings, to send out their espials to look for more in places further distant, to lie with their faces upward under the leaves when they have fet forth any voyage by night, left their wings being much moistened by the dew, they should come tardy home the next day; to balance and poyle their light bodies with carrying a flone in stormy weather, and when there is any whirl-winde, to fly on the further side of the hedge, for fear lest either they might be disturbed, or beaten down by the boylerous violence thereof. Whosoever (I say) will duly consider all this, must needs confefs, that they observe a wonderful order and form in their Common-wealth and government, and that they are of a very strange nature and spirit.

I had almost omitted to speake of that natural love which they bear to their young, a great vertue, and seldom seen in the parents of this age. For Bees doe fit upon their combs (when they have laid their increase) almoft like unto birds; neither will they thr from thence but in case of pinching hunger, returning out of hand to their breeding place again, as though they were afraid lest by any long stay and abstinence, the work of their little cell might be covered over by some Spiders web (which often happeneth) or the young by taking cold might be endangerd. Their young bees not be very nice or tender, nor cockerelly brought up, for being but bare three days old, as soon as ever they begin to have wings, they enjoy their task, and have an eye to them that they be not idle, though never so little. They are so excellent in divination, that they even feel aboard, and have a lene of rain and cold that is to come, for then (even by Natural instinct) they flye not far from home; and when they take their journey to seek for their nectar, (which is never done at any set and ordinary time, but only in fair weather) they take pains continually and diligently without any flay, being laden with such plenty of Honey, that oftentimes being over-wearyed, they faint in their return to their own private cottages, not being able to attain them. And because some of them in regard of their roughnes are unfit to labour, by rubbing their bodies against flones and other hard matter they are smoothe, afterwards addressing themselves most floutly to their busines. The younger sort behir them right doubtfully without dores bringing to the hive all that is needfull. The elder look to the family, placing in due order that Honey which is gathered and wrought by the middle aged Bees. In the morning they be all very filent, till one of them awaken all the rest with his chrice humming noye, every one bullting himself about his own proper office and charge. Returning at night, they are as it were in an uproar at the first, and after that they make a little muttering or murmuring among themselves, until the principal Officer appointed for the setting of the watch, by his flying round about, and his softe and gentle noyse, doth as it were covertly and privily charge them in their Kings name to prepare themselves to rest; and so this token being given, they are as silent as fishes, so that laying ones ear to the mouth of the hive, you shall hardly perceive any the least noye at all: so dutiful they are to their King, Officers, and Rulers, repoling themselves wholly in his books, favour, and pleasure. And now I will intreat of their excellency and use.

Whereas the Almighty hath created all things for the use and service of Man, so especially among the rest hath he made Bees, not only that they should be unto us patterns and prefigualds of political and economical vertues, (of the which before I have discoursed) but even Teachers and School-masters instructing us in certain divine knowledge, and like extraordinary Prophets, premonishing theucces and event of things to come. For in the years 90. 98. 113. 208. before the birth of our bleffed Saviour, when as great swarmes of Bees, lighted in the publique and Ox-maker, upon the houses of private Citizens, and the Chapell of Mass, many conspiracies and treasons were intended against the State at Rome, with which the Common-wealth was weignly deceived, infinuaded, gored and overthrown. In the days of Severus the Emperour, Bees that swarmed in the Environs, banners and standards of the Souldiers, and almost all of the camp of Niger, after which enufi given, confiding betwixt the Armies of Severus and Niger, Fortune for a time imparting her favours equally to them both, but at length Severus side carried away the bucklers. Swarmes of Bees also filled the Statues which were set up in all Hestoria, representing Antonius Plus, and after that they fell in the camp of Caius, and what hurly bursly after that followed, Julius Caecilius will resolve you. At which time also a great number of Romans were intrapped and slain by an ambusc of Germans in Germany, P. Fabius and Q. Elius being Confuls. It is written that a swarm lighted
lighted in the tent of Hesilius Butilius, who was in the Army of Drusus, and did there hang after such a manner, as they did enclose round his Spear which was fastened to his Pavilion, as it had been a rope hanging down. M. Lupidus and Munatius Plancus being Consuls. Also in the Consulship of L. Paulus and Caius Metellus, a swarm of Bees flying up and down, presaged the enemy at hand, as the Soothsayers well divined. Pompy likewise warning against Cesar, when for the pleasing of his Cæsars, he had let his Army in array, going out of Dyrbachium, Bees met with him, and darkened even the very Ancients with their great multitude. We read in the Histories of the Hebrews, how that in the year of our Lord 1385, when Leopold of Augrihich prepared to go against Semypach with an Host of men, being yet in his journey, a swarm of Bees fled to the Town, and there rested upon a certain great Tree called Tilia; whereupon the vulgar fort rightly foretold the coming of some strange people to them. So likewise Virgi in the seventh Book of his Äneis, feemeth to describe the coming of Äneas into Italy after this manner.

Lauri

Examen subito ramo frondente pendit.

Adventae virum.

Stridore ingenti liquidum trans atbera viete

That is, a tale of wonder to be told, there came a swarm of Bees, which with great myse within the air a Bay-tree did attain, where leg in long they crept fast, and top of all degrees. O're-spread, and suddenly a bine of them remained there hanging down: whereas the Prophet said, some stranger here shall come to us all afraid.

Which thing also Herodotus, Pauflanias, and divers other Historiographers, have with greater observation then reason confirmed. Láun Acouchmèns, when he could not finde the Oracle of Strophium, by a swarm flying thither he found the place. In like fort, the Nurés being abient, Jupiter Mettius, Hiero the Sycophant, Plato, Pindaris, and Ambrus, were nourished by Honey, which Bees by little and little put in their mouths, as Pitharcb, Pauflanias, and Textor are Authors. Xenophon likewise in his Oeconomiky, termeth Honey-making the Shep of virtues, and to it tendeth mothers of Houfholds to be instructed. Poets gladly compare themselves with Bees, who following Nature only as a School-miferesse, woth no Art. So Plato faith, that Poets ruled by Art, can never perform any notable matter. And for the same reason Pindaris maketh his brags, that he was superior to Bacchides, and Simonides, having only Nature, not Art to his friend. Bees unlesse they be incendi to anger, do no hurt at all, but being provoked and shirred up they flyng moft sharply: and fuch is the disposition and natural inclination of Poets; and therefore in his Mino strictly enjoyeth, that those who love their owne quiet, must take great heed that they make no wars either with Poets or Bees. Finally, they have to many virtues which we may imitate, that the Egyptians, Chaldeans, and Grecians, have taken divers Hieroglyphicks from them. And he that will read over Picius, shall there finde flore of Emblems of them.

The Country people in like manner have learned of them Acromantie, that is, Divination of things by the air, for they have a fore-seeing and understanding of rain and winde afoot, and do rightly prognosticate of storms and foul weather; So that then they flye not far from their own homes, but fuitain themselves with their own Honey-fuck already provided. Which being true, we mutt then think it no strange matter, that Aristim, Philius, Arifom тысяч Solenfic, Menus the Summit, and fix hundred others that have wite of the Nature of Bees, bidding adiew to all tho pleasures and delicacies that are found in Cities, for fifty and eight yeeres space together, inhabited the Woods and Fields, that they might more exactly come to the knowledge of their order of living, and natural dispositions, leaving it as a monument for posterity to imitate. But what their bodies do work in ours, I judge worth the labour and pains taking to let you understand, that we may be averse there is nothing in Bees, but maketh to the furtherance of our health and good.

First therefore, their bodies being taken newly from the hives and bruised, and drunk with some Medicinal ufe diuertical wine, cured mightily the Dropifie, breaketh the stone, openeth the obstructed passages of the Urine, and helpeth the suppression thereof. Being bruised, they cure the gripings and gripings of the belly, if they be laid upon the place affected: and if any have drunk any poynous Honey, Bees being likewise drunk do expell the same. They mollifie hard ucles in the lips, and being bound to the part, they cure a Carbuncle and the Bloody-flaxes, amending alfo the crudity of the flomack, and all spots and flecks in the face, being tempered with their owne made Honey; as both Hollicius, Alexandcr, Benedicit, and Pliny have written.

Gaen affirmeth, that if you take live Bees out of their Combes, and mix them with Honey wherein Bees have been found dead, you shall make an excellent Ointment to be used against the shedding and falling of the hair in any place of the head, causimg it to grow again, and come shrest. Pliny again willeth us to burn many Bees, commixing the ashes with Oyl, and therewith to anoint the bld places; but we mull (faith he) take great heed that we touch no other place neer adjoyning. Yea, he affirmeth, that Honey wherein is found dead Bees, is a very wholesome medicine, serving
Bees also are very profitable, because divers living creatures are nourished by, and do feed full
favourably on their Honey, as the Bear, the Badger or Brock, Lizards, Frogs, Serpents, the Wood-
pecker or Eat-bee, Swallows, Lapwings, the little Timtoume, which of some is called a Nanne, be-
cause his head is filletted as it were Nun-like, the Robin-red-breast, Spiders, and Wasps, as Bellonius
hath well observed.

But to what end (you will say) serveth their sting, against whose poison Pliny knew no remedy?
I must needs confess truly that which cannot be denied, that the stings of Bees are sometimes
venomous, but that is when either they are mad and raging, and be exceedingly disquieted by
means of anger, or some vehement Fever, for otherwise they do not sting. But prick but a little:
and therefore Dioscorides never made mention of the stinging of Bees, supposing it very unmeet for
a man to complain of so small a matter as the sting of a sily Beel. But yet they that have ac-
ceeded him, have observed pain, redness, and swellings, as companions and effects of their ma-
lice, especially if the sting do stick in the flesh, which if it do very deep, then death hath sometimes
followed, as Nicander writeth in his Theseeus. In like manner the people of the old World (that
we may prove the sting of Bees to be converted to some good use) did (as Suidas writeth) puni
those persons who were found guilty of coulenage, and deceitful counterfeiting of merchandise,
alter this sort: First, they stripped the offender stark naked, anoynting his body all over with Ho-
ney, then setting him in the open sun with his hands and feet fast bound, that by this means being
tormented with Flies, Bees, and scorching beams of the Sun, he might endure punishment, pain,
and death, due to his lewd and wicked life. With which kindes of punishment and torture, the
Spaniards doe grievously vex the poor naked Indians of America at this day, (now called the Weh-
Indies) who are under their rule and government, not for jullice Jake, (as those Ancients did) but for
satisfaction and fulfilling of their barbarous wills, and basely tyranny, that they might seem to be
more cruel than cruelty it self.

Nama faith, that if the herb Balm (called Apialetum) be beaten, and anoynted with Oyl upon
the stung place, that there will ensue no hurt thereby. Florent w. counselleth the gatherer of Ho-
ney, to anoynt himself with the juice of Marsh-mallowes, for by that means he may safely and
without tear take away the Combes. But the juice of any Mallow will do as much, and especially
if it be mixed with Oyl; for it doth preferveth from stinging, and besides it remedieth the stings.

But admit that Bees by their stinging do vexe and diserte us, yet notwithstanding the dead Bees
so found in the Honey do speedily bring cure to that hurt, if they be duly applied, abating and ta-
kings away all the pain and pyoin. What should I say? No Creature is so profitable, none leffe
sptomptous. GOD hath created them, and a little money and coft will maintain them, and small
provision will content them. They live almost in all places, yea, even in Forresets, Woods, and
Mountains; both rich and poor by their good husbandry do gather good customes and pensions by
them, they paying (as all men know) very large rents for their dwelling houses; and yet for all their
tribute they pay, a man need neither keep one servant the more for the gathering of it, nor set on
pot the oftner. Merula faith, that Varro gathered yearly five thousand pound weight of Honey :
and that in a small Village of Spain, not exceeding one acre of ground, he was won to gain by Ho-
ney there gathered, ten thousand Sefterties, which is of our English Cyn about fifty pounds.
We are furnished also out of their work-houses or Shops, with Waxe, Sandarax, Bee-glee, Combs,
and dregs of Wax, which no Common-wealth can well spare. To speak nothing of the examples
of their vertues and noble properties, being no leffe wholesome for the soul, then these others are
for the good provision and maintenance of our life, and for nourishment of our bodies necessaries
and commodious.

Now for the confusion of Bees, it is very meet (as Pliny writeth) that we come by them law-
fully, and by honest means, that is, either by gift, or by buying of them; for being taken away by
theft, they will not prosper with us: even as the heare called Rue being ilone, will very hardly
or never grow. Furthermore, to keep these good pay-masters, and to make them to love in you, you
must remove from their Hives mouths, unluckly, mischievous, and deceitfull people, and idle
persons, yea, and have nothing to do, causeth them to stand further off: As all to those that are di-
flayed with wholedome, or infected with the disafe called Gongrorhea, or the fluxe of menstrues,
bathes, or any thing that smellet of smook, mud, dung, or orudence of Cattell, men or bea,
houses of Office, shops, or kitchens. Mundifie and correct the air oftentimes, infected with the
breath and vapour of Toads and Serpents by burning of Balm, Thyme, or Fennel; having great
care to keep them neat, clean and quiet. Destroy all Vermine, and seerers to prey upon their Ho-
nay, robbers, pillers and pollers, and if at any time they be sick, give them phylrick.

Now the signs of their unhealthinesse, as of all other living creatures, are known by three
things; that is, from the action offended, the outward affect of the body, and excrements. For
their cheerfulnesse being gone, flaggers dulnesse, a giddy and vertiginous pace, often and idle stand-
ning before the mouth of the Hive, lack of strength, weariness, litchenesse, languishing, and want
of spirit to do any businesse, detestation of Flowers and Honey, long watchings, and continuall
sleepings, unaccustomed noyes and hummings, are sure arguments, that Bees are not in good
health. As alio if they be somewhat rough, not fine and trim, dry and unpleasant in handling,
not soft, harf, and rugged, not delicate and tender, if their Combes be infected with any manner of
of filthy, corrupt, and noyome favour, and that their excrements melt, thinke, and be full of worms, carrying dead carcases daily out of their houles, that they have no regard to their Bees and Bee-hives, it is a certain token that they are sick, and that some epidemical, general Petholence or plague rages amongst them, whereof that famous Poet Virgil hath very elegantly, but confusely touched some part, in the fourth Book of his Georgickes, in these following Verifies.

"Si vero (quantum lapsus Apibus quoque nofris
Vita tulit) tristis languentur corpora morte,
Iud non dubia poterit cognoscre signa.
Continuus est aegris alius color, borrida vultum
Deformat macies, tum corpora lucem non ausent.
Exportant telis, & tristis funera ducunt.
Aut ille pedibus connexa ad limina pendebit,
In English thus:

The life of Bees is subject unto fall,
Their bodies languish with disdised sad:
This by undoubted signs discern you shall,
Their bodies then with other colour is clad.
A baneous rough dust then deform their face,
Then doth the living bring dead bodies out,
And for their felowers make a funeral place,
Morning sad excites their dwellings all about.

And so the sicknesses of Bees being evidently known, plainly perceived, and cured, they will live many years, although Aristotle, Theophrastus, Pliny, Virgil, Varro, Columella, Cardan, and finally all Authors, would make us believe, that they seldom attain to nine years, but never to ten. Although we know by good experience, knowledge of place, and the credible attestation of men worthy belief, that they have lived thirty years. Which only reason hath induced me to believe, that Bees (even by Natures appointment) are long lived, and that only with Albertus I only doubts, whether they die by means of old age.

I am not ignorant, how they are made away with the rage and violence of diseases, and other enemies, but if they have all things furnished fit for the preservation of their life, and prolongation of health, and the contrary far from them, I know no reason but that I should conclude them long lived, yea, more durable then any other living Creature, and never to die, but that i may not deny their time and turn to be mortal. For they only do feed upon Honey, that immaterial Nectar, sent from heaven, and gathered from a divine dew (the very life and soul of all herbs, fruits, trees and plants.) Of whose nature, use and excellency, if you would know more, I must referre you to the learned writings of Physitians.

Of Bees called Drones and The Evans.

A Drone or a Dran in English, is of the Latines called Fucus, of the Greeks Kephon, and Thronos, of the Tyrianc Caesae, of the Germanic Trenemus, of the Belgic Scenoricis, of the Spaniards Zangane, of the Italic, Apo che non fa mele, of the French Baradon, and Fabelon, of the Pannonians (now called Hungarians) Here, of the Polonians Caesaeus. This kinde of Bee is called Fucus, as some think, quasi Furs, because he doth fortimella dwetore, devour Honey by stealth: although it be more agreeable to truth that it is termed Fucus, because he doth Apibus Fecum fraundique fature: And through the colour and pretence of keeping warm the Hives, he helpeth their flock and undoes all their Honey-making. And therefore for some to derive Fucus the Latin word from Plouzmai the Greek, feemeth to be farre fetched: Some again will draw Fucus, de suendo, quia infodendo supra juvet fascias, and this in my mind is as harshe as the former.

Many men make the Drone to be one of the four sorts of Bees, which is very unadvisedly done, as some would make us believe: Because they belowe no pains in gathering the Honey, nor labour on it throughly to have it perfectly wrought. He is twice so great as the common Bee, and greater then the Thief, so that in bignessee he eveneth, yea, surpasseth the King himselfe: and yet he attaineth unto this greatnesse, not by the gift of Nature, but by his custom and trade of life. Whereas as Bees do prepare and make the Cells for the breeding of Drones: they make them leafer then the Drones, and not here and there through the Hive, but only in the uttermost, and as it were in the banished or most out-cast place of all in the whole Camp and lodged Army. Besides, the small Worms of the Drones are far smaller at their first bringing forth, then those that are of the Kingly race, and lineage of their Dukes: Who yet at length grow greater then any of them all, in regard that by labour and travail, they waste and diminish nothing of superfluus matter, and those grousse humours, wherewith they abound, as also that both day and night (like Oxen lying at Rack and Manger) they glutonously raven and fluffe themselves with the Honey-liquor, which they again pay for full dearly, in time of any general dearth and scarcity of victual and provision.
Further this is to be added, that the Drone is of a more shining black colour then the true labouring Bee, he is also greater then the greatest, without sting, sluggish, idle, slothful, without heart or courage, cowardly, and unapt to war, not daring to venture life and limb in manly Martial trade, as the true legitimate Bees will.

Aristotle faith, that they breed and live amongst the true Bees, and when they fly abroad, they are carried flatteringly, here and there aloft in the air as it were, with some violence or tempest; so exercising themselves for a time, they return from whence they came, there greedily feeding upon the Honey. Now why the Drones may be compared with the Dukes and Princes, in respect of their corporeality, and Bees like unto them in their sting, let us hear Aristotles reason. Nature would (faith he) there should be some difference, left always the same stock should encrease one of another confusedly, without order or consideration, which is impossible: For so the whole stock would either be Dukes or Princes. And therefore the true Bees in strength and power of engendering, and breeding, are comparable to their Dukes, and the Drones onely in greatness of body resemble them: to whom if you allow a sting, you shall make him a Duke. Thee Drones further of the Greeks are called Colours, because he puttheth not forth any sting: whereof Herodotus hath thefe Verites thus interpreted;

Huius vero Dii succensent & homines quiunque otiosus
Virtus, factis ac acutis carentibus similis studie,
Qui sum omni laborum absuant otiosi
Vorantes.

Both God and men disdain that man
Whose Drone lies in the hive,
Nor good, nor ill, endeavor can
Upon himself to live,

In English thus:

Eat idle is, and without sting,
And gives the labouring Bee

Deserving that which be borne brings,

Not yielding help or fee.

So that either he hath no sting at all, or else maketh no use of it for revengement. Pliny faith flatly, that they are fingleffe, and would have them called imperfect Bees, and the famous Poet Virgil styleth them, Ignorum pres: that is, idle, and unprofitable, good for nothing. Columella maketh them a race or flock of a larger size, very like unto Bees, and accounteth them very aptly to be placed in the rank of ordinary forts of Creatures, of the same kind and company with Bees. They suffer punishment and are scourged many times in the whole Bee-common-wealth not only for pretence of idlenesse, glutony, exortion, and ravenous greediness, to which they are too much addicted; but because lacking their sting, and by that defect, being as it were emasculated, they dare not shew themselves in public.

Pliny doth not express their nature and quality. The Drones are fingleffe and so to be reckned imperfect Bees, and of the basest sort, taking their Original from tired and worn out Bees, and such as be past labour and service, living only upon a bare pension: we may call them the very slaves and bond-men of the true Bees, to whom they owe all due homage and subjection, wherefore they exerce their authority over them, thruting them first out of doors by head and houlders, like a company of drudges to their work; and if they be any thing negligent, not behirring themselves quickly and lively, they give them correction, and punisheth them without all pity and mercy. For in the moneth of June, two or three Bees (especially of the younger sort) will hale out of the Hive one Drone, there beating of him with their wings, pricking and tormenting him with their wings, and if he offer any resistance to their Lordly rule, then they violently call him down from the shelf or step whereon he holdeth, down to the earth as though they would break his neck. Thus when they have glutted their wills, and punished him at the full, they at length put him to a shameful death, all which we have often beheld, not without great admiration and pleasure.

Sometimes the Drones remain like banished persons, before the entrance of the Hive, and dare not venture to preff in. For three caues specially the Bees do drive and caull out the Drones: either when they multiply above measure, or when they have not place enough left for their labourers, or that they be pinch'd with hunger and famine, for lack of Honey. And as they carry a deadly hatred against the Drones, so to make it more apparent they will not hurt such persons as offer either to take away with their bare hands any of the Drones, and to caull them away, yet though they be in the greatist heat of their flight. Aristoile in his ninth Book, De Bibls. Animal, Cap. 40 affirmeth, that Bees are engendred apart one from another, if their Captain liveth: but in case their King and Captain dies, some day they breed in the Bees Cells, and that of all others of this kind, they are the most noble and courageous.

The young Drones are bred without any King, but the true younger Bees never: for they derive their Original and stock from the Kingly flock. Some will say that the young Drones do fetch their Original from the flowers of the herb Cerinthe (described by Pliny, which is a kind of Honeyfuckle, having the taste of the Honey and Wax together) from the Olive tree and Reed, but this opinion is weakly grounded, and standeth upon small reason.

Aristotle affirmeth, that they proceed from the longer and bigger Bees, yea, and thole that are termed Thieves: which without question he received either from the ancient Philosophers, or some
some others that had the charge and were skilful of ordering Honey, that lived in his time. Some will have them to breed and come from putrefaction, as Hidrae from hydrating and putrefied Mules; Cardan from Alces, Plutarch and Servius from Horces. Other some are of opinion, that they first proceed of Bees, and that afterwards they degenerate bawdlardike from them, after they have lost these things, for then they become Drones; neither are they afterwards known to gather any Honey, but being as it were deprived of their strength, they grow effeminate, ceasing either to hurt, or to do any good at all.

Some again hold the contrary side, affuring us upon their knowledge, that the true labouring Bee fetheth his beginning from the Drone, because long experience (the Medres of Wildrome) hath taught us, that there is yearly known to be the greater swarm, when there is the greater multitude of Drones. But this to me seemed rather the devise and invention of some curious brain, than any true grounded reason. For because that many Drones breed (as it cometh always to pass in good and plentiful years) therefore there should be greater swarms, is no good confeguent: but contrariwise, because the multitude of Bees do greatly increase through the moderatenesse of the pure air, and the plenty of the Honey-dropping dew, and through the abundance of this mellifuous moisture, there must needs follow a greater foison and flower of Drones: as the Philosopher hath well observed. But admit that this be true, that whereas there is the greater increase of Drones, there should yearly ensue the more swarminings: yet must we not thereupon conclude, that Bees do owe, and ought to ascribe their first original from Drones, but rather that they are indebted and bound in honesty to the Drones, because in time of breeding, they give much warmth and comfort to their young, (as Pliny lib. 11. c. 11. faith) conferring upon them a lively heat, fit for their increase and prospering. Some divide them into male and female, and that by coupling together they make a propagation of their kind, although (as Athenaeus writeth) neither Drones nor Bees were ever yet seen of any one to couple together.

But whereas Wasps, Hornets, and other Cut-wafted creatures that make any combs, and breed in the same, have been sometimes (though feldom) seen, both by us and Aretin, to joyn together, I can surely see no caufe why we should utterly take from them the ufe of Venus, though in that respect they be very model and moderate.

I have before in the discourse of their generation, laid, that the Bees do make the male kind, and the Drones to be but the female; but fith that in the of Honey-making they punifh them fo sharply after they have ejected them from poffeflion firft, fo that afterwards they put them to death, I can hardly be induced to believe that the Drones are but the female kind, considering that one thing wouldiffe and overcall all those replendent vertues which all men know to be in Bees, to deal thus cruelly with their Parents. To what ufe therefore ferve they in Hives? Seeing Virgil in the fourth book of his Georgics thus describeth them;

\[\text{Immutaque felifens aliena ad pabula fove.}\]

That is to fay;

\[\text{The Drones or free and bold doth fit,}\]
\[\text{And naft of others food commit.}\]

Where Pefius taketh Immutaque, for lazy, idle, unierceivable, unprofitable, and fuch as are nothing worth, except perchance after the guifte of wicked men, they fo serve their own turns, as to live by the sweat of other mens labours, and to bring out of order, or utterly fook to overthrow the whole frame of the Common-wealth.

But the most approved Authors set down divers good ufe of Drones. For if there be but a few of them among the Bees, they make them the more careful about their affairs, and to look more duly to their task: not by their good example, (for they live in continual idlenesse) but because they might continue their liberality towards strangers, they work the more carefully in their Honey-shop. And (if Bartolomeum do not deceive us) thefe Drones be not altogether idle: but they employ themselves about the building of the Kings Houfe, which they make large, flately, and very fumptuous in the higher and middle part of the combs, being very fair to fee in respect of their covering.

So then they are but lazy, in respect of Honey-making and gathering: but if you look toward their Art or Science of building, they are to be accounted excellent devifes of the frame and chief Masters of the whole work. For as the Bees do fashion out the combs of the Drones nigh the Kings Palace: so again, for the like counterchange of kindenesse, the Drones are the sole inventors, and principal work-masters of the Kings Court; for which caufe both they and their off-spring, kinfolks and friends, (if they have any) are bountifullly rewarded of the whole flock of Bees, by giving them frankly and freely their diet and maintenance which coltheth them nothing.

The Lockers or holes of the up-grown Bees, are somewhat too large; if you respect the quantity of their bodies, but their combs leffer; for thofe they build themselves, and thofe other are made by the Bees, becaufe it was not thought convenient and indifferent, to great a portion of meat to be given to fuch vile labouurers and hirelings, as was due to their own fons and daughters, and thofe that are naturally fubjects.

The other Greeks do besides affirm, that the Drones are the Bees Butlers or Porters to carry them water, afcribing moreover to them a gentle and kindly heat, with which they are faid to keep warm, cherifh and nourifh the young breed of the Bees; by this means as it were, quickening them, and adding to them both life and strength.

\[\text{K k k}\]
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The same affirmeth *Coloptera* in their words. The Drones further much the Bees for the propagation of their issue, for they sitting upon their kind or generation, the Bees are shaped and formed to their figure, and therefore for the maintenance, education, and defence of a new issue, they receive the more friendly entertainment. And *Pliny lib. ii. c. ii.* differeth not from him. For not only they are great helpers to the Bees in any architectural or cunning devised frame (as he saith) but also they do good in helping and succouring their young, by giving them much warmth and kindly heat, which the greater it is (unlesse there be none lack of Honey in the mean space) the greater will the swarm be.

In sum, except they should stand the Bees in some good stead, the Almighty would never have enclofed them both in one house, and as it were made them freemen of the same City. Neither doublethee would the Bees by main force violently break in upon them, as being the sworn and professed enemies of their Common-wealth, except when their flavish multitude being too much increased, they might fear some violence or rebellion, or for lack of provision: at which time who feeth not, that it were far better the Maker work-men, free Masons, and Carpenters might be spared, then the true labouring Husbandman, and tiller of the earth? Especially since that milking these, our life is endangered for lack of meat, and other necessaries, and those other for a time we may very well spare without our undoing, and for a need every one may build his own lodging. But as they be profitable members, not exceeding a flinted and certain number, so if they be too many, they bring a picknife called the Hive-evil, as well because they consume the food of the Honey-making Bees, as for that regard of their esteem heat, they choke and suffocate them. This diseafe is by the Author of *Geoquyicon* thus remedied. Moitified with water inwardly the lid or covering of their Hive, and early in the morning opening it, you shall finde Drones sitting on the drops that are on the covers, for being glutted with Honey, they are exceeding thirsty, and by that means they will stick falk to the moist and dewie places of the cover: So that with small ado, you may either destroy them quite, or else if you please, take away what number you lift your self. And if you will take away withall their young, who are not yet winged, and first pulling off their heads throw them among the other Bees, you shall bellow on them a very welcome dinner. But what the welling of Drones portended, and what matter they minifter in the Hieroglyphical Art, let *Apomnecur* reveal and disclose out of the Schools of the Egyptians and Persians. I think I have discharged my duty, if I have set down their true ues, true nature, generation, degeneration, description, and names.

*Fur in Latin, or Theef in English,* is by *Arystote* called *Phoer,* of *Hefockian Phoerist* : from whence I take the Latin word *Fur* to be derived. Some have thought that Theeves are one proper sort of Bee, although they be very great, and black, having a larger belly or bulk then the true Bee, and yet leffer then the drones, they have purchased this theevish name, because they do by theft and robbery devour Honey, belonging to others, and not to them. The Bees do easily endure, and can well away with the presence of the Drones, and do as it were greet and bid one another welcome, but the Theeves cannot endure, in regard that the Bees do naturally hate them, for in their absence the Theeves privately and by stealth creep in, there robbing and consuming their treasure of Honey, so greedily and haidly (without chieving) swallowing it down, that being met withall by the true Bees in their return homewards, and found so unwelie by means of their fulnes, that they cannot get away, nor able to refit, but are ready to burn again, they are fiercely punisht, and for their demerits by true Justice put to death. Neither thus only do they prodigally consume and spend the Bees meat, but also privily breed in their cells, whereby it often cometh to passe, that there are as many Drones and Theeves, as true and lawful Bees.

These neither gather Honey, nor build houes, nor help to bear out any mutual labour with Bees: for which caufe they have Watch-men or Warders appointed to observe and oversee by night such as are over-wearied by taking great and undefatigable pains in the day time, to secure them from the Theeves and Robbers, who if they perceive any Theeves to be floln in a doors, they presently set up, on him, best, and either kill him outright, or leaving him for half dead, they throw him out. Oftentimes also it happeneth, that the Theeves being glutted and over-cloyed with Honey, cannot fly away or get himselfe gone in time, but lyeth wallowing before the Hives entrance, until his enemies either in coming forth or returning home do so finde him, and so with shame, discredit and scoffing frown flay him.

*Arystote* appointeth no office, charge or businesse to the Theefe, but I think that he is ordained for this end, that he might be as it were a spur to prick forwards, and to whe and quicken the courage of the true Bees, when the other offer them any injury: and to flir and to encourage them to a greater vigilance, diligence, and doing of right and justice to every one particular. For I cannot see to what other purpofe Theeves should serve in a Christiant Common-wealth, or what ufe might be made of such as lie in wait to displease, and practice by crafty feche, ambithes, and deceitfull treacheries to wound their Neighbours, either in their elimination, credit, or goods. Thus having at large discoursed of the lefe hurtful and stinging sort of Bees, I will now apply my self to a more luttful, teuly, angry, Wafipht, and implacable generation, more venomous then the former, I mean Wafps and Hornets.
A Wasp of the Chaldeans is termed Delbrine. Of the Arabians, Zambor. Of the Englishmen a Wasp. Of the Germans, Ein Weisse. Of the Belgics, Harzel. Of the Gobiers, Bonzirong. The common people of Italy term Vespa, and some of them do usually call it Mosconi, and the Bene- 
mark, Velpes. The French, Guappe, The Spadardi, Aspres, and Vespas, imitating the Latines, who 
call it Vespa. The Polesants, Offa. The Selavonians, Woff. The Hungarians, Daras. Calpeine faith, 
that it is called Vepaqua vesperi moscon venatur in cibum. The Greeks do also name them diversly, for 
commonly they are called Spokes. The Schoiailist of Nicander calleth them Lucowsiks; and Suidas, 
Delaius, and Delphes. Of Hebrus, Auleus, and Passifores; and Grecs naymeth them Ambreus: 
for these ought rather to be called Bees: Exiabritus deriveth Term Spexus, apx tris deslujogen, because 
they seem to be so much cut tinder the waffe or middle, as that they seem to gaze and to be clean 
cloven asunder, as by the figure here fet before your eyes you may plainly perceive. A Wasp is 
a kind of insect, that is fruit, living in rooms and companies together, having somewhat a long body 
encircled, with four membranous wings, (whereof the two former are the greatest) without bloud, 
flung inwardly, having also six feet, and a yellow colour, somewhat glittering like gold, garnithed 
with divers black spots all over the body in form of a triangle. Whereupon peradventure This 
would needs have it called Disphrus. 

The body of a Wasp seemeth to be fastened and tyed together to the midst of the breast, with a 
certain thin fine thread or line, so that by means of this disjoynd, and not well compacted compo-
sition, they seem very feeble in their loins, or rather to have none at all. Whereupon Aristophanus 
the Greek, Poet, in his Comedy, entituled Spheces or Waps, tearmeth all those Mids which are fine, 
slender, and pretty small in the waffe, Sperateus, resembling them to Waps, as if one should call 
them Wasp-waited-wrenches, whom Terence very quaintly and elegantly tearneth Spernos, that is, 
slender, long, and small, like to a Bulrush. I think that all the whole pack of them have flings in ge-
neral, although I am not ignorant that some Authors hold the contrary, affirming that the breeding 
female Waps do want them: but thus much I can fay of my own knowledge, that on a time 
finding a Waps net, and killing them ever one by pouring hot scaling liquor into their holes, 
because I would bolt out the truth, I plainly perceived by long viewing of their bodies, that there 
was not one of them all but had a fling, either thrust out evidently, or closely and secretly kept and 
covered. So that:

Quid nobis certa dvis est
Sensibus esse potest, quoe verae se falsa venum?

In English thus;

What can more certain be then sense,
Discerning truth from false pretence?

They make a found as Bees do, but more fearful, hideous, terrible, and whistling, especially when Lucretius, 
they are provoked to wrath; from whence Therestus inteacheth this prover, Spexis bombonm trettus 
venation, that is, Scelit obtirruman atmunda espisa viensa: and this old fald Saw may well be applied to 
those who being themselves unlearned, will not fick to cry out, exclaim, and procure trouble to thole 
that be more learned: or to such as be weak, feeble, and impotent persons able to do nothing, that 
will offer to contend with their betters and Superiors with their brawling speeches, and spirituall 
raylings. And this Latin proverb carryth the fame fense, Canina lemmn adieritum.

If you will have the gifts and ornaments of their minds described, you must consider that a Wasp 
is a creature that liveth in companies together, one with another, subject to a civil government un-
der one King or Ruler, indeltrious, mutual friends one to another, ingenious, crafty, suble, quick, 
and cunning, of a very quarrelsome nature, and much subject to anger and retiliness. This is a good 
Argument of their Civil and Political manner of life, in that they live not solitarily in a Deer or 
Wilderness where no man keepeth, but they build for themselves a City, both excellent and admi-
orable for the notable buildings and houses in it, where they spend their time (for the moft part) ac-
cording to the mutable and never-failing laws of Nature, observing and keeping ever the Golden 
mean, as well in their daily tasks, as in their dispositions and affections of mide.

Besides, they are governed with a Kingly, not with a tyrannical government, (as Elianus 
faith) although by nature they are great fighters, eager, boylerous, and vehemently temperate-
ous: and he is led to fay this, because their Dukes or Generals are wingles, or rather having flings 
as their subjets, they will not use the fame to the hurt of their inferiors, by thruffing it forth, or 
striking in paffion.

Now although they be twice so great, and harder and rougger then the other Waps, yet 
are they not unfinishd of the vertue of patience and clemency, or gentle and debonair behav-
our, by which means they keep in order, and contain in their lils, as it were by gentle langue, 
their unruly rout, and mutinous companies. There is no man but will confede, that this is an 
evident token and argument of their mutual love, and great good liking which they bear one to 
another: for whofoever dare be so knock-hardy as to come near their houses or dwelling places

K k k 2 where
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where they have to do, and to offer any violence or hurt to the same, at the noylfe of some one of them, all the whole swarm rusheth out, being put into an amazed fear, to help their fellow. Citizen, and do so busily betrifh themselves about the ears of their molefters, as that they fend them away packing with more then an ordinary pace: and if we will credit Euhistus, the Phenof-

lies in times past were condemn'd to forfakke their City, for all their defence, munition, and Ar-
mour, only through the multitude and cruel fiercecffe of the Wafps, wherewith they were annoyed.

Again, this manifeftly proueth that they want not a hearty and fatherly affection, becaufe with more then hercillif courage and invincible fury, they fez upon all perfons, of what degree or quaf-

ity forever, that dare attempt to lye in wait to hurt or defoy their young breed, no whit at all dreading Neptolemus, Pyrtius, Helcor, Achilles, or Agamemnon himfelf, the Captain generall of all the whole Grecians, if he were prefent. Yea, the Divine Poem Homer, in 12. lib. of his Iliads, when he would exprife the haughty and generous spirits of the Grecifh Cheifains, he likeneth them to Wafps in these words, Spekoffa ajalios traden kai Toumon ebouphi, that is, having the hearts and flomacks of Wafps, when they are to fight for their private dwellings, their dear Progeny and off-

spring. The love that Bees carry to their issue is great, but it cannot be greater then that of Wafps, neither can they have a greater promptitude, alacrity, or defire to defend their young ones, if they be any way offended by passengers. Which thing Homer in his Iliads, lib. 12. intimateth by the example of the chafing god Jupiter, who took it marvellous angry, and much repined at the furious flomacks of the Grecians, adding, that the Grecians did defend themselves as valiantly, and endur'd the fhook and affault of their enemies, as ever Wafps or Bees would in defence of their chil-

dren or issue; in thefe Verfes following;

Non enim ego putavi heros Aobivos
Suffrunturos nostrum robur, & manus invictas:
Ili autem quae in axeet atque aetis,
That is to fay,

Quae nidos faciant ad iam pulverulentarn,
Neque deferunt cum dorum; fed expellant
Vires venatoris pingent pro filius.

I did not think our noble Grecian Lords could bear
Our force, and with unconquered hands maintain
Our right: but they like Wafps and Bees devout of fear,
Which by hiego-ways their bujes use to frame,

Besides this, they further build for them very large dwellings, with Chambers and floors, in a round and orbicular form, with rooms one above another, finely and wittily compacted, fo that there is space enough of ingrefle and regrefle, and very defensible againsf all winde and weather, and yet their nefts or houfes are not all made after one fahion, but very different; fome of them re-

preffenting a Harp, fome made much after the fahion of a Pear, a Toadftool, a Bottle, or budget of Leather, and some like a flanding Cup with handles.

Some affirm, that the mater of their Combes is confufed, rude, and iflafouredly heaped up, full of bark and sand, but I could never as yet fee it otherwise then light, slender, and thin like pa-

cer, dry, tranparent, gummy and thin, as though it were thin leaves of gold, flaken very easily hither and thither with the winde, and rising many times from the foot or foundation very small, and broad above like unto a Top. The place of this their building is divers, and much different for some repects. For if they have loft their Duke or principal Leader, then do they make them nefts of clay in the high holes of walls and hollow Trees; and as some fay (although hither I could never fee it) they make Wax there also.

But in cafe they have a Generall or Duke, then they make their nefts under the earth, their Cells or Chambers being formed with fix angles or corners, much like unto Bees. They make their Combes round, much after the fahion of a broad Toad-Toof, from whole centers there go-

eh forth as it were a fhort flalk or tying, by which the Comb cleaveth, and is faffened hard to the earth, or fome tree, or peradventure to fome other Combe. They have fuch a tender care over their females, (especialy at fuch time as they are great with young) and fuffer them fo much to have their own wills, as they will neither permit them to take any pains abroad for their living, nor yet to fee for their meat at home: But the males flying about, (like good Purveyers) bring all home to their own dwellings, thereby as it were strictly enjoying the females to keep them-

selves within doors.

All which fore-cited particulars, if a man would duly enter into consideration of them, he must needs confeffe, (will he will he) the admirable induftry, diligence, wit, prudence, Art, sweat, and labour that is in thefe poor vermife. Their natural inclination to anger, and the bafy furnifhme-

nts of Wafps, not only Cocks, which do scratch and scrape up with their fpirs their nefts, doe finde im-

placable, but even all other difturbers and provokers: From whence I take it that proverb hath sprung, Spicfian eritbinicein, which the Latines as Plintus almoft in the fame fene ufeth, Irritare Cra-

bromes: For Crabro among the Poets, is used fometimes for a Hornet, and otherwhiles for a Wafp.

In like manner Clemens Alexandrinus, Stromaton 2, when he would exprefse and declare the foun
delefs and abominable hurt of fuch firs that do lie in wait as it were to deceive, and watch to do displeasure to the life of man, hath these words, Houoi gar (inquit) oi antegenisfal patheis koi

Olympi-
Of the Wasp.

Olympioes, ifbecon bas exper esti diesmutrai, kai maleta hekone. That is, these fat, dull, grogge, and Olympical enemies of ours, are worser then Waps, more cruel and pleafant, and especially fenfual and worldly pleafure. Yea, whofoever dare adventure to challenge into the field this hardy and couragious little Creature, he shall (I dare be bold to fay) but Cademqem witfatum reparetse, lofe more then he fhall get, when his sword againft himfelf, and return home by weeping croffe, conffdering that befides the noblenefle of their fluent flomacks, and armed flings, they are withall fo flife and obfinate, as that they will never give over.

They differ alfo in their firft breeding, flock, sex, place, feeding, and manner of labour. Iflode faith, (although perhaps not fo truly) that Waeps do firft proceed from the rotten Corkafes of dead Afles: for all hold opinion, that the black Flies called Beetles, do take their Original from them. But I am rather moved to think that they were firft bred from the dead body of some warlike and fierce Horfe, and fo also thinketh Pliny, in his eleventh book and twentieth Chapter. And the Gra- ciuns have ufually this famous and vulgar Verfe in their ordinary talk.

Hippa men bebeo genefis, Tauri de melifin, 
Equi enim seipsum generatis, Tauri vero Apum.

In English thus;

Waps do firft come from Horfe, and Bees are bred from Bulls.

And surely their incredible witneffe in their flight, their ardent and burning defire have they to fighting, are fufficient inducements to move me to think, that they took their firft beginning from fome gaffant Horfe, and not from Afles, Oxen, or COWes, and much leffe from the tearful Deer. For Dame Nature hath feldome been fo indulgent and friendly to any one beast besides an Horfe, as to excell both in witneffe of pace, quickneffe of spirit, courage of flomack, and magnanimity. And I rather lean to this fide, becaufe elfe I do not know what fenfe I fhould have to give that

Aristotelian Proverb;

Chairete allpopound thougaters ippon,
Selvete volupedum filie Equorum:

Which may be Englished thus;

All bali ye daughters of swift, footeed Horfs.

For befides the truth that lyeth in the bare words, I take the morall of it to be uttered as a witty check, or a figurative flout, conceitedly to rebuke and hit in the teeth those threwd women, curft and fclouding wives, which are fo peevifh that they will not be pacified, who are like unto Waps in their fullen difpleafant humours, tempestuous madneffe and pelting chafe.

Some Waeps do proceed from the finking Corkafe of a Crocodile, if we may give any credit to the Egyptians and their fellows; and for that caufe, when they imagine or think a Wasp, they paint and draw out the shape and form of a Crocodile or a Horfe. From hence Hieron Gardant would make this collection, that of every corrupted living Creature another doth proceed: which in my conceit is very abfurdf and againft all reafon. For this being granted, the generation of Waeps would be infinite, and daily experience would read a Lecture of contradiction againft him, upon the progreffe of Natures works. Many times Waeps do breed by the mutual company of the male and female together, which though Athenæum counteth but a fable, yet for all that, fith the Philosopher doth plainly tell us, that he hath been an eye-witneffe to the fame, (as in his firft book De gener. Animal. cap. 16, and in his ninth book De fuis. Animal. cap. 41.) I will wholly incline to his judgement. But what manner of beginning they have by joyning together, and how itis perfected and accomplifhed, let us a little lend our listening eare to Aristotle, and Pliny his Interpreter.

The Princes or Ring-leaders of the Waeps, when they have made choice of a fit place for themselves under the earth, either in the holes, chinks, or clefts of the Rocks, or in thatched houfes, (as I have often feen) there they make their Combes in the begining of Summer, fashioning their small Cells with four little doors, wherein small Worms do breed, who when they are more grown, they make yet other greater doors or hatches, and then again when their young are at the greaftefl, they make others, fo that towards the end of Autumn, you fhall finde many, and those very large nelfs; wherein their principal Commander doth breed, not with every Wasp indifferently, but only with thofe of his own race and princely linage. They are bred in the molt eminent and highest place of the Wasp-nell, like unto great Worms, their Cells being four or five in number, clofe joyned and couched together, for otherwife they would increafe after the fame fort in all repleft, as the common Waeps do.

The excrement is only in the small Worms, and their young increafe remaineth immovable without any flirring before they be able to fly, and whileft they are covered as it were with a thin membrane, and yet in the fame feafon of the yer, and in the space of one day, you fhall manifiely perceive a great difference: for one flyeth out, another flicketh full as it were in the shell, another rolleth and tumblcth, and a fourth cannot flir one whit. All these have their beginning and increafe for the molt part in Autumn, not in the Spring, and especially in the full of the Moon. This one thing here is to be noted, that Waeps do not inflame, and that in Summer-time they are subject to Kings, and in Winter, Gunaivovratais, the females regiment, or Muleth's

K k k 3 Imperius
of Serpents in General.

imperium prevaleth. And when they have renewed and repaired their issue with a great supply, and that they be fresh and juicy, the Empire again returneth to the Masculine kind, and yet it is but a short, brittle, and ruinous Empire, notable to bear up itself, although by Nature immutable decreed orderly ruled, and rightfully governed.

Arifate faith, that it is not likely that the young Wasps are brought forth as a brood, because they be so great in bulk, as that in reason it should not seem probable, that so small a file as a Wasp, should have such great young ones. But this is a bare and weak reason, not beleeving the dignity of so great a Philosopher. For what can any man allledge to the contrary, why Nature in a lawful birth and breeding, should not as soon and as speedily finish, as the doth in generation that proceeds of rottenneffe or corruption, which I hold to be but illegitimate? Let us but call fonts young birds, in how short time after they be out of the shell, they be feathered, they are able to go, to eat, yet quickly increas'd in strength, and grown to their full greatneffe, so that they are in their full flower ere one be a ware. All which when one hath thoroughly considered, he will easily judge that famous Philosopher Arifate, to have relied but upon a weak prop, having scarce probability to stand on his fide for the maintenance of his opinion. His credit therefore at this time must not be sufficient to barre us the liberty of contradicting him.

The fame Arifate, the Monarch of our modern learning, faith that the small worms of Wasps, before they have any wings at all, are somewhat long, not much unlike those worms which Hippocrates calleth Eulcis, that breed in feft, called (as I judge) Maggots, but in our Country, Gentiles: and these Wasps worms are somewhat white, known and easily difcover'd by their fkins or dathes, the hinder part of their body being very thick and groffe, having a black lift or line running along their backs, without feet, not creeping, but rolling and tumbling themfelves this way and that way confusedly. When they have disburthened themselves of their breed, they close up their cells with a certain thin small skin, which again being broke when they come to any perfection or growth, they get themfelves out of dores into the clear light, and at two days end will be able to fly round about. The Philosopher maketh two kindes of Wasps, the one wide and fell, the other more meek and quiet. The wilder fort is seldom feen, for they live and breed in Mountains and Woods, in Oak, trees, and not in the earth, and this kindes is greater, blacker, more diversly cou'd, and fignet more cruellly then the other. After they have lived one whole year, they are seen to fly away, if in the Winter the tree be cut down. Thofe kindes of Wasps I did once fee in a Wood in Effex, where going unwarily to gather fimples with another Physitian, and offending one of this fumnifh generation, the whole swarm of them presently runned forth about mine ears, and fully had I not had in my hand fome fprings or branches of broom for my defence. I had undoubtedly paid dearly for this my unadvisedneffe, if it had not got me my life, for they purfued me in every place of the Wood, with a vehement rage for a long feafon, infomuch that I was fain to take me to my heels, and fo to seek to fave my felf from further danger. And if our own Countryman Sir Francis Drake himfelf had been there, although he was (as Materia in a stranger, and fo unpartial) in his Bar- gick History right truly obferved,) Omnim ductum nufri sfech fortifimus ac famofifimus, yet I make no doubt, but he would have taken my part, and been a companion with me in this my fearful flight.

Some of thefe Wasps, as well tho'fe of the crueller kindes as tho'fe of the gentler, do lack a flinging, (or rather, I think they feem not.) Otherfome again of both forts, are furnifhed with wings, and fome that want them, are ever the leffer and weaker, neither revenging themselves any way, nor offering to make reffilation. Contrariwise, tho'fe who have flings are greater, stronger, more quarrellefs, contentious, flibborn and eager. Some account thefe the males, and tho'fe other flingflefe to be the females. Many of thofe which have flings, do forgoe and quite lofe them when Winter draweth on, as fome make reckoning, but it was never my hap to fee this, faith the Philosopher in his 9. Book De hift. Animal. capi. 41.

If you catch a Wasp, holding her falt by the feet, fuffering her to make her ufual humming found, you fhall have all tho'fe that lack flings prefently come flying about you, which the finged Wasps never are feen to do. Therefore fome hold this as a good reafon, to prove that the one fhould be the male, the other the female. Both thefe forts, both wilde and wiludle, have been feen to couple toger after the manner of flies. Befides, (in reffpect of the) both kindes of Wasps are divided into Captains or Ring-leaders, and into labourers: tho'fe former are ever greater in quantity, and of more calm diifpofition; tho'fe other, both laffer, more frowndly, telly, peevifh, and divers. The males of labourers, never live one whole year out, but all of them die in the Winter: time, which is evident by this, becaufe in the very beginning of cold weather, they are as it were frozen or benumbed, and in the depth or midil of hard winter, a man thall hardly or never fee any of them.

But yet for all that, their Dukes or principal Chief-tains, are feen all the Winter long to lie hid in their lurking holes under the earth: and indeed many men when they plowed or broke up the ground, and digg'd in Winter, have found of this fort. But as for the labouring Wasp, I never as yet heard of any that could finde them. Their Principal or Captain, is broader, thicke, more ponderous and greater then the male Wasp, and fo not very swift in flight, for the weightneffe of their bodies is fuch an hinderance to them, that they cannot fly very far: whereby it cometh to paffage, that they ever remain at home in their hives, there making and deviling their combs, of a certain glutinous matter or bulblance, brought unto them by the Work-wasps: thus spending their time in executing and doing all tho'fe duties that are meet, in their Cells.

Wasp
Wafps are not long lived, for their Dukes (who live longer,) do not exceed two years. And the labouring, that is the male Wafps, together with Autumn, make an end of their days: Yea which is more strange, whether their Dukes or Captains of the former year, after they have ingendered and brought forth new sprung up Dukes, do die, together with the new Wafps, and whether this do come to paffe after one and the self fame order, or whether yet they do and may live any longer time, divers men do diversly doubt. All men hold the wilder kinde to be more strong of nature, and to continue and hold out the longer. For why, these other making their nefts neer unto common highways and beaten paths, do live in more hazard, lie open to divers injuries, and fo more subject to shortness of life.

The brevity of their life, is after a fort recompensd, and some part of amends made by the rare clammy glewifhneffe of the fame; for if you separate their bulks from the head, and the head from the treat, they will live a long while after, and thrust out their iling almost as strongly as if they were undividable, and free from hurt and deaths harm.

Apionism calleth Wafps Omeoloris, and Ariftote, Melorotis; although they do not only feed on raw fleth, but also on Pears, Plums, Grapes, Railins, and on divers and sundry fruits of flowers and fruits; of the juyce of Elms, Sugar, Honey, are in a manner of all things that are feazoned, tempered, made pleafant, or prepared with either of these two laft rehearsed.

Fliny in his i. Book capi. 53. is of opinion that some Wafps, especially thofe of the wilder and feller kinde, do eat the fleth of Serpents, which is the caufe that death hath oftentimes enu'd of their poifonous Stinggng. They also hunt after great flies, not one whit sparing the harmefle Bees, who by their good deeds have so well deserved. According to the nature of the foyl and place, they do much differ in their outward fform and fashion of their body, and in the manner of their qualities and dispositions of their minde: for the common Wafps being acquainted, and familiarly ued to the company of Men and Bealls, are the gentler; but the Hermites and foltary Wafps are more rude, cruel, and tempeffual: yet Nicander exemps them Olws, that is, pernicious. They are also more unhappy, dangerous, and deadly in very hot Countries, as Ouidius reporteth, and nameth in the Welf-Indies: where both in their magnitude and figure, there is great difference betwixt theirs and ours, so that they are accounted far more poifonous and deadly, then either the Englifh, French, Spanifh, or Barbarian Wafps. Some of thofe dangerous generation do also abound in exceeding cold Countries, as Oleum Magnus in his 22. Book telleth us.

Their ufe is great and fingular: for besides that they ferue for food to thofe kind of Hawks which are called Kaifrets or Fleingtals, Martinets, Swallows, Owls, to Brocks or Badgers, and to the Camefion: they do also give great pleafure and service to men fundry ways, for the kill the Pbalangium, which is a kinde of venomous Spider, that hath in all his legs three knots or joynts, whose poifon is pernicious and deadly, and yet Wafps do cure their wounds.

Raynard the Fox likewise, who is fo full of this wiles and crafty shifting, is reported to lie in wait to betray Wafps after this fort. The wily thiefs thrusteth his burny tail into the Wafps neft, there holding it fo long until he perceive it to be full of them, then drawing it flily forth, he beatheth and fmiteth his tail full of Wafps againt the next flone or tree, never refenting fo long as he feeth any of them alive; and thus playing his Fox like parts many times together, at laft he feteth upon their combs, devouring all that he can finde.

Fliny greatly commendeth the foltary Wafp to be very effectual againft a Quartain Auge, if you catch her with your left hand, and tie or affain her to any part of your body, (always provided, that it muft be the firft Wafp that you lay hold on that year.) Miscalcius memor. Cell. 7 attributed a great vertue to the difiled water, and likewise to the decoction of common Wafps, affirring expressly, that if any part be therewith anointed, it straight ways caueth it to fwell monifteriously, and to be puffed up, that you would imagine them to be fick of a Drapie: and this courtefy drabs and queens ufe to perfwade their sweet hearts, that they are forfooth with chide by them: thus many times beguiling and blinding the eyes of wary and expert Midwives. Whereupon we may very confidently conclude, that their poifon is very hot, flatulous or windy. Some do prole efter Wafps, and kill them by other flights and deviles. For when the labours do much ufe and frequent Elms, which they do very often about the Summer follisice, to gather from them some gummy and clammy matter, their Dukes and Princes being at home, not flanding full, but letting themselves to their bullines or tribe, and helping to bathe up their young, they are suddenly choked with the fume of Bromptone, Garlic, the branches of Coleworts, or other pot-herbs, or elfe by breaking down and overthrowing their combs, they dye through famine.

When you are minded to defend the Bees from the invasion and profe of Wafps, you muft fet a pot with some pieces of fleth in it neer the Hive, and when the Wafps (in hope of some prey) are entered, sudenly clap over the cover, and so destroy them, or elfe by pouring in some hot water at the top, you may flay them all to death in the pot. In like fort, some do gentle breath upon Railins, Fruits, Sugar, Honey, Oyl, by which, either the Wafps are chafed away, or by tayling the Oyl do die. And again, some do mix corróvives with Honey, (as for example, Sublimates, Vitriol, Aurigentum, &c.) that by taking this venomous or poifon infected drink, may fuffer condfign punishment for their intemperate and inftafiable glutony.

Of the flinging of Wafps there do proceed divers and fundry accidents, passions and effeots, as pain, diluqueting, vexation, swelling, redneffe, heat, fweetings, disposition or will to vomit, loathing and abhorring of all things, exceeding this finelife, and now and then fainting or fwooning; especially
especially when after the manner of venomous creatures, they have infected their stings either by
tailing the flesh of some Serpents, or by gathering their food from venomous plants.

I will now fet before your eyes and ears one late and memorable example of the danger that is
in Wasps, of one Allen's wife, dwelling not many years since at Lowick in Northamptonshire, which poor
woman reporting after her usual manner in the heat of the Summer to Dr. Goddard's house, being extremely thirsty, and impatient of delay, finding by chance a black Jack or Tankard
on the Table in the Hall, the very inconsiderately and rashly fet it to her mouth, never suspeeting
or looking what might be in it, and suddenly a Wasp in her greeneffe paffed down with the
drink, and stinging her, there immediately came a great tumor in her throat with a redness, puf-
ing and swelling ot all the parts adjacent; fo that her breath being intercepted, the miserable
wretch whirling her selfe twice or thrice round, as though she had had some Vertiginy in her brain,
prefently fell down and dyed. And this is known for a truth, not only to me, but to most of the
Inhabitants thereabouts, being as yet fresh in their memories, and therefore their authorities as I
take it, is unproveable.

Now, for fear left I should lose my self in this troublesome and vast Ocean of Natures admirable
fabricate, I will now difcoure of such medicinal means, as will defend from their furious malice.
The vertue of Mallows, and of Althea, (called Marsh-mallow) is notable against the stings of
Wafs. For the foftest and molt emollient herb, is applied as a contrary to a warlike and hurtful
creature, whose juicce being anointed with Oyl, either abate the rage of Wafs, or be blunted
and dulled their fting, that the pain is not very sharp or biting. Pliny lib. 21. cap. 171. And of
the fame minde is Asitum; Wafs (faith he) will not come near any Man if he be anointed with Oyl and
the juicce of Mallows. For as a foft anwer doth frangere iram, and as the Grecians have a faying,
Edu Meijnas efm atn eger pharmaken lagos: So alfo in natural Philosophy we fee, that hard things
are quelled, and their edge even taken off with foft and fuppling: as Iron with a fine, small, and foft
feather, the Adamant fhone with blood, and the fling of Wafs, Hornets and Bees, with Oyl and
Mallows.

What is fooner then a Caterpillar? and yet if Asitum credit be of sufficience, the fame being beaten
with Oyl, and anointed upon any part preferveth the fame from the wounds and flings of Wafs.
And of the fame vertue the herb called Balm, being ftemped and mixed with Oyl. The fame
symptoms or accidents do follow the flinging of Wafs, as of Bees, but far more painful, and of
longer continuance, to wit, redneffe, and intolerable pain, and Apofumes. And if any be
trucken of the Orange or yellow coloured Wafs, especially in a fnewy or fome fенitive part,
there will follow a Convulfion, weakenefte of the fkins, ftwounding, yea, and sometimes death, as be-
fore I have touched.

Against the flinging of Wafs divers medicines are precribed by Phiftians, but I will speak of
fuch only as I have made proof of, and fuch as are confirmed by long experience. Gilbert the Eng-
lifhman, faith, that Wafs being bruized and applied to the place affected, do cure their own
wounds very ftrangely. The fame vertue peradventure, not only the Scorpion, but the greater
part of Infects have, if any one would make any diligent trial thereof. If a man be stung of any
venomous Wafs (which is easily known by the bluenesse of the place, madneffe, raving and faint-
ing of the party, and coldneffe of the hands and feet) after you have given him inwardly fome Alexi-
pharmaca medicine, the place afceived must be linched, or rather opened with a Cautery, fo being
thus enlarged and opened, the venom must be well fucked out, and the paring or ftaving of that
earth wherein the Wafs build their nets, must be wounded and kneaded with Vinegar, and so ap-
plied like a Cataplasm.

A plaifter also made of Willow-leaves, Mallows, and the comb of Wafs, is very medicable for
the fame, as by the counsel of Holy Abbas I have experimensed. The English Northern men, do pre-
pare molt excellent emplifier worth gold, againft all flings of Wafs, only of that earth whereof
their Ovens are made, having Vinegar and the heads of Flyes commixt therewith. Let the place
be very well rubbed with the juicce of Citrals, and withall, let the party that is pained drink of the
feed of Marjoram beaten to powder the quantity of two drams: or thus Take of the juicce of Mar-
joram two ounces of Bole Armony two drams, with the juicce of unripe Grapes so much as is suffi-
cient, make an emplifier. Another. Anoint the place with the juicce of Purcellane, Beets, or fweet
Wine, and of Oyl of Rofes, or with Cows bloud, or with the feeds of the Spiritng or Wilde Cucumber
(called Nelis: tangere) beaten with fome Wine. Thus far Galen. Barley Meal wrought up with Vi-
negar, and the Milk or juicce of a Fig-tree, Brine, or Sea-water, are excellent for these griefs (as
Diofcorides lib. 8 cap. 20. writte) if the wound be often fomented, bathed, or foaked with any of
them. To drink, give two drams of the young and tender leaves of Bays with harth Wine, and if
the part affected be only anointed with any of thee, they are much available. In like for the deco-
ration of Marjoram mallows drunk with Vinegar and water, are much commended, and outwardly falt
with Calves fat: Oyl of Bays draweth out the poyson of Wafs. The leaves of Marsh-mallows (as
Asitum faith) being bruized and applied, do perform the fame.

The juicce of Rue or Balm, about the quantity of two or three ounces drunk with Wine, and the
leaves being chewed and laid on with Honey and Salt, or with Vinegar and Pitch, do help much.
Water-creffes, Rosemary, with Barley meal, and water with Vinegar fog together, the juicce of Ivy
leaves, Marigolds, the blood of an Owl, all these are very effectual against the flings of Wafs;
as Pliny lib. 31. cap. 9. tell us: the buds of the wilde Palm-tree, Endive with the root, and wilde
Thyme.
Thyme being applied plaiter-wife, do help the stinging of Wasps. After the venom is drawn out by tickling, the place affected must be put into hot water the space of an hour, and then suddenly they must be thrust into Vinegar and Brine, and forthwith the pain will be assuaged; the tumor cease, and the malice of the venomous humor clean extinguished. Rhazes faith, that the leaves of Night-shade, or of Sengreen, do very much good in this case. And in like fort Bole Armony with Vinegar and Camphire, and Nuts beaten with a little Vinegar and Casforum.

Also take the Combe with Honey applying to the place, and hold the grieved place near the fire immediately, and laying under them a few ashes, bind them hard, and forthwith the pain will be swaged. Sausio faith, that Savory, or Cressels applied, and the feed thereof taken in drink, and the juice of the leffer Centory mixt with Wine, are very meet to be used in these griefs; he also commendeth for the same purpose the leaves of Basil, the herb called Mercury, and Mandrakes, with Vinegar. Ardeynus is of opinion, that if you take a little round ball of Snow, and put it into the fundament, the pain will cease, especially that which proceedeth by Wasps. Let the place be anointed with Vinegar and Camphire, or often fomented and bathed with Snow-water. Take of Opium, of the feed of Henbane and Camphire, of each alike much, and incorporate them with Rose-water, or the juice of Willows, and lay it upon the wounded place, applying on the top a linnen cloth, first therewith wetted in wine. Johannes Nefius (who of some is called Evangellina medicorum) prescribed this receipt of the juice of Sifimbrium two dram and a half, and with the juice of Tartarus make a potion. The juice also of Spina Arabica, and of Marjoram are nothing inferior to these formentioned. Aaron would in this grief have water Lintels (called by some Ducks meat) to be dipped with Vinegar, and after to be applied.

Constantine affiruther us, that Alcanas tempered with Barley meal and Vinegar, and so bound to the place, as also Nuts, leaves of Wall-nuts, and Bleets, are very profitable in this passion. Item, apply very warm to the wound a Spiders web, bruised with a white Onion, and sufficient Salt and Vinegar, will perfectly cure it. Guill. Placentinus will warrant, that a plate of cold Iron laid upon the wound, or Lead steeped in Vinegar, will do the deed. Gardnerius counsel is to rub the place with Sage and Vinegar, and afterwards to foment it with water and Vinegar fold together. Varignana would have us to apply Chalk in powder, and inwardly to take the feeds of Mallow boiled in Wine, Water, and a little Vinegar.

Matthioli much commendeth Sperage being beaten and wrought up with Honey, to anoint the place. Likewise the bees beaten and anointed on the place, winter Savory, Water-cressels, with Oyl of Momordica, give most speedy help. A. Naldius Villanovensis affiruther us, that any fresh earth, especially Fullers earth, is very available, and the herb called Peley, used as an Unguent, or else Goats milk. And Marcellus Empiricus is not behind in his commendations for the use of Bullocks dung, to be applied as a poulsceffe to the stung part.

These and many others may any Man ascribe that hath had but an easie taft of the infinitie of Physick's speculations,for the store-house of Nature, and truly learned Phystitians, which way soever you turn, you will minuter and give sufficient store of alexiterial medicines for the expelling of this grief. In conclusion one and the self same medicament will serve indifferently for the curing of Wasps and Bees, faying that when we are sung with Wafps more forcible remedies are required, and for the hurt that Bees do, then weaker and gentler are sufficient. In the hundredth and ninetieth year before the birth of our blessed Saviour, an infinite multitude of Wasps came flying into the Market place at Capua, (as Julius witneffeth) and lighted on the Temple of Mars, all which when with great regard and diligence were gathered together and solemnly burnt, yet for all that they prestignified the coming of an enemy, and did as it were fore-tell the burning of the City, which shortly after came to passe. And thus much for the History of the Wasp.

Of the Wasp.

Hornet is called of the Hebrews, Tsrubah. Of the Arabians, Zabor, and Zembor. Of the Germans, Ein bornaufo, Hufite, Frofier, Ofterzweible. Of the Flemings, Hufite. Of the Frenchmen, Trelions, Feonians. Of the Itallians, Calvaron, Crabron, Staven, and Calvanon. Of the Spaniards, Taboros Mofcaros. Of the Eyrions, Hufien. Of the Scandavians, Sierzen. Of us Englishmen, Hornets, and great Wasps. The Grecians call them Ambrenos, and Ambremos, because with their sting they raise an Ather or Carbuncle, with a vehement inflammation of the whole part about it. The Latins call them Crabronos, peradventure of Crabro, a Town so named in the Territory of Tusculanum, where there is great plenty of them; or they may be they are tearmed Crabronos of Cabull (a Horse) of whom they are first engendered: according to that of Ovid, 15. Metamorphos.

Pref us humo bolster equestris Crabronis origo est.

That is to say:
When War-horse dead upon the Earth lies,
Then doth his steeds breed Hornet fies.

Albertus tearneth a Hornet Apis citrina, that is a yellow or Orange coloured Bee. Carden laus much to prove that dead Mules are their first beginners. Plutarch is of opinion, that they first
first proceed from the feet of dead Horses, as Bees do out of a Bull's belly: and I think that they have their breeding from the harder, more firm and solid parts of the flesh of Horses, as Wasps do from the more tender or fift. Hornets are twice as great as the common Wasps, in figure and proportion of body much resembling one another. They have four wings, the inward not being half so large as the outward, being all joined to their shoulders, which are of a dark, brownish, and of a Cheimant-like colour; these wings are the cause of the swift flight: they have also five feet of the same colour and hue, that their breast and shoulders are of. There is somewhat long of the colour of Saffron, their eyes and legs are hanging or bending downwards, crooked and made like a half Moon, from which grow forth two peaks like unto Sitches or two ditches, nothing varying in colour from their feet. Their belly is as though it were tied to their shoulders with a very fine thread, the forward and middle part whereof is overcast with a brown colour, and begins as it were with a girdle of Saffron. The hinder part is altogether yellow, easily discerned and remarkable for those brown pricks or licks, every one of them being much like unto a small triangle, besides they have certain clefts or slits on both sides, both before and behind, by which they can at their pleasure when they lift, either shrink up themselves, or draw and gather themselves together, and with the same again lengthen and stretch out their bodies. They have also near to their belly on both sides four black spoils, and in their tail they are armed with a strong piercing sting, and the same very venomous. They make a sound or a buzzing strange noise, more hideous and dreadful then Wasps do. They are thried, fierce and cruel, quickly angry and wrathful, and although they live in companies together, yet notwithstanding they are ever known to be but of an homely, rude, curt, and untractable disposition and nature, and will never be brought by any Art or fashioning to lay aside their uplandish wildenefs. (As some herbs will do that are transplantted into Gardens.)

They are besides this of such a mischievous malignity and venomous quality, that as some affirm, nine of their flies will kill a Man, and three times nine will be able to kill a strong Horse; especially at the rising of the Dog, that is to say, a great and very venomous Wasp to anger: which I suppose they used as a by-word against the properties, natures, and froward behaviours of women, who being in their wonted familiar mood, if once you go about to overthwart them, or a little to contrary their willfulness, you shall pull an old house over your own head by a further provocation, and perhaps if you get you not the sooner out of their flight and reach of their clutches, you may chance have somewhat more flying about you ears then you would.

And therefore it is no marvel though in holy Scripture, they are compared or likened to men fierce and cruel enemies, which should put and call forth the Cainites, Pelites, and Chevites, Exo 23. 28. So likewise Ovid in the eleventh Book of his Metamorph. hath these words, *Spicula car- num ardentia.* The burning flies of Hornet: And Virgil in the fourth Book of his Georgics, call them *Aferpima,* most sharp and violent. *Terence* (the most eloquent of all Comical Poets) in his Comedy intituled *Pharmio,* and *Plautus* in his *Amphiptero,* have this Proverb, *Inquitul-crabrum,* I have provoked or incensed the great Waps to anger: which I suppose you used as a by-word against the properties, natures, and froward behaviours of women, who being in their wonted familiar mood, if once you go about to overthwart them, or a little to contrary their willfulness, you shall pull an old house over your own head by a further provocation, and perhaps if you get you not the sooner out of their flight and reach of their clutches, you may chance have somewhat more flying about you ears then you would.

It is good therefore if you have a Wife, that is *Calceato immunity hydra,* unquiet and contentious, to let her alone, not to make an angry Dog: and when a mischievous sill quieted and brought asleep, to go your ways and lay never a word. Whereas among Bees, their Drones and Kings do want things; yea, and some Wasps too, as before I said, it being notwithstanding all Hornets in general, as well the greater fort of them that build their houses in trees, as the lesser fort that dwell in earth, are provided of things, neither do their King, leader seem to be unarmed. For Wasps have their Prifidens of their own society, and their Captains general as well as Bees and Wasps, whatsoever *Fly lib. 11. cap. 21. dream to the contrary: which in proportion and quantity are far greater (if you respect the bodies of other Hornets) then either the Captains of the Bees and Wasps are in comparition of their subj ects. These also spend their time within doors, as the Captain of Wasps do, not having many but one head to guide and rule over them, left by banding into parties and factions, some civil war (wherein all things are miserable, as *Tally faith*) or other mutiny might arise to their final destruction. They are great vexers and trouble-makers, and even like such as had sworn the death of their enemies, robbers, and thecheves: And yet at home they nourish peace, excelling even the very Bees themselves in their painful, earnest, and willing desire to maintain their flock and common society.

For neither do they chide, braul, or contend, nor yet make any flir or ruffling when any is promoted to any office or place of preferment in their corporation; neither are they distracted into divers minds with their businesse, neither yet do they raise any tumult, make any uprore, or keep a coil or ruffling at the election of their Prince and Captain general, but with common content they use but one Table, taking their commons together like good friends and fellows, and whatsoever they kill, they carry some part of it home, frankly imparting it to their neighbours, children, and companions.

Neither do they yearly drive and expel forth of the doors to seek new habitation, where they can, (as some Bees deal very churlishly and unnatural with their young) but they contrarily wise in their boime defend and keep warm their new springing up progeny and race, building for them greater Houses, and raising of moe Sellers and flowes, bounding and planking the fame in cafe of necessity, never ceasing till they be fully rear'd and made fit for defence and safety. But as for their
King and Captain (whom they exceedingly honor and highly esteem) they make choice of such a one, as neither seemeth to be a King without a Kingdom, nor a Prince without people and possessi-
on, and yet he so behaveth himself, and carryeth himself so evenly, as though he had but little to do in this his Empire. And yet in largeness of body and greatness of his heart, in Routine and stateliness of stomach and person, he flaitheth all the rest, carrying away the prize from them all: and when there is Proclamation of War to be made against any forain foes, and that their flags and ancients be displayed by founding his deadly blast, he giveth defiance to his enemies, most courageously bestridith himself more than any of his followers, shewing himself both moit vehem-
ent, warlike, and skilful in fight, and yet again at home towards his subjects, (like a true noble spirit) he is very generous, gracious, and temperate, tractable, easy to be intreated, and most ready to for
give. They make for themselves certain holes or dwelling places under the ground, calling forth the earth much after the fashion of Phinires: for you must understand that neither Wasps nor Hornets do send forth any Swarms as Bees do, but those young Hornets which spring from them now and then, do there remain among their breeders, making their beds or hives much greater, by means of the earth formerly cast out.

They enlarge their combes exceedingly, by adding more and more unto them, so that of a strong and healthy flock of Hornets, it hath been known they have gathered three or four trays or baskets full of combs. If any Hornets flye from their own home, they repair to some tree, and there in the top of it make their combes, so that one many times may very easily and plainly perceive them, and in these they breed, the Captain General, or great Commander, who when he is grown to be great, he carrieth away the whole company, placing them with him in some convenient lodging. Wilde Hornets (as Pley fith) do live in the hollow trunks or cavities of trees, there keeping them-
selves close all the Winter long, as other Cut-wafts do.

Their life is but short, for they never exceed the age of two years. Their combes are wrought with greater cunning, more exquisite Art, and curious conceit, then those either of Wasps or Bees, and these excellent devisers do make them one while in the trunks of trees, and sometimes again in the earth, encreafing them at their pleasure with more floors and buildings, according to the encrease of their issue, making them smooth and bright, decking and trimming them with a certain tough or binding lime or gelly gathered from the gummy leaves of plants. Neither do any of the little mouths or entries of their cells look upwards, but every one bendeth downwards: and the bottom is placed upwards, left either the rain might soke through in long showers, or the head of them being built upwards, they might lie open and be the more subject, and exposed to the unruly rage and furious blasts of windes and storms.

If you eye well their Neilts, you shall finde them all for the most part exactly fix and fig cornered, the outward form and fashion whereof is divided with a murrey coloured partition: and their membraneous substance is much like unto the rinde or bark of Birch, which in the parching heat of Summer cleaveth and openeth it self into chaps. The flinging of Wasps is for the most part ac-
 companied with a Fever, causinf withial a carbuncle, swelling, and intolerable pain.

My self being at Downward in Huntingtonshire, my native loy
, I law on a time a great Wasp or Hornet making after, and fiercely purfuing a Sparrow in the open street of the Town, who at length being wounded with her sting, was precitely cast to the ground, the Hornet satisfying her self with the fucked blood of her quelled prey, to the exceeding admiration of all the beholders and considerers of this seldom seen combat. Aftrifede, whom I fo greatly reverence, and at whose name I do even rise and make curt flicks, knows not of a surely how Hornets do engender, nor after what manner they bring forth their young breed. But since we are affured of this, that they bring forth their young by the fides of their Cells, as Wasps and Bees, we need not doubt, but that they do all other matter after their manner, and if they couple together, they do it by night, as Cats do, or else in some secret corner, that no man with his hundred eyes can never epy it.

Hornets gather meat not from flowers, but for the most part they live upon fleth, whereby it cometh to paffe, that you shall often finde them even in the very dunghills, or other ordure. They also proue at great Flyes, and harry their slender small Birds, which when they have caught into their clutches, after the manner of hunger Hawks they first wound them in the head, then cutting it a
under, or parting it from the shoulders, carrying the rest of the body with them, then beeat them themselves to their accustoied flight. The greater fort of them die in the hard Winter, because they lose not themselves suficiently aforehand with any suifitenance as Bees do, but make their provision but from hand to mouth, as hunger enforce them, as Aftrifede enforme us. In like fort Lani
, hath well observed, that Hornets both day and night keep watch and ward besides the hives of Bees, and so getting upon the poor Bees backes, they use them in head of a Waggion or carriage: for when the fitle Bees laboureth to be discharget of his cruel Sitter: the Hornet when he hath sucked out all his joyce, and clean bereit him of all his moisture, vigour and strengte, like an unthank-
ful Guest, and the most ungrateful of all winged creatures, he spareth not to kill, and eat up his fof-
ferate and chief maintainer.

They feed allo upon all sweet, delicious, and pleasant things, and such as are not untoothome
and bitter, and the Indian Hornets are so ravenous, and of such an incontinent glosynony (as Cu
b לדמ reporteth) that they flie upon Oyl, Butter, greafe Cooks, all forts of sharp fawce used
with meats, and all motl and liquid things not sparing the very Napkins and Table clothes, and other
linnen that is any way foiled, which they do filthily contaminate with the eirements of their belly,
The History of Serpents.

But as they get their living by robbery, and purloining of that which others by the sweat of their brows, by their own proper wits and invention, and without the aid and help of any do take great pains for: fo again they want not revenge to punifh, and a provost Marshal to execute them for their wrongful dealings: term'd of some a Gray, Brock, or Badger, who in the full of the Moon makest forcible entrance into their holes or lurking places, destroying and turning topfe-turvy in a trice their whole stock, family, and lineage, with all their household stuff and possessions.

Neither do they only minifter food to this palling, profitable, and fat beast, but they serve in stead of good Almanacks to Countrey people, to foretell Tempefts and change of weather, as Hall, Rain, and Snow: for if they flie about in greater numbers, and be ofteener feen about any place, then usually they are wont, it is a figne of heat and fair weather the next day. But if about twilight they are obferved to enter often their nefts, as though they would hide themselves, you mutt the next day expext rain, winde, or some fomny, troublesome or boylerous feafon: whereupon Aevem hath thefe verfes;

Sic & ceraeomum raua aemina fit volitare
Fines sub Autumni confertvis atheae lune,
Fam vorstertinos primas cum communes ortus
Virginis, pelago dicit infare pocillum.

In English thus;
So if the buzzing troops of Hornets howse to flie,
In fparious air how Autumn end ye fee.
When Virgil fcar the evening lump efte,
Then from the Sea fome fomny tempeft pure fhall be.

Furthermore, for it is moft certain that fome remedies which do heal the ftingings of Waifs, do alfo helpe fuch wounds and griefs which Hornets by their cruel ftinging caufe, yet notwithstanding, as Aggregat hath pronounc'd, the Zabor is the Bezaor, or proper antidote of his own hurt, if he be ofteentimes applied with Vinegar and Water, Oyl and Cow-dung tempered together. In like fort all manner of fols and earths that are miry and muddy, are much commend'd in this cafe, fuch as Baccius applied to bald Selenus, who was wounded with Hornets, when longing for a little Honey, he jogged and shaken their nefts, thinking he had lighted upon some Bees Honey, which Cuvil molt elegantly 3. Felifum hath defcribed in thefe verfes;

Millia cradavum cernens, & vertice mudo
Spicula defignans, ora; prima manent:
Ile cedit propetus, & color feritum asfelli:
Inclamat fociis, auxiliis, vocat.

Concurrent Satyri, turgenterag; ora parentis
Rident, perculs claudicat ille genus,
Riders & ipse Deus, limineque inducere monstrat:
Hic parent monitit, & limita lato.

In English thus;
Of Hornets thousands on his head full bare,
And on his face their fryon'd fpears flock faff.
Then headlong down he fell, and Affe foot him fnote.
Whiles he for help his voyce to fellows caft.
The Satyrs flock came run spaces, and did deride.
Their firs fwooned mouthes, whiles Affe had made him lame.
The God himfelf did laugh; yet beawed an earth to hide.
The wound which he receav'd, and foid did beatifte fame.

If any one be defirous of moe medicines against the perillous and tranfiercing ftinging of these horn-mad Hornets, he fhall finde fome of them digelettled together in the Hillogy of Waifs: for their remedies are common, belonging as well to the one as to the other, there being no other difference but this, that here they must be given in a greater meafure or quantitie, and their use ought longer to be continued. And let this suffice to have spoken thus much of fuch Infests or Cat-waft ned vermine as are winged, and live in companies and routes together. Now wil I make choice to describe fuch as are winged and live solitarily, left I fhould feem to lose my felf in this troublesom and vall Ocean of Phyfical contemplation.

Of CANTHARIDES or Spanifhflies.

This kinde of Cut-waft is called of the Grecians, Spaniards, and among the Latins it changeth not his name, Of the Frenchmen Cantaride. Of the Italian, Cantarella. Of the Spaniards, Cubillo. Of the Germant, Grunke Kifer, Goldgrefter. Amongt the Belgis or Nederlanders, it is term'd Spanefbe Uitjehe; and of us Englishe men, Cantarides, and Spanifh Flies. I have feen two forts of Cantarides, the one great, and the other small. Of the greater fort some are thick, and long bodied, which are found among wheat, and these are thick, groffe, and unwieldy, like unto Beetles, they are also ofundry colours, and changeable hew, with golden freeks or lines croffing their wings, and these are beat to be used in Phyfick. They of the other lefter kinde, are lean and thin
Of the Cantbarides.

Scrags and starvelings, broad, hairy, heavy, and sluggish, and for physical ills little worth.

The greater sort also are not always of a glittering green colour, but otherwhiles you shall have them somewhat reddish or murrey coloured, but yet all of them of a glittering brightneffe, and marvellous shining gloffe, piercing the eyes with singular delight. The lesser fort are not so common as the greater, somewhat differing from them in shape and proportion of body, but in vertue, quality, and manner of breeding, there is no disagreement at all to be found.

Those of the lesser fort have their bodies and heads somewhat long and hooked, their eyes very black, and hanging out, their wings growing out from the midst of their Loyns, being marked with two silver specks or pricks, and some few white spots.

They are commonly found in the Summer Season, in the herb that is called Ciumatia, or wild Hemlock. Their feet and legs are very small and long, finely decked and garniished, as it were with a Vermillion red, or beautiful purple. There is also another fort of these anfwerable to the former, in colour of their bodies in every respect, faving that their eyes are green: their head very little; and the hinder part of their shoulders round and crooked.

The third fort have their head and thoulders all one, being fo clofely and confufedly joyned together, as if they were but one thing and could not by any means be separated, unlefe in imaginati

The fourth is very like to the third fort, but it is rather of a greenifh, then of a rufly Iron colour, but in all other respects there is no difference to be fenn, faving in their magnitude, for this laft decribed is the leaft of them all. But these kindes of Cantbarides as well the greater as the lefser, do firft proceed not from any beafts, as fome have thought, but they rather take their Original from some rotten, thinking, and corrupt moisture and fickness, Titilus gar en toon prom ptei licies kai toa agiraz, kai toa Sakeis profei to ton Cantbaridon phulon, the meaning whereof is, that the whole flock and kindred of Cantbarides do bring forth or lay their young in the vile, bafe, and imperfect force of heat or warmth; and further in moiff Figs, as Melampus in his ninth Book and thirty nine Chapter, word for word hath excribed out of Aristotle.

They do also breed from a certain little Worm which is found in the sponge of the Dog-bryer (called of the Phyffians bedeygus) and from Caterpillars of the Fig-tree, Popler, pear-tree, Ash, Olive-trees and Roses: in all these there be found certain Worms, the very Founders and Parents of Cantbarides, but yet in the white Rolfe thefe Worms are of much leffer force, power, and sufficiency, then in the former.

Cantbarides do couple togethcr and generate, but yet not any living creature of their own kinde, but only a little small Worm. They feed upon all manner of pulse and Corin, but especially Wheat, and then they are bell for medicinal ills. The small like unto Tar, and in their tale they much reSEMBLE the Cedar-tree, as Nisander reporteth. Their vertue and quality is to burn the body, to parch and to bring a hard scale or crullinesse upon any part they fhall be applied to, or as Diisorder faith, to gnaw or eat into, to raise blisters, excufurate and raise an inflammation, for which respect, they mix them with fuch medicaments as are appointed to heal Leprories, any dangerous Terrors and Ring-worms, or thofe that be Cancerous.

They are applied to hard, Scourvy, or Mangy nails, being firft tempered with fome fit plaiters or Cerotes tending to the fame purpofe, taking them fo clean away, that they fall off by the roots. Some fome alfo to temper them with fuch convenient medicines as are warranted to take away Warts, Corns, or any hard knobs or pieces of flesh growing in the hands or feet. Some again use to pulvere-fice Cantbarides, and then mixing them with Tar, do make an Unguent to cure the fallong away of the hair, or the shedding of it, either in the head or beard, but herein there muft be good advice required, left at any time by their caufick faculty they excufurate too deep into the flesh.

Cantbarides mingled with Lime, serve in head of a Pen-knife to eradicate and take away those little hard and red swellings rising chiefly in the crown of the head, armits, or privy parts, called of some Phyffians Pani: and fome there be again that will adventure a little of them in powder, to give with fuch Medicines whose property is to provoke Urine: But yet there is hard hold and tough reafoning on both fides, whether they ought to be given inwardly with Duretikes or not, confidering that being fo drunk, they are accounted amongft Strong poisons, tormenting the bladder without any ceafling: otherfome again hold the contrary, affuring us upon their own experience, that not exceeding their due quantity, they may be taken with other Correftories, to serve as a Retricle to transport them to the place affected, fo that you see either fide hath his strength and reafons.

\[\text{Jut a part premiitur velatam pondere libra,}\]
\[\text{Froma nec hoc plus parte fedes, nec fertis ab illo.}\]

That is to say:

\[\text{As when an even scale with equal weights is priced,}\]
\[\text{Not fails it down this way, or is it that way raised.}\]
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But being mingled and wrought up with the juice of \textit{Una Tamnæa}, (which is a kind of Berry, growing on the herb called \textit{Anfælas angria}, a kind of Briony) Sheeps or Goats fweet, there is no doubt but that they do great good. Some of my Malters (faith Gaien, the Prince of all Physicians next to \textit{Hippocrates}) did use to put Cantharides amongst such medicines as they prepared to move urine, taking only their wings with the feet, but I (faith he) am wont to take Cantharides wholly, as well as some parts of them, and so I judge them the more safe to be used and prepared this way, especially I mistake not to make choice of such are found among Corn, and have as it were a yellow circle or encloure crouthing overthwart their wings, \textit{lib. 3. lib. & 11. de Simplic. Facult.}

Being applied rightly, they do also provoke the monthly terms, and that very effectually, and put into Antidotes, they are thought of many to helpHydropellic persons, as not only \textit{Hippocrates} and \textit{Diocedes}, but also \textit{Gaien, Avicenna, Rhazes, Pliny}, and other Physicians of both note and worth have wrote: I cannot here sufficiently commend their affured, tried, and approved use, being commixed with \textit{Salt}, and \textit{Gum ammoniacum}, for the diversion of Rheumes or Catarrhs, the taking away of all Goutifiable pains, out of the hanch or hip (called the \textit{Sciatica} of the popular fort) whilst they draw forth and confume from the center of the body, (being there thoroughly and deeply impafted) to the surface the matter or offending humours causing these griefs above said.

They are also good against the venom of a \textit{Salamandra}, as \textit{Pliny} in his 29. Book, and 24. Chapter affureth us. They are also highly esteemed of some, being duly prepared and orderly mixed with certain other medicines, to take away and correct the remiff negligence, falling-faintnefe, and heartlefe casting down of the Virile part, yea they do (as they say) very much provoke to venereal incitements.

But here I would counfel each one not to be knack-hardy bold, in medling with them, for these or the like intentions: for as they bring both health and help, being duly commixed, and orderly tempered, not exceeding their dole and first quantity; so again, if you fail in their due and skilful application or propagation, they induce and drive men into most intolerable grievous symptoms and accidents, and otherwhiles to death it self. \textit{John Langius} feteth down a true and very pleasant story, which in this place, becaufe it maketh greatly for our matter in hand, I will not refuse briefly to describe.

There was (faith he) at Bonony in Italy, a certain rich and Noble young man of France, (which \textit{Gal-}
\textit{luis}, to use his own words, was \textit{Galio quosin galitanoce falacior}) who falling extremely in love with a certain Maid in the same City, prevailed so far at length through his earnest importunities and incessant solicitations, that at length they appointed and agreed upon the time and place of their meeting, to keep their Revels for one night. So this juicy Gallant being thus inspired in the inextirpable labyrinth of her beauteous Phinny, fearing deadly, left his heart should turn into Liver, or that he might faint and lose his courage before he should attain to his journeys end; in this his doubtful coping, and dangerous skirmishing conflict, like a wife man fearing the worst, casting all dangers aforehand what might ensue, would needs know of a fellow-fouldier, and Countr耶man of his, who had as one may queffe born a standard in the Camp of \textit{Venus}, what were left to be done, to move him on a more vigorous courage, and to keep his credit for that time, left either he should turn Craven like an overtyred Jade, or else be utterly non-suitted, which was worst of all; who presently withfhit him to take some Cantharides in his Broath, which the other at all adventures forthwith did.

But it was not long before this jolly Yonker felt an itching about his lower parts, then being fro-like above measure, supposed to be the operation of his medicine that caufed this Colt-evil, he without any more ado hyed him to his Love, minding there indeed to draw the matter to a fet battel, and to end all controversies by dint of sword.

\textit{Tunc animis opus, Aenea, tunc pellere firmis.}

In English thus;

\textit{Of courage then indeed,}

\textit{Then of stout brood it is need.}

But yet for all this, in the fill of the night, when every one besides were at rest, my ruffled \textit{Frank} felt his whole body to be pokily torn, and miserably rent with fundry cruel prickings and stings, feeling moreover a strange tall in his mouth, like the joyce or liquor that issueth from the Cedar tree, flamping and flaming, raging and flaring like a furious mad, \textit{frantike Bediam}, being almost besides himself through the extremity of his pain, viritginy and giddinefe of his brain, with inclination to fainting or frowning: so being troubled, tolt, and perplexed, all fad, melancholike and male-content, deftitute of counfel and comfort, like a filthy Mifer, and an impotent Switer, and not like a couragious hot-fpur, he let his action fall, turning his back like a Novice and fresh-water Soulard, full fore against his will you may be sure, but there was no remedy, and so with as much speed as he could, bidding his Love adieu, he trudged home to his own lodging; whither being come, and finding no relief, but rather an ecrease of his torments, with a continual burning of his Urine and Strangury, he lamentably befouled, and with weeping and tears most humbly craved and cried out for help, requiring the
the favour and furtherance, both of my self and another Phyfitian for the cure: so I being admitted to visit this poor patient, I first gave him some Oyl to drink, thereby to provoke vomiting: then was there prepared a Glyfter, made of the herbs Hieraticu, Wallows, and the root of Althea decocted, wherein was disolved Coffe, with Oyl of Violets and Lillies. After the administering of this, I commanded him to take a good draught of Cows or Goats milk, once in every hours space, and if Milk could not be had, then I willed him to take an Almond Milk made Ex alniis pinnis, seeds of Mellons, Gourds, and Poppy bruised with the distilled Water of Wallows, and Alka- kent, and this would I have given to him in good quantity in read of the Milk if it were wanting.

But after that my fie Frrenchman had recovered his former health with thefe and the like remedies, and that the unavowed Author of this rash counsel had very humbly intreated pardon at our hands for this his great fault, he protested solemnly with a great oath, that he would never hereafter prescribe any Phyfick to any man living. Thus far Johannes Langius in his first Book Epiftola. Medicinal, forty eight.

There is also very profitable use to be made of Cantharides, for if you bear them to powder, and convey a little of it into Apples, Pears, Plums, Figs, Peaches, or Quinces: especially those that be fairest and ripest: and thofe that hang the lowest, finely closing it up again with the pill, which if any Theves or Robbers of Orchards shall taff of, they fall within a while after into an intolerable burning in their Urine and Strangury, making it only in dropping wife, whereby their thief is foon found out, and they well rewarded with fowe Sawte for their sweet meat. And this is an excellent night-spell, and therefore I was loath to pretermit it, but to make you acquainted withall.

There is also another excellent medicinal use of Cantharides, if they be duly, and according to truth administered, and with great warneffe for that passionate grievance, which at this time though some foolish Phyfitioners never heard tell of any fuch, I will call Pefiuo infinirius, yet I may not let it down in English, because I would have but a few acquainted with Secrets. Habeo enim ego singulare quoddam contra penis Languorem remedium, quos promiscuously uterem, ut ustrumque multis nobilibus (qui veneris utique studiis hiereticis) animos & vitres admasti abfine noxa. Unum tamen inter efferos fo obfult, ut a verae (cuium maxima litterar) fanguinem continuo mingeret, & lipophania frequentis laborem. Satis fatis laetis copia in protétulis fufficit, omnis interactus venereus pulsum, & veritus felactivus cupidiis paenuliffimus is accefo.

And let this suffice to have spoken of their medicinal vertues and qualities; Now will I proceed to tell you of their ill name, naughty, venomous, and pernicious properties. They are reckoned and scored up in the number of most deadly and hurtful poynons, not only because they caufe eftion and inflammation, but more in regard of their putrefactive quality and making rotten, where-in they exceed. Their juice being taken into the stomack, and fo piercing into the veins, or laid upon the skin outwardly fo long till it hath entered the veins, is a most strong poynon, where-upon Ovid when he with'd ill unto, or curfed his enemy, wrote this: Cantharidum fuccus dante parentem bibis. lib. Trifi. Cieris ad Iovem, in his ninth Book of his familiar Epiftles hath these words, Caecus accusavit L. Crasso, Cantharidam sanguifse dicerunt, as if he purposed by that way to make an end of himself by death. Galen in his third Book De Simplici medicam. facul: writeth thus:

If they be taken inwardly into the body, though but in small quantity, and mixed with other convenient corretories, they do mightily provoke urine, and sometimes corrode and fret the bladder, fo that it is as clear as the noon-day, that what things forever do overthrow nature, by reason of their extreme frigidity, if they be taken but in a very small quantity, yet will nourish the body: so on the other fide, whatsoever is contrary, repugneth or goeth against humane nature, by means of corrupting or any putrefactive quality like unto Cantharides, can never do fo. Bartholomei Montagnae, a learned Phyfitian, affureth us, that he once knew one Francis Bressa a Citizen of Padua in Italy, who having but outwardly applied Cantharides to his knee, yet their poynon spreading to other inward parts, he voided five pints of blood by way of urine: and this may any man see, if he will take the pains to read over Montagnae Crasfi. 182. Cap. 10.

The same accident hath also befaln them, who to be remedied of rough, hard, mangy, or leprie-like nails, have adventured to apply them to their great toe. So that Cantharides must not rashly be applied and used, as common deceivers, blindke Empericks, and confounding Land-lopers would make plain Countrie people believe. Pium relateth a story of one Coffinus a Roman Knight, who was deeply beloved of Nero the Emperor, who having a very dangerous Tetter (a dieafe in times past peculiar to the people of Egypt) a Phyfitian of that Countrie in heed of curing, did kill him by giving him Cantharides to drink.

But I should rather think that Coffinus dyed by the outward application of Cantharides, because by their burning and cautifick quality, they clean eat and confume away filthy Tetteres or Ring-worms, Manipinellae, Scorbutias, Lepries, and all hard Callous Warts, Corns, or pieces of feth that grow in the hands or feet: for I can see no reason why any would be fo wilfully blinde, as to give them inwardly for the curaion of any Tutteres or fuch like griefes: or at leaftwise I must think that the right use of Cantharides was unknown to the ancient Phyfitioners of the old world, as by Galen it may appear in his 11. Book De Simplici. Medic. fac. and in his fourth Book De vidia Aut.
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The same Pliny (in his twenty nine Book and fortieth Chapter) witnesseth, that Cantharides were reproachfully laid to Cato Uticensis charge, and that he was falsely blamed for offering to make a price of poisons, and to sell them openly, as in Port-fail to any that would give money, for that their price role to threecore sesterces. Being drunk in too large a quantity, or else applied outwardly to any part, either too long or too deep, they produce these or the like symptoms, accidents, and effects.

The party to whom they are any way given, feeleth a pricking pain and torment in his bowels and inward parts, extending from the mouth down to the lower parts about the Bladder, Reins, and the places about the wafe and short ribs: they do also ulcerate the bladder very dangerously, inflaming the yard, and all other parts near the same with a vehement apoplexyation: after this, they pule blood, and little pieces of feath.

Otherwhiles there will follow a great gask orBloody-flux, fainting and swooning, a mummeffe or duneffe of moving or feeling, debilitation, or feeblenesse of the minde, with alienation of the wit, as though they were bestraffed; likewie lothing or abhorring of meat with a disposition to vomiting, and otheren a ordinary desire to make water, and to exonerate nature, but all in vain. That he taketh them findeth in his mouth the tait or tallowe of Pitch: and all these symptoms, passiones, or effects, that they have, work they have much labour faithfully collected out of the sixth Book of Dioscorides, and the first Chapter. And out of Galen Lib. de Theriaca ad Pyl Phaser Cap. 4. and Lib. 3. de Temperam. Cap. 3. And out of ancient Rhazes (who practified Phystick one hundred years, if truth be truly related) Tit. 8. chap. 17. If any one be either affected or infected with any accidents, by means of Cantharides, Dioscorides doth thus cure them, as you may readily finde in the Book and Chapter before cited.

First of all he cauffeth them to vomit often and much: and after that he prescribeth Glypters to be made for the scouring of the belly with Nitre, and to preserve the bladder inwardly, to take Milk and Pfilum: and then he would have the matter of Glypters to be somewhat different from those which were to be made of Barley water, Marsh-mallows, the white of an Egg, the Mucilling of Line-feeds, Water of Rice, the decoction of Fenugreek, Hydromel, fat Broths, Oyl of Almonds, the fat of a Goose, and the yolks of Eggs. And inwardly to take at the mouth, he biddeth them to use Cows milk, Hydromel, the grains or fruit of the Pitch-tree, both the greater and the jeffer fort, Wine fodd to the half, Ducks fat, a decoction with some diuretical feeds (namely with the four greater cold feeds, which are Cucumbers, Gourds, Citrals, and Melons) and likewise some decoction made of Figs, with sirup of Violets. Oyl of Quinces is highly commended of some as a proper and special Antidote in this case, and so is Oyl of Lilies, and Terra Semia.

Rhazes counselis, after the taking of some Glypters made of any fat broths, to make an injection into the yard with Oyl of Roses, and the sick perfon to fit in a warm Bath. Tit. 8. Chap. 17. The Writers and Authors of Phystick and Philosophy cannot agree, in what part of the Cantharides their poeyon chiefly lurketh: for some will have it to be principally in the head and feet, and others again will none of that: And yet they all agree upon this point, that in what part of the body forever their poeyon is feated, that their wings are a sovereign remedy and preservative, and if they be wanting, that their poeyon is deadly: so that although they be never so poeyounous, yet have they their own remedy which in themselves they contain and carry about: Thus faith Pliny in his 11. Book and 35. chapter.

And peradventure for the same caufe, Galen in his eleventh Book, which he intituled De Simple, Medicament. facultatib, advizeth us expressly and learnedly, that Cantharides shoule be taken whole as they are, and so to be used either for inward or outward uses. For why it is far better, even in the outward application of them, that they should more gently and slowly corrode, gaaw, or fret surn, and that their burning vertue and quality shoule be a little corrected and weakened, then to perform their full effect to the great danger of the patient, and many times to his utter undoing and destruction. Therefore they are clean out of the way, who when they would use them for any inward caufe, do call away their wings and feet, whereas indeed they ought to take all of them, not rejecting any one part of them. For being given whole, they need not so much any corrective to bridge and leffen their powerful operation in regard of their wings and feet, the proper refillers and expellers of their own or other poeyon.

The fafelt courfe is to use all, and every part of them without exception, unlees you would have them to corrode, fret, inflame, or burn any part. Lyco Nesotiam is of opinion, that Purgcanee is their proper counter-poeyon, which vertue Pliny in his twentieh Book, Chap. 13. acribeth to the herb called wilde Bafil: who also many ways commendeth Actum Sylbicum, Olym Omantibum, Cows milk and brethes made of Goats flesh for these intentions, in his 23. Book, Chapter the second and fourth, and likewise in his 28. Book and tente Chapter. And for our History of Cantharides, let this for this time suffice, which I much wonder that the famous learned Gelfer hath in such deep silence passed over, never so much as mentioning them: whereof notwithstanding so many Authors, both of the Ancients and Neotericks, do so much ring.

Many moe authorities coule I have allledged concerning this my discourse of Cantharides, but that I suppose it a labour as endlesse in toyle, as needlesse in ufe; the one favouring of too much curiosity, the other of a frivolous affectation: so that I hope even amongst the whole College of
Of the Caterpillar.

of Phyfiitians, wherever in England (it their ears be not too dainty) to finde some few grains of their good words, and such curio outraged confruction, as that I may neither be charged with partiality of concealing (where it is met I should be mute) nor be suspected of unufficiency, for not pursing where I can finde no good footing.

Of CATERPILLERS, or PALMER-WORMS, called of some Cankers.

Now I come to speak of Caterpillers, sometimés the destroyers and walters of Egypt: as well Their name. in regard of the great difference that is found in their severall forts, as for their great dignity and life, whereon some of them are most notable and excellent. Some think that Ernea, which is Eng- lised a Caterpillar, hath his derivation ab erodendo, which is not altogether improbable: For they gnaw off and consume by eating, both leaves, bougnes, and flowers; yea, and some fruits also, as I have often seen in Peaches.

Ovidius the famous Poet, fileth them by the name of Tine a grefles:

Quaque solum canis frondes intexere filis,
Agrestis Tinea, ter observata colonis,
Feroci mutant cum papilionem figuram.

In English thus;
And throfe wilde Mothes by humbldmen obferved,
Which fold themselves in hoary stringing leaves,
Gainst force of famine, and fform to be preferv’d,
A shape from fruitful Butterflies receiv’d.

The Græcians call a Caterpillar Kompe, by reafon of his crooked winding or bending pace in wa- ving fort, whereby in creeping they bow, wry, and lift up themselves. Of the Hebrew it is termed Ghonainam, because it theareth, pilleth, and devoureth the fruits of the earth, as Kimbi upon the firft of Joel writeth. The Italians call it Bugaverme, and Brucho, for so Marcellum Virgiliim upon Diojcurides faith expressly, that in this time all the people of Italy, named it Ernea, Bruchi. The Spaniards term it Oruga. The Frenchmen, Chenille, and Chattepeluse. Of the English they are commonly called Caterpillers, of what kinde forever they be of. But the English Northern men, call the hairy Caterpillers, Obuts, and the Southern men usually term them Palmer-worms. Of the Polonians it is called by the name of Ruh- fanerka. In the German tongue Ein Raupe. In the Belgian, Rupe. Of the Illyrians, Gasemica. And Sil- vanus will have it called Cerris, and Cedebroa.

I should go about to define and set down all the differences and varieties of Caterpillers, I might perhaps undertake an endleffe and tedious labour. I think it therefore fittest to bend my flen- der skil, and to employ my bell forces, in speaking of such as are more notable and common with us in this Country: For some of them in touching are rough, hard, and itif, and other some again, are soft, smooth, and very tender. Some are horned either in the head or in the tail; and again, others have no horns at all. Some have many feet, and some fewer, & none at all have above sixteen feet. Most of them have a bending fift pace, and like unto waves, and others again keep on their way very plainly, soft- ly, by little and little, and without any great halt. Some change their skins yearly, others again there be that neither change nor call their old dry skins, but keep them still. Some of them cealing alto- gether from any motion, and giving over to eat any thing at all, are transformed very strangely into a kinde of vermin or worms, who being covered with a hard crift or shell, lie as it were dead all the Winter; and from thefe come in the beginning of hot weather, our ufal Butter-flies.

Many of thefe Caterpillers are bred of the egs of Butter-flies; and some again do breed in the leaves of trees, of their own proper feed, being left there in the time of Autumn, included in a certain web, or else by means of the dew or air, therein shut and putrefied, as commonly the little hairy Cankers or Caterpillers which are so full of feet, do breed. Beside, some of them do feed on leaves, some on flowers, and there are some which devour fruits.

All smooth Caterpillers which are not hairy, are of a yellow or green colour: some again are found of a reddith colour, or brownith, or else they be of sundry hews. But of all others, the moft excellent is the green coloured Caterpillar, which is found upon that great buoyf plant, usually termed Privet, or Primpnt, which hath a circle enclosing round both his eyes and all his feet, having alfo a crooked horn in his tail: thefe Caterpillers are blackish-red, with spots or streaks going overthwart their fides, being half white, and half purpulith, the little pricks in thefe spots are in- clining to red: The reit of their body is altogether green.

There is another Caterpillar feeding altogether upon Elder-trees, not much differing from the former, saving that this is altogether of a green colour, and wanting thofe overthwarting crofs white marks or spots, and the other small white pricks which we defcrib’d in the former.

There is alfo a third fort of green Caterpillers, which when Autumn or the fall of leaf draweth on, are turned into a certain fheth or cafe, being of a very hard and horibly substance, of colour very brown, and this feedeth altogether upon Pot-herbs, especially thofe that be soft, as Lettuce: where- upon it may not unfitly be termed, Ernea Lactucaria.

L. 113 Lastly,
Lastly, there is to be seen another sort, of a green colour, which is the least of them all, and this kind live and feed upon trees, (especially in the Oak) there drawing out their web, by means of which they are hired and shaken, they easily fall down upon the heads of travellers and passengers by the way side, clearing to their hats and garments. And this kind of Caterpillar is too well known and found in the Summer time, and when cold weather approacheth, they fold themselves into a rude, plain, and nothing curious web. And thus being included in a greenish scabbed or cale tending to red, they all die in Winter, and all these have ten feet, as all they have to go bending themselves upwards. But to leave the green, and come to those that are yellow, there is to be found a certain Caterpillar called Vimpla, being as the word foundeth, a very elegant and fine insect to look upon, and palling beautiful: and this kind I have often found amongst Willows, full favourly feeding upon their leaves. His lips and mouth are somewhat yellow, his eyes black as a cole, his fore-head purple coloured, the feet and hinder-part of the body, of a green grapple hue, his tail two-forked, and somewhat black. The whole body is as it were stained and dyed with thick Red-wine, which runneth along the neck and shoulder-blades, as it were in form of a Burgenian croffe, or of the letter X, made croffe-wise down unto the tail with a white line, addeth no small grace to the other parts.

There is yet another Caterpillar of yellow-blackish colour, called Porcellus, we may in English call it Bugs-fleur, in respect of the fashion of the head, especially the greater sort of these, for the leafer have round white specks upon their sides, and these live and are altogether to be found amongst the leaves of the Marsh Trifoly, which they consume and devour with an incredible celerity. In the wide Night-shade, (which the Italians call Belladona) there is found a smooth Caterpillar of a yellow-greenish colour, having a horn in his fore-head the length of a finger, which Hieron Cardan, the learned Physitian, reporteth that he had often seen.

The hairy Caterpillars are most mischievous and dangerous amongst them all, and these are either thick or thin haired, and the most venomous is that which is called Pityocampa, whose biting is poyson: and this is ever found in the Pine-apple-tree, being as thick as three little fingers, and three fingers long being laid a croffe. They confite of eleven flits or cuts between the head and the tail, and they have sixteen feet, according as all other hairy Palmer-worms have. That is to say, near the head on both sides, there, in the midst of their body on both sides, four, and at the end of the tail on both sides, one. Their former feet are crooked and small, with which they feel, try and affay the way whether it be passable or no, their other feet are broader, with many jags and notches like a saw, to take the safer hold, and fray with furcer footing upon smooth and slippery leaves. Their head is much like a Pifsière, and the rest of their bodies like other common Caterpillars. They are rough, and full of brily standing up hairs on all sides, and those in their sides are white, but those on their back do shine, being very bright and glittering, the midst whereof is garnished with many spots, as though it were full of eyes.

Their skin is black which is so often seen, their hairs being cut or taken clean away. All their hairs are but small; and yet they sting more vehemently than any nutter, whereby is caused intolerable pain, burning itching, a Fever, and much dyequenesce: when as their poyson is suddenly in a moment felt and conveyed without any manifest appearance, or kenfe of any wound to be judged by the eye, unto those parts that are next the entrailes, as the Heart, liver, and the rest. They weave their webs after a fine and exquisite manner, as Spiders do, drawing out in length, framing and trumming in good order, their hairy small threads. And under these when night draweth on, they lie in as their own proper tent and pavilion, adverted to avoid cold, as the discommodities of furious blastes and storms: for the matter and substance of this their tent is handfordemly wrought, for firm, flitte, clammy and sure, that they neither care for furious windes, nor yet any rain or Storm will ever euer foke through. Besides, the garnensse of this house is hie, and of fo great receit, as it will eieceive and lodge many thousands of Caterpillars. They make their nests or buildings in the highest branches of the Pitch and Pine-trees, where they live not solitarily (as other Palmer-worms do) but in flocks or companies together. Which way soever they take their journey, they are still spinning and drawing out their threads for their web, and early in the morning, (if it be like to prove fair) the younger sort by bees attend the elder, and having first bared and robbed the trees of all their boughs and leaves, (for they make cleanalliance of all whereabouts they come) they afterwards dexterously bend themselves to their weaving craft. They are the only plague and destruction of Pitch and Pine-trees, for unto any other roziny or gummy trees they never do harm.

There is great plenty of them to be found in the Mountain of Alba, situat betwixt Macedonia and Illyric, in the Woods of Tdiest, and in divers Valleys beyond the Alpes, in which places there is stotre of these fore-named trees, (as Mathewes faith.) They are doubleste most poysonous and venomous vermine, whether they be cruified outwardly with the hands, or taken inwardly into the body: yeas they are so known, manifest, and so never failing a poyson, and so efeemed of in times past, as that Pipian the famous Lawyer, interpreting the Law Cornelia de Siciariis, or privy murtherers, that he in that place, calleth and elethem the giver of any Pityocampe in drink, or otherwise to any one, to be doomed a murtherer, and their punishment to be equalized. Seil. Alium ft. ed Leg. Corn. de fit.

As soon as this kind of Caterpillar is receied into the body, there followeth immediately a great pain, extremely tormenting the mouth and palate, the tongue, belly, and stomack are grievously inflamed by their corrodong, and growing poysonous quality, besides the intolerable pain the receiv
Of the Caterpillar.

Chae liber, postrem vsit bene aide laborum, dedit the fract.
Ne vea purpurae fofaderis or robore.
Agrestis abstant tumus ex exprampeus superstit.
Verniculuzg, leun qui in thecomwellera mutant.
Hi fignaem artificis prudente poilitse Divi
Fingamur, tenui qui non tenenatur opella

Et qui vermiculis, desine miranda potentis
Signa suo prodi, potius quam corpus ovi
Malfero Barbato, tumido vel robere Ceti
Squamanitis eili; qui latam per aquam tentant
Fuminae, fine mentis minis, & invenas profundo
Lenta qua mangan, largo mare gaturn radiant.

Which

 receives feeleth, although at first the party seemeth to feel a certain pleasant itching, but it is not long before he perceiveth a great burning within, loathing and detesting of meat, and a continual desire to vomit and go to the floor, which nevertheless he cannot do. At length, unless speedy succour be given, they so miserably burn and parch the body, that they bring a hard crustineffe, skurfe or flaid upon the stomache, as though the fides thereof had been plattened with some hard tharts, or other like things, after the manner of Arleincte, as Dofoiridies, Aetius, Pliny, and Ceffer do affirme us. In like manner Celen in his eleventh Book Simp. cap. 50. and Aetius cap. 25. have testified the fame.

And for this caufe Aetius and Aginnet do fay, that it is nothing wholesome for any to fit down to meat, to spread the Table, or make any long taneance under any Pine tree, left peradventure through the favour or smell of the meats, the reek or vapour of their breaths, or noife of men, the Pitycampe being disturbed from their homes and usual reting places, might fall down either into their meats beneath, or at left-wife cast down, or let fall any of their feed, as poyfonous as themselves. They that receive hurt by them, must have recourse to those prefervative and medicines, as were prescribed to thofethat were poyfoned by Cantharides, for by them they are to be cured, and by no other means. Yet for all that, Oyl of Quinces is properly commended to vomit withall in this caufe, which must be taken twice or thrice, even by the preffcript of Dosoiridies and Aetius. They are generated, or to speak more aptly, they are regenerated (after the manner of Vine-fretters, which are a kinde of Caterpillers, or little hairy Worms with many feet, that eat Vines when they begin to shoot) of that Autumnal feed of theirs, left and referved in certain small bags or bladders within their webs.

There is another fort of these Caterpillers, who have no certain place of abode, nor yet cannot tell where to finde their food: but like unto superflitious Pilgrims, do wander and fray hither and thither, and (like Mice) consume and eat up that which is none of their own: and these have purfued a very apt name among us Englishmen, to be called Palmer-worms, by reason of their wandering and roguifh life, (for they never stay in one place, but are ever wandering) although by reason of their roughneffe and ruggedneffe, some call them Bear-worms. They can by no means endure to be dieted, and to feed upon some certain herbs and flowers, but boldly and disorderly creep over all, and taint of all plants and trees indifferently, and live as they list.

There are sundry other forts of these Cankers or Caterpillers to be found, in the herbs called Cranesbill, Ragwort, Petic-mullen, Hops, Coleworts, Hafis, Marigolds, Fennil, Lycence, Bafil, Alder, Nightshade, Water-betony, Garden-Spurge, and other forts of that herb; in Elm-trees, Pear-trees, Nettles, and Glifforows. Ye there is not any plant to be found, which hath not his proper and peculiar enemy and deftroyer: all which because they are so commonly known of all, though perhaps not of all observed, I will (left I should seem to be infinite) passe over with silence.

But yet I will add a word or two of a strange and flinking Caterpillar, which it was never my hap as yet to fee, described by Conradus Geffer, in these words following: This flinking Caterpillar (faith he) is very like to thofe that are horned, but yet it wanteth horns, differing from them all in colour.

I first espied it creeping upon a wall toward the end of August, Anno 1570, there comeith from it a lothome and an abominable favour and smell, so that you would believe it to be very venomous. It went forwards very frowingly, and with a quick, angry, and delightful countenance, as it were in binding wife, the head always stretched up aloft with the two former feet: I judge her to be blinde. She was the length and breadth of a man's finger, with a few flattering and rugged hairs, somewhat brifly and hard both on her back and fides, the back was very black, the colour of her belly and fides was somewhat red, enlashing to yellow, and the whole body was distinguitfed, divid ded, and easily discerned with fourteen joynts or knots, and every joynt had a certain furre in a kind of wrinklle running all along the back. Her head was black and somewhat hard: her mouth crookedly bending like hooks, having teeth notched like a faw, and with thefe teeth as with pincers or nippers, whatsoever the laide hold on, the (as famished) did bite. She went on fourteen feet, as for the most part all the forts of Palmer-worms do. Without doubt, the muft be concluded to be exceeding venous.

The learned man Vergeniis, took it to be a Pitycampe, and others thought it a Scolopendra: but that could not be, by reason of the number of her feet. I could hardly with much ado endure her vile smell, till I had drawn out her description. She so infefted two Hot-houses with her abominable favour and flink, that the whole and thefle and they that were with me, could not endure in the place. Thus far Geffer, as I have to fhow out certain fcroles of paper of his, never as yet imprinted.

Now I will proceed to discourse of the original, generation, aliment, and metamorphos of Ca terpillers.
Deer Book, a witness of my labour true,
Be not ashamed to write of little worms,
Nor Caterpillers, which from bale things enfeue,
And into ease cast again return :
For these are framed by hand of God most wise,
Never abased in any work so small:

For out of Worms his wonders do arife,
As well as from great Beasts so tall,
Tower bearing Elephant, huge Whale,
And other monsters swimming in the Sea,
Irresistable beasts, in hills and deepseadale,
Death threatening to all that them distilse.

For so I think it best to begin with the verses of a good Poet, who indeed did see and admire the infurbritable wisdom and divine Providence of the Almighty, in the generation and breeding of Caterpillers. Whiles with divers Authors laboured to expresse and let down diversly, I know not what clouds of errors they have thrust us into; for swarming themselves besides the way, although they pretend a matchless understanding in the mysteries of Philosophy, they have cauht others to tread awry as much as themselves, and to be blinded with the macarados of absurdities. And first, if we will begin to rife in the monument of former times, I will here produce Arborifolus opinion in his fifth Book, Histor. cap. 19, who there expressly faith, that they take their beginning from the green leaves of herbs, and namely of Radifh and Coleworts, by means of their small feed of generation, being like unto Miller-feed, which is there left about the end of Autumn, from which female Worms proceed: and of these little Worms in the space of three days a Caterpillar is formed, about the Spring time, or toward the later end thereof, which growing to their due quantity, and well fed withall, they ceafe at length from any further motion, and when Autumn begins them, they change both form and life.

Pliny is of this minde, that Caterpillers fetch all their pedigree, race, parentage and birth, from a dew thickened and incrassated by the heat of the Sun, and fo hilt left behind in leaves: and Armodaus de Ville novae is of the fame judgement. Otherfome derive them wholly from Butter-flies, and will have them to proceed of no other beginning, which as soon as they are crept out of their hard shells or scabbards, wherein they had lain as it were dead all the Winter, affoon as Summer and warm weather draweth on, they call certain eggs either under or above the leaves of certain herbs, which eggs according to the quantity of their bodies, are either greater or leffer, and fome of these fells wherein they are included are of a sky colour; others yellow, white, black, green, or red: and fo being at length about fourteen days quickeened and nourifhed with the lively and kindly heat of the Sun, their hell-house being broken, firft cometh forth small Caterpillers, like unto little Worms, faying that they are diversely coloured, who at their firft appearance, being as it should feem very hungry, do altogether bend themfelves to devour and eat up both leaves and flowers, efpecially of thofe trees and plants whereon they were whileft they were in egges.

But I am of opinion, that not only this, but by divers other ways and means they may proceed and increase, for although the doctrine of Arborifolus in this point feemeth to be unfavourable, and nothing relieving divers fates, because he affirmeth, that that little Worm which is found upon Coleworts, doth turn into a Caterpillar: yet for all that, it is not fo much without fmes of falt, or fo abhorrent to reafon as they would make fome believe. For Nature, as she is able, and doth produce and bring forth a living creature from an Egg, fo likewife from a Worm the breedeth a more perfect living creature, by many degrees; and that by not way of corruption, but by way and means of her excellent perfection. For although a Worm afterwards be not that thing which before it was, (so far as is apparent to outward fens) yet for any thing we can gather or perceive, it is that which it was, and this Toft, is more by a great deal now, then before it was. For a Worm dyeth not, that a Caterpillar may thereby spring, but to the old body, Nature addeth a greater magnitude: as for example, feet, colours, wings: so that whileft life remianeth, it acquireth other parts and other offices.

There be some also that deride the opinion of Pliny, because he entendeth that Caterpillers have their beginning and production from dew. But it may not be denied in my conceit, that some imperfect small creatures are bred and take life from dew, and not without great reason. For the Sun by his kindly heat and warming quality, worketh and acteth, being as it were the form, and the moisture or humour is Passiffe, as the mater or the subject, for the heat of the Sun is different from that of the fire: for it either quickeneth and infipreth with life, or at least-child conferveith and mainaintth our life, by means of likenefe, proportion, or symmetry, wherein our lives and spirits respect each other. Besides, there is nothing more nourishing then Dew, for with it only some certain small creatures are fed, and do thereby live: which thing the divine Poet very well observed, when he uttered these words;

Quantum nos vide repetit.

So that in respect that it is humour, it is matter, in respect it is thin, it pierceth and easily entereth in, and in respect it is attracted and thereby concocted by the Sun, it is the apter made to generation. For the preparation of the form, carryeth with it the matter or stuffe, as his mate and companion: So these two meeting together, there consequently followeth the quickening or taking life of some one creature. And not only are some Caterpillers the off-spring and breed of dew, as common experience can witneffe, but even the greatest part of Caterpillers do fetch their stock and pedigree.
pedegree from Butter-flies, unless it be those that live upon Coleworts and Cabbages, and those that are called Vine-fretters, with some few other. For those that live and breed in Vines, (called of the Grecians, fats,) do proceed from dew, or some dewy and moist humor, which is included in their webs, and there grown to putrefaction. For then do they swarm so exceedingly in some Countries, as I dare neither affirm, nor otherwise imagine, but that they must needs have such a mighty increase from putrefaction. And this for the most part happeneth when the Eastern winde bloweth, and that the warmth of the air furthereth and haletheth forwards any corruption.

All the whole pack of them are great destroyers and devourers of herbs and trees: whereupon Philippus the Parasite, as Athenaeus faith in Pythogorista, braggeth of himself in this wife, Apollofia thumon lochanoste kamppe. Vefcens thymo oleegs, erawu fum. I am (faith he) a Caterpillar that eateth both Thyme and Pot-herbs. And to this lene speakeath Martial, Eruewm midâ pepeft bartu unam. A Garden hardly andandlerly can suffice to feed one Caterpillar. I think he meaneth, when the time of their wasting and devouring is gone and past, for they commonly leave but little behind. For that being past, they go wandering hither and thither, up and down uncertainly, waited and hunger-starved, and so at length pinning away by little and little through famine, some feek them fit places within, other-some above the earth, where they transform themselves, either into a bare and empty bag or cafe, or hanging by a thread into an Auricula covered with a membrane.

If this happen in the midft of Summer, the hard rinde or shell wherein they are inclosed being broken, about the time of 24. days, there flieeth out a Butterfly: but if it come to passe in the midft, or toward the end of Autumn, the Aurelia continueth a whole Winter, neither is there any exclusion before the vernal heat. And yet notwithstanding, all Caterpillars are not converted into Aurelias, but some of them being gathered and drawn together on a heap (as the Vine-frettres) do grow at length to putrefaction, from which sometimes there falleth as it were three blackish Eggs, the true and proper mothers and breeders of Flies and Cantharides. When the Butter-flies do joyne together very late, or after the time it ought to be, they do lay or cast their Eggs, which will continue vital, and that may live till the next Spring, (if a diligent care be had of them) as well as is often seen in Silk-wormes, whose Eggs the Spaniards fell, and that very usually by whole ounces and pounds. I have now according to my cunning, dircoufed of the transmutations and variable changes of Caterpillers; it followeth next that I write of the qualities and use of Caterpillers, together with those preservatives which experienced Physitians have warranted for true and infallible.

All Caterpillers have a burning quality, and such as will readily fetch off the skin, and fea it quickly, and raise blisters. If any one drink the Caterpillar that liveth in the Peach trees, there will forthwith follow a great pain about his mouth and jaws, vehement inflammation of the tongue, strong gripping and wringing of the Stomach, belly and intestines, with a fenible itching about the inward parts, the whole body is as it were burned and seared with heat and hot vapours, and the stomach abhorreth all meat: all which are to be remedied with the same means, as those that have taken Cantharides. Yet properly, (as heretofore I have touched) Oyl of Quinces given to cause vomiting, is the belt and failest. And if we may credit Physy, new Wine boiled to the third part; and Cows milk being drunk, are very effectual. There is not any one fort of Caterpillers, but they are allnaugnt, and venemous, but yet they are leafl hurtful who are smooth and without hairs; and the most dangerous of all the rest, is that which heretofore I termed a Pityocampe, whose poyfon for the most part is deadly.

The daughter of Callus Secondus living at Basfï in Germany, (as Geffiners faith) when she had unwarily and greedily eaten some Coleworts-leaves, or Cabbage in a Garden, and with them some Caterpillers, after a strong vomit that was given, her belly began to swell, which swelling, having continued these many years, could never as yet receive any cure. If you will have your Gardens and Trees untouched and preserved from their mischievous quality, you must first take clean away in the Winter time their webs, or any part thereof (though never so little) that you can finde clearing to the bare boughs: for if you let them alone till the Spring, you shall sooner see them, than finde them removed, for in a short space of time they devour up all that is green both leaves and flowers. Some use to anoint their trees with the gall of a green Lizard, and some with a Bulls gall, which as some commonly report, they can by no means away withall.

The Countrey people chose them with the vapour of a little Brimstone, with straw being fired under the tree, and so to smoother them. Some there be that make a fumigation with Galbanum, Harts-horn, the shavings of Ivory, and Goats hoofs, and Ox-dung. Didyma in Georgius faith, that if you bare the roots of your trees, and beinair or foyl them with Doves dung, they shall never be hurt by any Worms.

I should willingly have omitted, and not renewed with any fresh discovery Convolvulis remedy against Caterpillers, (or rather the immodest deceit and deluding trick of Democritus,) unleeffe experience, which is, Iterata ejusdem eventus observatio, a repeated observation of the same event, had approved the verity thereof, especially in the Country of Stiria. And Palladius in his firft Book, ch. 35. and Conslantius near the end of his 11. and 12. Books, whose words be these;

As si nulla voilet medicina repellere pufcere,  
Das dannet venient artes, nudisque plantas  
Familia, quae jutis tum demum operat juvante  
Logibus, obtrano mansit pudibunda et torve,  
Sed refoluta sine, refoluta magis cupido  
Ter circun atetis, & fecem dutius horti :
The History of Serpents.

Theophrastus faith, that Caterpillars will touch no plants which are moistened or beprinkled with Wine. They will die if they take the fume, or any be way finomced with the herb Pora. Actius. Whereby it is apparent (faith Sibirus) that the herb commonly termed Scabious is not the true Pora. Caterpillars that live and feed on Coleworts, if they be but touched with that kinde of Worm which is found in the Fullers Teafeil, they die. Phine. All to be prinkled a Colewort whileit hath but only three leaves, with Nitre, or with Sulphur and brimstone, and by means of the salteffe, the Caterpillars will quite driven away. Geopon. Palladium in this cafe preferreth the ashes of Fig-leaves. The Sea-onion called Squilla, being fown or hanged up in Gardens, hindereth the breeding of Caterpillars. Otherfome in the moft places of their Gardens, and round about them, sow and set. Myns, the pule called Orobos, which is somewhat like Vetches, and some Wormwood, or at leaft-wife hang them in bunches in divers places of the fame, to expell this kinde of noyfe creature.

Some very advisedly take dry leaves and stalks of Garlick, and with the fame do flyke and perfume their whole Garden, fo that by this way the fmocke being conveyed into all places thereof, the Caterpillars will fall down dead, as Palladium hath written, in whose writings any man may read of plenty of such Antidotes and Alexipharmical medicines, as may ferve to delroy Caterpillers.

Now will I speake of their use in Phyfick, and in the Common-wealthe. The web of Caterpillers being taken inwardly, flaty womenes fluxes, as Matthiauif faith. Being likewise burnt and put into the noftris, it flanches bleeding at the nofe. The Caterpillers that are found amongst the herbs called Spurges of all sorts, (by the judgement of Hippocrates) are notable for purulent and matterly Wombs, especcially if they be first dried in the Sun, with a double quantity of Earth-worms and a little Anifeed finely powdered, and all of them to be retained, and taken in some excellent White-wine. But in cafe they feel any heavinesse or aking in the belly after the taking of this medicine, then it would be good to drink a little Mulie thereupon. This faie Hippocrates in his Book De Superfata.

Disoerides in his firft Book and 90. chapter, gived in drink those common Caterpillers that live in companies together, against the disease called the Squinfie. But unleffe by some hid and fecret property, they do good in this grief being received inwardly, it were needful (in regard of their manifold venemous nature) that they were utterly rejected and condemned. Nicander ufe them to provoke feep, for thus he writhe:

\[ \text{Ei de fugis tripus olige en bommai kemnen} \]
\[ \text{Rpeien dissectam apu chreidea nato, etc.} \]

Which Hieremiuus Lertius hath thus tranflated;

\[ \text{Quod radentes olpe & frententia vermes} \]
\[ \text{(Sting. quibus virides deponent lipo colors)} \]
\[ \text{In medius ferca de Palladium arbore fucco} \]
\[ \text{Tivrinus, hincq tuum comorveus undig, corpus} \]
\[ \text{Tota dabis dulci fucruris membra quieti.} \]

Which may be Englifhed thus;

\[ \text{With herb-eatings, or green-lefs-gnawing, Worms,} \]
\[ \text{Whose backs imprinded are with colours lively green,} \]
\[ \text{All bruifed, mixed with juice from Pallus tree that rains,} \]
\[ \text{Anointed body brought to found feep is often feen.} \]

There are to be feen in divers thorny, prickly, sharp and rough herbs, (as for example in Nettle) sundry hairy or lanuginous Caterpillers, which being tyed or hanged about some part of the body, do by and by (as the report goeth) heal those Inflants which have any flopping of the meats passage when they cannot swallow.

A Caterpillar breeding in Pot-herbs, being frift bruised and then anointed upon any venemous bings of Serpents, is of great efficacy: and if you rub a naughty or a rotten tooth with the Colewort-caterpillers, and that often, within a few days following, the tooth will fall out of his own accord. As canna. Caterpillers mixt with Oyl, do drive away Serpents. Disoerides. If a man anoint his hands, or any other part with Oyl, it will caufe that he shall receive no hurt by the ftringing of Bees, Wasps, or Hornets, as Aius faith. Pliny citec many fond and superfitious fained and lying tales, devised by those who in his time were called Magi, Soothfayers or Diviners, concerning the admirable vertues of Caterpillers. All which, because I fee them hiffed out of the School of Divinity,
Divinity, and that in heart secretly I have condemned them, I will at this time let them passe without any further mention.

They are also a very good meat to divers Birds and Fowls, which are so needful for the use, benefits, and food of mankinde, as to Starlings, Peacocks, Hens, Thrushes, Daws or Choughes: and to hundy fifies likewise, as to the Tench, Pike or Pikere, and to a certain Sea-fish called a Scorpion: also to the Trout, and some others, who are easily deceived with a Caterpillarled hook. Which kind of infining fraud, if you would better be instruicted in, I must reier you to Tertinim in his Geoponicks, and to a little Book dedicated to Robert Dudley, late Earl of Leiceste, written by Master Samuel Vicer of Godmancheles in Hamburgh.

It is not to be paffed over in silence, how that not many years since, there came infinite swarms of Caterpillers out of Terasia into Polonia, Hungary, and beyond the limits of Germany, which did not only devour the fruits of trees, but whatsoever was green either in the medows and tilled fields, besides the Vines: which was taken for an evident prognoftick and sign (as many divined) of some great Turkishe Army to come swarming into those parts: neither herein did this their ghilliing and miiftuing, for the next year following was the fledge of Vienna in Austria, the warting, with dyling and over-running of Hungary: and the deadly English-sweating could not contain it self in an Illand, but must spread it self among them of the Continent, whereupon ensued the destruction of many thousands of people, before any remedy could be found out. In the year of grace 1573. there ruffed infinite swarms of Caterpillers into Italy, where they spoyled and made havoc of all green buds and graffe growing upon the face of the earth, so that with their unquenchable and infatiate voracity, they left nothing but the bare roots of trees and plants: and this hapned chiefly about Mantua and Brixia. And upon the neck of this, followed a terrible and fearful pellitence, of which there dyed about 50. thousand perons.

Also in the year of our Lord GOD 1570. there were two great and sudden swarms of Caterpillers that came ruffing into Italy in the face of one Summer, which put the Romanes into an exceeding great fear, for there was nothing left green in all their fields that could be preferred from their raisine, and from their gluttonous and puling maw. And although the fertility of the year immediately following, did almoft blot and rafe out the memory of this their heavy punishment, and that many seemed as it were to repent them of their repentence; yet are we not to doubt, but that many were truly penitent, and seriusly were drawn to amendment of life by a due confideration hereof. God grant that we may be warned by other mens punishments, left that poor creature, which we imagine to be the fiiileft and leaft able to do us harm, we finde the most heavy.

Of the BOAS.

It was well known among all the Romans, that when Regulus was Governour or General in the Pairick wars, there was a Serpent (neer the River Bagrade) killed with flings and and itones, even as a Town or little City is overcome, which Serpent was an hundred and twenty foot in length: whose skin and cheek bones were reserved in a Temple at Rome, until the Numantine war.

And this History is more easie to be beleived because of the Boas Serpent bred in Italy at this day: for we read in Suidus, that when Claudius was Emperor, there was one of them slain in the Vitusen at Rome, in whose belly was found an Infant swallowed whole, and not a bone thereof broken. The Germanes call this Serpent Uncke, and besides them I do not read of any other Name. Some have ignorantly confounded it with Cherisdrus, an Adder of the earth, but upon what reason I do not know, only Suidus dicouring of Calabria, might give some colour to this opinion, when he faies, Calabria Cherisdrus eft frequentisfima, & bodem gregit quem Anguem ad immensum molem ferunt coeloscrere: that is to faie, Calabria is full of Earth-adders, and it breedeth the Boas, which Snake some affirm will grow into a monstrous stature. Out of which words, there is no wise man can collect, that the Boas and the Adder of the earth are all one thing.

The Latines call it Boa and Bova of Bar, because by sucking Cows milk it so encreafeth, that in the end it destroyeth all manner of herds, Cartel and Regions. And our domestical Snakes and Aders, will also suck milk from Kine, as in all the Nations of the world is most manifeft to them that will obserue the fame.

The Italians do uttally call them, Serpent of Aque, a Serpent of the water, and therefore all the Learned expound the Greek word Hidra for a Boa. Cardan faith, that there are of this kinde in the Kingdom of Senega, both without feet and wings, but moft properly they are now found in Italy, according to these verues;

Boa quidem Serpent quem tellus Italia nutrit
Hunc babulum plures tac easimine ducunt.

Which may be Englished thus;

The Boa Serpent which Italy doth breed,
Men say, upon the Milk of Cows doth feed.

Their fashion is in seeking for their prey among the haers, to destroy nothing that giveth suck so long as it will live: but they reserve it alive until the milk be dryed up, then afterward they kill and
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and eat it, and fo they deal with whole flocks and herds. The poyzon of it, faith Fefius, maketh tumour and swelling in the body, whereunto all other agree, except Albertus, who in this point agrees not with himſelf, for in one place he faith, that they are venomous, and their teeth alfo like other Dragons, in anothre place he faith, their poyzon is very weak, and not to be regarded, becaufe they be Dragons of the third order or divifion. They go all upon their belly, and fo I will conclude their ifory with Manuian.

Turpi Boa flexilis also.
That is to fay;
The filthy Boa on his belly moves.

of the CHAMELEON.

I t is very doubtful whether a Chamaeleon were ever known to the ancient Hebrews, because there is no certainty among them for the appellation thereof, fome affirming one thing, and fome another. We read Levit. 11. among other beafts there forbidden to be eaten of, Kooby, or Koeb, which Rabbi Kimbi interpreteth a kinde of Crocodile, (Haoab,) Rabbi Jone in the Arabian, Hardun, and fo alfo doth Avicen. The Chaldree, Koob, the Persians, An Sanga; the Septuagints and S. Jerom, a Chamaeleon. The felf fame word is found Levit. 14. which the Jews do vulgarly at this day take for Semeus, a Crocodile of the earth. The word Oab or Oek, leemeth to come neer to this, which is fometimes interpreted a Tortoife, a Dragon, or a Monkey. And Oab by Sybagians, is translaffed a Salamander. Koab by the Jews, is translaffed a Cuckow, a Jay, a Pelican, and an Onnasina: and in the fcond of Sepby for a Chamaeleon. Some have framed an Hebrew word Gamalion, which is abfur'd, for Gamingon. Zameon, Ameleon, Hamaleon, and Meleon, are but corrupted terms of Chamaeleon, as Ijferum well obferveth, or elfe fignifieth fome of the kindes of Lizards or Stellions, as is manifeft in Albertus, and other learned Writers. Therefore I will not blot more paper about the Arabian beafts, Harbe and Albarbe, Arabian or Hardun, or Albarba, but leave them to the judgement of thofe, who delight in the inquifition of fuch fecrets.

Chamaeleon is a Greek word, from whence the Latines, and almoft all Nations have borrowed the name of this Serpentine or creeping beaft, except the Germans, and they only have famed names, as Lindsworm in Albertus, that is, a Worm of the Wood, and Rattader by Gefier, that is, a Ratmouse, becaufe in quantity and compofition it refembleth both thofe creatures. Some Latines by reafon of the fimilitude it holdeth with a Lizard, call it Muri Lacettum, a Moufe Lizard. The Greek word Cломейen, fignifieth a low and humble Lion, becaufe in fome parts and members, he refembl eth that lofty and courageous beaft. So do they derive the name of certain low and short herbs, from great and tall trees, as Glomaeurisstis Chamaedrae, and Chamaepitys, shrubs of Plumtree, Heath, Cypress, Ger- mander, and ground IVy, from the Cherry, the Cyprte, the Cedar, and the Pine tree. And thus much for the name of the Chamaeleon.

The Countries breeding Chamaeleons, are Africa, Asia, and India, and for the quantity thereof I do finde divers defcriptions, some particulars, as in Bellinum, and Scaliger, and fome general in other Writers, all which I purpoſe briefly and succifely to exprefs in this place. It is faid (faith Bellinum) that the Frog and the Chamaeleon are like one to the other, because they use the fame Art and industry in taking their meat: and to the intent that this thing may more evidently appear, both by the defcription and the picture, I have thought good to entreat of the Chamaeleon, among the Water-beafts, becaufe it liveth for the moft part in moist, marshy, and Penny places. I have feen of them two kindes, one, a leffer kinde in Arabia, being of a whitifh colour, all fet over with yel- lowifh or reddifh spots, and in quantity not exceeding the green Lizard. The other, in the hot places of Egypt, being twice as big in quantity as the Arabian, and of a changeable colour, betwixt white, green, brown and yellow, for which occafion fome have called it versicolar Chamaeleon, that is, a turn-coat-coloured Chamaeleon. But both thefe kindes of Chamaeleons have a coppered head, like to a Camel, and two bones at the top of their brows flanding upon either fide, and hanging out: their eyes are more clear and bright, about the bigneffe of a peaft, only covered with a skin, fo that their appearance outward, exceedeth not the quantity of the Millet-feed. They are very flexible, turning upwards and downwards, and are able at one time to look two ferveral ways, diftinfly upon two ferveral objects, wherein they exceed all other beafts. It is a heavy and dull beaft, like the Salamander, neither can it run, but like a Lizard, wherefore it is not afraid of the fight of men, neither doth it run from their preffence, neither is it easily provoked to harm or bite, a man : it climbeth little trees for fear of Vipers and horned Serpents.

Some have thought that it never eateth meat, but is nourifhèd with the wind, becaufe it draweth in very eagerly many times the winde into the belly, whereby it fwelleth; for it hath great lights stretched all along the fides of the belly: but this opinion is falfe, as shall be fhewed hereafter, al- though it cannot be denied that it is Oviparum patensfinulum famis: that is, The moft induring famin among all other Egg-breeding-beafts, for it faileth many times eight moonths: yea, a whole year together. In head of no trils and ears, it hath certain passages in thofe places, whereby it smellith and heareth.

The
The opening of the mouth is very large, and it hath teeth on the neather and upper chap like faws, such as are in a Slow-worm, the tongue very smooth, half a hand breadth long, where with it licketh in thoso in fentry Flies, Horse-flies, Locuits, and Emets whereupon it feedeth: For it keepeth at the mouth a certain fome or moisture, and also upon the tail or backer parts, where withal thoso Flies and other Creatures are fo much delighted, that they follow the Chameleons, and as it were bewitched with the defire thereof, they fall upon the moisture to their own perdition; and this is to be noted, that this moisture or fome in the backer parts of the belly is like a Spunge. It hath a line or brake under the belly, indented as it were with fcales, white in colour, and stretched out to the tail; but the feet seem to be of an artificial work of Nature, wherein is a curious difference between the former and the hinder: for the forefeet have three fingers or claws within, and two without: the hinder-feet on the contrary, have two without and three within. It layeth twelve long Eggs, such as Lizards do; the heart is not much greater than the heart of a domeftical Moufe or Rat: it hath two laps of a Liver, whereof the left is the greater, unto which cleaveth the skin of the gall, the which skin exceedeth not in quantity a Barley corn. And thus far the description by Bellamie.

In the next place for the better manifeflation of the nature of this beall, I will alfo add the description that Strigel maketh thereof. For he did, that when Johannes Landius was in the farthest parts of Syria, he saw five Chameleons, whereof he bought one, which with his tongue did very suddenly take off a Fly from his breast: Wherefore in the diʃference of the said Chameleon, he found that the tongue thereof was as long as a hand breadth, hollow and empty, in the top whereof there was a little hole with filthy matter therein, wherewithal he took his prey: which thing seemed new and strange unto them which heretofore thought that a Chameleon lived only by the air. His back was somewhat crooked, rifting with spotted bunches like a Saw, like the Turlbut fish, his belly closed with short ribs, his eyes most beautiful, which he turneth every way without bending his neck: his colour white, green, and dusky: naturally green, somewhat pale on the back, but paler and neerer to white on the belly, yet was it better all over with red, blew, and white spots.

It is not true that the Chameleon changeth her self into all colours: upon green growth greenneffe, upon the dusky is tempered a dusky colour; but upon blew, red, or white, the native greenneffe is not blemished or obscured, but the blew, white, and red spots yeld a more lively and pleafant aʃpect; upon black, standeth brown, yet so as the green hew feemeth to be confounded with black, and it doth not change his own colour into a suppozed colour, but when it is oppressd with fear or grief. That it liveth sometime of the air, a whole yer or more, doth appear, because it eateth no meat during that time, but gaping with a wide mouth draweth in the air, and then shutteth his chops again his belly swellth. Yea, I found one that constantly affirmed, that they turn themselves to the beams of the Sun, and gaping wide after them, follow them hard as it were to draw them in. They have five definct claws upon every foot, with two of which they clapp the round boughe or twigs of trees, as Parrats do when they fit upon their perches, and these claws stand not as other Birds do, three together and one by one, but in imparity or diflimilitude, three on the one side, and two on the other, and
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In English thus:

The Beasts that liveth by wind and weather,

Of each being touch'd takest colour.

The reasons of this change or colour are the same which are given of the Buffe and Pelte Fishe; namely, extremity of fear, the thimnefle, smoothnefle, and baldneffe of the skin. Whereupon Ter-ribbim writeth thus; Hic fci Chamaeleonti datum quod vulgo dilum eff de fua corti ludere: That is to say, This is the only gift of nature to a Chamaeleon, that according to the common Proverb it deceiveth with his skin; meaning that a Chamaeleon at his own pleasure can change the colour of his skin.

Whereupon Exafimus applieth the proverb, de aldeo corti ludere, to such as secure themselves with other mens peril. From hence alo cometh another proverb, Chamaeleontes untue adobolontes, more mutable than a Chamaeleon, for a crafty, cunning, inconstant fellow, changing himself into every mans disposition; such a one was Antipater, who was said to be in Albens, and of such a man remembering this beast, did Alcibiades make this emblem against flatterers:

A Chamaeleon of all Egge-breeding Beasts is the thimneft, because it lacketh blood, and the rea-son hereof is by Ariflades referred to the disposition of the foul: For he faith, through overmuch fear, it taketh upon it many colours, and fear through the want of blood and heat is a refrigeration of this Beast.

Plutarch also calleth this Beast a meticuluous and fearful beast, and in this cause concludes the change of his colour, not as some fay, to avoid and deceive the beholders and to work out his own happinefle, but for meer dread and terror.
change of Chameleons colour, not to fear, but to the meat and to the air, as appeareth by these verses:

Novi timor, imo clama, nimirum limpidus aer,
Ambo fumam vario membra colore novant.

Which may be thus Englished:

Not fear, but meat which is the air thin,
New colours on his body doth begin.

But I for my part do assign the true cause to be in the thinness of their skin, and therefore may easily take impression of any colour, like to a thin fleck of a horn, which being laid over black, seemeth black, and to other colours: and besides, there being no hinderance of blood in this Beast, but Intrails, except the lights, the other humors may have the more predominant mutation, and so I will conclude the discourse of the parts and colour of a Chameleon, with the opinion of Karmides, not that I approve it, but to let the Reader know all that is written of this Subject, his words are these; Chameleons singult huius dies mutat colorem, A Chameleon changeth his colour every hour of a day.

This Beast hath the face like a Lyon, the feet and tail of a Crocodile, having a variable colour, as if you have heard, and one strange continued nerve from the head to the tail, being altogether without flesh, except in the head, cheeks, and uppermost part of the tail, which is joyned to the body; neither hath it any blood but in the heart, eyes, and in a place above the heart, and in certain veins derived from that place, and in them also but a very little blood.

There be many membranes all over their bodies, and those stronger then in any other Beasts. From the middle of the head backward, there ariseth a three square bone, and the fore part is hollow and round like a pipe, certain bony brims, sharp and indented, standing upon either side. Their brain is so little above their eyes, that it almost toucheth them, and the upper skin being pulled off from those, there appeareth a certain round thing like a bright ring of Brass, which Scientists call Falsa, which signifieth that part of a Ring, wherein is set a precious stone.

The eyes in the hollow within are very great, and much greater then the proportion of the body, round and covered over with such a skin as the whole body is, except the apple, which is bare, and that part is never covered. This apple stands immovable, not turned, but when the whole eye is turned at the pleasure of the Beast. The snout is like to the snout of a Hog-ape, always gaping, and never shutting his mouth, and serving him for no other use but to bear his tongue and his teeth; his gums are adorned with teeth as we have said before, the upper lip being shorter and more turned in then the other. Their throat and artery are placed as in a Lizard: their lights are exceeding great, and they have nothing else within their body. Whereupon Theophrastus in Plutarch witnesseth, conceiveth, that they fill the whole body within, and for this cause it is more apt to live on the air, and also to change the colour.

It hath no Spleen or Milt, The tail is very long, at the end and turning up like a Vipers tail, winded together in many circles. The feet are double cloven, and for proportion resembles the thumb and hand of a man, yet so, as if one of the fingers were let near the side of the thumb, having three without and two within behind, and three within, and two without before, the palm betwixt the fingers is somewhat great: from within the hinder-legs, there seem to grow certain spurs. Their legs are straight, and longer then a Lizards, yet is their bending-like, and their nails are crooked and very sharp. One of these being deflected and cut asunder, yet breatheth a long time after, they go into the caves and holes of the earth like Lizards, wherein they lie all the Winter time, and come forth again in the Spring, their pace is very slow, and themselves very gentle, never exasperated but when they are about wise Fig-trees.

They have for their enemies the Serpent, the Crow, and the Hawk. When the hungry Serpent doth assault them, they defend themselves in this manner, as Alexander Mindius writeth: they take in their mouths a broad and strong italk, under protection whereof as under a buckler, they defend themselves against their enemy the Serpent, by reason that the italk is broader then the Serpent can gripet in his mouth, and the other parts of the Chameleon so firm and hard, as the Serpent cannot hurt them: he laboureth but in vain to get a prey, so long as the italk is in the Chameleons mouth. But if the Chameleon at any time see a Serpent taking the air, and running himself under some green tree, he climbeth up into that tree, and seteth himself directly over the Serpent, then out of his mouth he casteth a thread like a Spider, at the end whereof hangeth a drop of poyzon as bright as any pearl, by this ittling he letteth down the poyzon upon the Serpent, which lighting upon it, killeth it immediately. And Scaliger reporteth a greater wonder then this in the description of the Chameleon, for he faith, if the boughs of the tree so grow as the perpendicular line cannot fall directly upon the Serpent, then he can correct it and guideth it with his fore-feet, that it faileth upon the Serpent within the mark of a hairs breadth.

The Raven and the Crow are also at variance with the Chameleon, and so great is the adverse nature betwixt these twain, that if the Crow eat of the Chameleon being flain by him, he dyeth for it, except he recovereth his life by a Bay-leaf, even as the Elephant after he hath devoured a Chameleon, faeth his life by eating of the Wilde-olive-tree. But the greatest wonder of all is, the hostility which Plini reporteth to be betwixt the Chameleon and the Hawk. For he writeth,
that when a Hawk flyeth over a Chameleon, the hath no power to resift the Chameleon, but fallith down before it, yeilding both her life and limbs to be devoured by it; and thus that devourer that liveth upon the prey and bloud of others, hath no power to save her own life from this little Beast.

A Chameleon is a fraudulent, ravenous and glutinous Beast, impure, and unclean by the law of GOD, and forbidden to be eaten: in his own nature wilde, yet counterfeiting meekness, when he is in the custody of man. And this shall suffice to have spoken for the description of this Beast, a word or two of the Medicines arising out of it, and to a conclusion.

I finde that the Ancients have observed two kindes of Medicines in this Beast, one magical, and the other natural, and for my own part, although not able to judge of either, yet I have thought good to annex a relation of both to this History. And first of the natural medicines, Democritus is of opinion that they preserve a peculiar Volume, and yet he himselfe tellett nothing of them worthy of one page, except the lying vanities of the Gentiles, and superstitious of the Grecians. With the gall, of the succubus and leprous parts of the body be anointe three days together; and the whiteneffe of the eyes, it is believed to give a present remedy: and Arabigenus preferreth the fame for a medicine for the taking away of the unprofitable and prickling hairs of the eye-brows. It is thought if it be mixed with some sweet composition that it hath power to cure a quotidane Auge. If the tongue of a Chameleon be hung over an oblivious and forgetful person, it is thought to have power to restore his memory.

The Chameleon from the head to the tail, hath but one Nerve, which being taken out and hung about the neck of him that holdeth his head awry, or backward, it cureth him. The other parts have the same operation as the parts of the Hyaena and the Sea-calf. If a Chameleon be fed in an earthen pot, and confum'd till the water be as thick as Oyl, then after such feething take the bones out and put them in a place where the Sun never cometh, then if thee see a man in the fit of the Falling-sickneffe, turn him upon his belly, and anoint his back from the Os facrum to the ridge-bone, and it will presently deliver him from the fit: but after seven times using, it will perfectly cure him. The Oyl thus made must be kept in a Box. This medicine following is a present remedy against the Gout. Take the head and feet of a Chameleon, cut off also the outward parts of the knees and feet, and then keep by themselves those parts: that is to say, the parts of the right leg by themselves, and the parts of the left leg by themselves, then touch the Naul of the Chameleon with your thumb and right finger of your hand, dipping the tips of your fingers of the right hand in the blood of the right foot of the Beast: and so likewise the fingers of the left hand in the blood of the left foot, then include those parts in two little pipes, and so let the sick peron carry the right parts in the right hand, and the left parts in the left hand, until he be cured: and this must be remembered, that he must touch every morning about the Sun-rising the said Chameleon, yet living and lapped in a linnen cloth, with those parts that are oppreft with the Gout.

The like superflitious and Magical deviles are thofe that follow, as they are recorded by Pliny and Democritus: The head and throat being fet on fire with wood of Oke, they believe to be good against Thunder and Rain, and so also the liver burned on a Tyle. If the right eye be taken out of it alive, and appli'd to the whiteneffe of the eyes in Goats milk, it is thought to cure the same. The tongue bound to a woman with child, preferveth her from danger in childe-birth, if the fame tongue be taken from the Beast alive, it is thought it fore-warneth the event of judgement. The Heart wrapped in black Wooll of the first shearing, by wearing it cureth a quartane Ague; the right claw of the fore-feet bound to the left arm with the skin of his cheeks, is good against robberies and terrors of the night, and the right pan against all fears. If the left foot be forc'd in a furnace with the herb Chameleone, and afterward putting a little Ointment to it, and made into little Paffies, being carried about in a wooden box, it maketh the party to go invisible. The right shoulder maketh a man to prevail against his adversaries, if they do but tread upon the nerves call down upon the earth. But the left shoulder they consecrate the fame to monstrous dreams, as if that thereby a man might dream what he would in his own perfon and efect, the like in others.

With the right foot are all Paffies resolved, and with the left foot all Lathargies: the Wine wherein one side of a Chameleon hath been steeped, sprinkled upon the head, cureth the ach thereof. If Swines Grefe be mingled with the powder of the left foot or thigh, and a mans foot be anointed therewith, it bringeth the Gout, by putting the gall into fire, they drive away Serpents; and into Water, they draw together Weasels, it pulleth off hair from the body, so also doth the Liver, with the lights of a Toad; likewise the Liver dissolveth amorous Incantations. Melancholy men are cured by drinking the juice of a Chameleon out of a Chameleon skin. They also say, that the Intrails and dung of this Beast wafhed in the urine of an Ape, and hung up at our enemies gates, caufeth reconciliation.

With the tail they bring Serpents asleep, and lay the flowing of the floods and waters: the same mingled with Cedar and Myrrhe, bound to two rods of Palm, and driven upon water, caueth all things that are contained in the same water to appear; but I would to GOD that such Magitians were well beaten with Rods of stronger wood, until they forsook these magical fooleries: And thus much for the florey of the Chameleon.
T

His Beasts is called by the Grecians, Batilsous, and the Latins Regulus, because he feemeth to be the King of Serpents, not for his magnitude or greatness. For there are many Serpents bigger then he, as there be many four-footed Beasts bigger then the Lyon, but because of his flatly pace, and magnanmous minde; for he creepeth not on the earth like other Serpents, but gaeth half upright, for which occasion all other Serpents avoit his sight. And it feemeth nature hath ordained him for that purpose: for beside the strength of his poiyon which is uncurable, he hath a certain comebe or Coronet upon his head, as shall be showed in due place. It is also call'd St. Heli, as we read in Iffidur, Stibilum enim societ antiquam murdrerat vel exsua: The Cockatrice kilthe before it burneth. The Hebrews call it Pelven, and Carman, also Zapina, and Zaphhaini. The Oicle, Harmene, and also Carmene: The Egyptian, Ocre; the Germans, Ein Etre Schiingle; the French, Un Befilic; the Spaniards and Italian, Bafilico.

There is some question amongst Writers, about the generation of this Serpent: for some (and those very many and learned) affirm him to be brought forth of a Cocks Egg. For they say that when a Cock groweth old, he layeth a certain Egg without any shell, in read whereof it is covered with a very thick skin, which is able to withstand the greatest force of an eafe blow or fall. They lay moreover, that this Egg is laid only in the Summer time, about the beginning of Dog-days, being not long as a Hens Egg, but round and orbicular: Sometimes of a dultry, sometimes of a boase, sometimes of a yellow with muddy colour, which Egg is generated of the putrefied feed of the Cock, and afterward fer upon by a Snake or a Toad, bringeth forth the Cockatrice, being half a foot in length, the hinder-part like a Snake, the former part like a Cock, because of a treble comebe on his fore-head.

But the vulgar opinion of Europe is, that the Eggge is nourished by a Toad, and not by a Snake; howbeit in better experience it is found that the Cock doth fit on that Eggge himself: whereas Levius Laminio in his ewelth Book of the hidden miracles of nature hath this discourse, in the fourth Chapter thereof. There happened (saith he) within our memory in the City of Pirizes, that there were two old Cocks which had laid Eggges, and the common people (because of opinion that those Eggges would engender Cockatrices) laboured by all means possible to keep the said Cocks from flitting on those Eggges, but they could not with clubs and flaves drive them from the Eggges, until they forced to break the Eggges in funder, and trangle the Cocks. But this point is worth inquiry, whether a Cock can conceave an Eggge, and after a certain time lay the same without a shell. I for my part am perswaded, that when a Cock groweth old, and ceaseth to tread his female in the ordinary course of nature, which is in the seventh or ninth year of his age, or at the most in the fourteenth, there is a certain concretion bred within him by the putrefied heat of his body, through the baying of his feed generative, which hardeneth unto an Eggge, and is covered with such a shell, as is said already: the which Eggge being nourished by the Cock or some other beast, bringeth forth a venomous Worm, such as are bred in the bodies of men, or as Wasps, Horfe-flies, and Caterpillers engendered of Horse-dung, or other putrefied humors of the earth: Of the Cockatrices.
and so out of this Egg may such a venemous Worm proceed, as in proportion of body, and peltiferous breath, may resemble the African Cockatrice or Basilisk, and yet it is not the same whereof we purpose here to intreat, but will acknowledge that to be one kind of Cockatrice, but this kind is generated like other Serpents of the earth, for as the ancient Hermes writeth, it is both false and impossible, that a Cockatrice should be hatched of a Cocks Egg. The same writer maketh mention of a Basilisk ingendered in dung, whereby he meaneth the Elisir of life, wherewithal the Alchemists convert metals.

The Egyptians hold opinion, that these Cockatrices are ingendered of the Eggs of the Bird called Ibis, and therefore they break those Eggs wherefover they finde them: and for this cause in their Hieroglyphicks, when they will signifie a lawful execution after an upright judgment, and found institution of their fore-fathers, they are wont to make an Ibis: and a Cockatrice.

The Countries breeding or bringing forth these Cockatrices, are said to be thefe: First Africk, and therein the ancient seat or land of the Turks, Arabis, and all the Wilderneffe of Africa, and the Countries Cyrenet. Gauls among the Physitians only, doubteth whether they have a Cockatrice or no, whose whole authority in this case must not be followed, seeing it was never given to mortal man to fee and know every thing, for besides the holy Scriptures unavoidable authority, which both in the prophesie of Esay and Jerem, maketh mention of the Cockatrice and her Eggs: there be many grave humane Writers, whose whole authority is irrefragable, affirming not only that there be Cockatrices, but alfo that they infect the air, and kill with their bite. And Mercurial affirmeth, that when he was with Maximilian the Emperor, he saw the carcasse of a Cockatrice, referfed in his treasury among his undoubted monuments. Of this Serpent the Poet Georgium Philobatus writeth on this manner:

Rex eff Serpentum Basiliscus, quem modo vincant
Muifae injuflus, jevaque bella ferre.
Lernae vermen Basilisidis fads Cyrenae
Procula deinde maxima fperationem.

That is to say,

Et nefi eft omni galli, fi crederes fefi,
Decrepitis, in fima, fulo nitentes, docent.
Sed quamvis officina ladeat, vi fique ferorum
Omnis genus, credat nulla tenere bona.

We do read that in Rome, in the days of Pope Leo the fourth, there was a Cockatrice found in a Vault of a Church or Chappel, dedicated to Saint Luca, whose peltiferous breath had infected the air round about, whereby great mortality followed in Rome: but how the said Cockatrice came thither it was never known. It is most probable that it was created and fent of GOD for the punishment of the City, which I do the more easily believe, because Sigerinus and Julius Scaliger do affirm, that the faid peltiferous beast was killed by the prayers of the faid Leo the fourth.

I think they mean that by the authority of the faid Bishop, all the people were moved to general falling and prayer, and fo Almighty GOD who was moved for their firs, to fend fuch a plague amongst them, was likewise intreated by their prayers and fuits, not only to reverse the plague, but with the fame hand to kill the beast, wherewithal it was created: even as once in Ægypt by the hand of Moses, he brought Graffe-hoppers and Lice, by fo the fame hand he drove them away again.

There is some fmall difference among the Writers, about the quantity and parts of this Serpent: which I will briefly reconcile. First Æthiopian faith, that a Cockatrice is not paft a palm in compaffe, that is as much as a man can grip in his hand. Second faith, that it is as big as twelve fingers. Scaliger and Jefuites affirm, that it is but half a foot long.

African faith, that is the Arabian Harmonia, that is, the Cockatrice, is two cubits and a half long. Nicander faith, Et tribus extempe parcetibus corpore palmis, that is, it is in length but three palms. Actius faith, that it is as big as three handfuls. Now for the reconciliation of all thefe. It is to be understood, that Piny and Ælianus speakeith of the Worm that cometh out of the Cocks Egg: and in regard of the length, not of the quantity, and fo confound together that Worm and the Cockatrice. For it is very reasonable, that feeing the magnitude and greatneffe of the Serpent is concluded to be the leaft a span in compaffe, that therefore the length of it must needs be three or four foot at the shorft; elfe how could it be such a terror to other Serpents, or how could the fore-part of it arise fo eminently above the earth, if the head were not lifted at the leaft a foot from the ground. So then we will take it for granted, that this Serpent is as big as a mans writ, and the length of it anfevorable to that proportion.

It is likewise questionable whether the Cockatrice have wings or no: for by reason of his conceived generation from a Cock, many have described him in the fore-part to have wings, and in the hinder part to have a tail like a Serpent: And the conceit of wings seemeth to be derived from holy Scripture, because it is written Esay 14. verf. 29. De radicibus ostendit regulas & semen ejus aperit hominem: That is to say, Out of the Serpents roots fhall come a Cockatrice, and the fhit thereof fhall be a fiery flying Serpent, as we tranflate it in English: but Teemellius the beft Interpreter, doth render the Hebrew in this manner: Deractic Serpentinus proterba hominibus & fruticos illebus prefcri volant: That is to say, word for word, Out of the root of the Serpent fhall come the Homowe.
Of the Cockatrice.

I have, & the fruit thereof a flying Pheasant. Now we know, that the Hamath and the Pheasant are two other different kindes of Serpents from the Cockatrice, and therefore these Interpreters being the most faithful and learned, we will rather follow the holy Scripture in their translation, then the vulgar Latin, which is corrupted in very many places, as it is also Elyafi the Saxon verfe. For Pheasant there is again in the vulgar translation the Cockatrice: and for this cause we have not described the Cockatrice with wings, as not finding sufficient authority to warrant the same.

The eyes of the Cockatrice are red, or somewhat inclining to blackneffe, the skin and carkafe of this beast have been accounted precious, for we do read that the Pergamen did buy but certain pieces of a Cockatrice, and gave for it two pound and a half of silver: and becaufe there is an opinion that no Bird, Spider, or venomous beast, will indure the flight of this Serpent, they did hang up the skin thereof stuffed, in the Temples of Apollo and Diana, in a certain thin net made of gold: and therefore it is said, that never any Swallow, Spider, or other Serpent durft come within those Temples: And not only the skin or the flight of the Cockatrice worketh this effect, but also the flesh thereof, being rubbed upon the pavement, polls or walls of any Houfe. And moreover, if Scaliger. Silver be rubbed over with the powder of the Cockatrices flesh, it is likewise said, that it giveth it a tincture like unto gold: and besides these qualities, I remember not any other in the flesh or skin of this Serpent.

The hifling of the Cockatrice which is his natural voyce, is terrible to other Serpents, and therefore as soon as they hear the fame, they prepare themselves to fly away, according to these verses of Nicander;

uell auditas exspectant nullus suarum, 
Quantamvis magnis fiment animalia fivræ, 
Quam vel in paffium, vel space devia funt.

Which may be Englished thus;

When is the greatest winding Serpents bear, 
(Reading in Wood or pasture all abroad,)
Altho' inclin'd in many places, yet fear:
Or in mid-day the shades near Brooks road,

The fearful hissing of this angry beast, 
They run away, as fast as feet can lead them, 
Flying his rage unto some other field, 
Turning their backs whereby they do escape him.

We read also that many times in Africa, the Mules fall down dead for thirst, or elfe ye die on the ground for some other caufes, unto whose Carkafe innumerable troops of Serpents gather themselves to feed thereupon: but when the Bafilisk windeth the faire dead body, he giveth forth his voyce at the firft hearing whereof, all the Serpents hide themselves in the near adjoining sands, or else run into their holes, not daring to come forth again, until the Cockatrice have well dined and satisfied himself. At which time he giveth another signal by his voyce of his departure: then come they forth, but never dare meddle with the remnants of the dead beast, but go away to seek some other prey: and if it happen that any other pestiferous beast come unto the waters to drink near the place where the Cockatrice is lodged, so soon as it perceiveth the presence thereof, although it be not heard nor seen, yet it departeth back again, without drinking, neglecting his own nutriment, to save itself from further danger: whereupon Lucanus saith;

Lati si fibi submovet omné
Vul/us, Or in occaso regnat Basilissus arena.

Which may be thus Englished;

He makes the vulgar far from him to stand,
While Cockatrice alone raíngs on the sand.

So then it being evident that the hifling of a Cockatrice is terrible to all Serpents, and his breath and poýon mortall to all manner of Beasts: yet hath God in nature not left this vile Serpent without an enemy; for the Weafl and the Cock are his triumphant Victors; and therefore Piny saith well:

Hoc si talibus multo quad fampus eminum conspiret regs wider, mustellorum virus exitio efi, adox natura nilit placuit efs fine pari: That is to say, This monster which even Kings have defired to see when it was dead, yet is destroyed by the poýon of Weaflis, for so it hath pleased Nature, that no Beast should be without his match.

The people therefore when they take Weaflis, after they have found the Caves and lodging places of the Cockatrices, which are easily difcerned by the upper face of the earth, which is burned with their hot poýon, they put the Weafl in unto her: at the fight whereof the Cockatrice flyeth like a weakening overmatched with too strong an adversary, but the Weafl followeth after and killeth her. Yet this is to be noted, that the Weafl both before the fight and after the slaughter, armeth her self by eating of Rue, or else she would be poýoned with the contagious air about the Cockatrice; and besides this Weafl, there is no other beast in the World which is able to stand in contention against the Cockatrice, faith Lemau.

Again, even as a Lyon is afraid of a Cock, so is the Bafilisk; for he is not only afraid at his flight, but almost dead when he heareth him crow, which thing is notoriously known throughout all Africa. And therefore all Travellers which go through the Deferts, take with them a Cock for their safe conduct against the poýon of the Bafilisk: and thus the crowing of the Cock is a terror to Lyons, and a death to Cockatrices, yet he himself is afraid of a Kite.
The History of Serpents.

There are certain learned Writers in Saxon, which affirm, that there are many kindes of Serpents in their Woods; whereas one is not unlike to a Cockatrine: for they say it hath a very sharpe head, a yellow colour, in length not exceeding three Palms; of a great thicknefe, his belly spotted and adorned with many white pricks: the back blew, and the tail crooked and turned up; but the opening of his mouth is far wider then the proportion of his body, may seem to bear. These Serpents may well be referred to Cockatrices: for however their poiyon is not so great as the Basilisks of Africa, (even as all other Serpents of the hot Countries are far more pelliferous then those which are bred in the cold Countries;) the very fame reafon perfwaded me, that there is a difference among the Cockatrices, and that thofe of Saxon may differ in poiyon from thofe in Africa, and yet be true Cockatrices: Besides this, there is another reafon in Lemnias, which perfwaded the Reader there are no Cockatrices; because when the Countrymen fet upon them to kill them with Clubs, Bills, or Forks, they receive no hurt at all by them, neither is their any apparent con- cept of the air: but this is answered already, that the poiyon in the cold Country is nothing so great as in the hot, and therefore in Saxon they need fcar the biting, and not the airs infection.

Cardan relateth another story of a certain Serpent, which was found in the walls of an old decayed Houle in Milian, the head of it (faith he) was as big as an Egge, too big for the body, which in quantity and shape refeembled a Stellion. There were teeth on either chap, fuch as are in Vipers. It had two legs, and thofe very fhort, but great, and their feet had claws like a Cats: fo that when it ftood it was like a Cock, for it had a bunch on the top of the head, and yet it wanted both feathers and wings: The tail was as long as the body, in the top thereof there was a round bunch as big as the head of an Italian Stellion. It is very likely that this beaft is of the kinde of Cockatrices.

Now we are to intreat of the poiyon of this Serpent, for it is a hot and venomous poiyon, infec- ting the air round about, fo as no other creature can live near him; for it killeth, not only by its hisfing and by his fight, (as is faid of the Gorgons,) but also by his touchings, both immediately and mediatly; that is to fay; not only when a man toucheth the body it felf, but alfo by touching a Weapon wherewith the body was flain, or any other dead beaft flain by it; and there is a common fame, that a Horfe man taking a Spear in his hand, which had been thruit through a Cockatrice, did not only draw the poiyon of it into his own body and fo dyed, but alfo killed his Horfe thereby. 

Lucan writeth;

Quid profefit incerti Basilifum capite Mauro
Tranplus et volox currat per tela venenam.
Insaudit manum quoqueque.

In English thus;

What had the Moore to kill?
The Cockatrice with Spear, no
Sith the swift poiyon him did fail.
And Horfe that did, him bear.

The question is in what part of this Serpent the poiyon doth lie; some fay in the head alone, and that therefore the Basilisk is defat, becaufe the Air which ferveth the Organ of hearing, is renvolved by the intenfive caldity: but this feemeth not to be true, that the poiyon fhould be in the head only, becaufe it killeth by the fume of the whole body, and besides when it is dead it killeth by only touching it, and the Man or Beaf fio flain, doth alfo by touching kill another: Some again fay, that the poiyon is in the breath, and that therefore it breatheth at the fides, and in any other places of the body, through and betwixt the scales; which is also true, that it doth fo breath: for otherwife the burning fume that proceedeth from this poiyonful beaf, would burn up the Intrails thereof, if it came out of the ordinary place; and therefore Almighty GOD hath ordained, that it fhould have fpiraments and breathing places in every part of the body, to venf away the heat, left that in very fhort time, by the inculusion thereof, the whole compage and juncture of the body fhould be utterly difolved, and dispersed one part from another.

But to omi inquiry in what part of his body the poiyon lyeth, feeing it is most manifest that it is universal, we will leave the fear thereof, and difpute of the instruments and effects.

First of all therefore it killeth his own kinde, by fight, hearing, and touchings. By his own kinde, I mean other Serpents, and not other Cockatrices; for they can live one unlefe another, for if it were true (which I do not believe) that the Arabian Harmonis were any other Serpents then a Cocka- trice, the very fame reafon that Arabian gave the fellowship of these two Serpents together, (becaufe of the fimilitude of their natures) may very well prove that no divers kinde can live fo well together, in fafety without harming one another, as do one and the fame kinde togethcr. And therefore there is more agreement in nature between a Cockatrice and a Cockatrice, then a Cocka- trice and Harmonis, and it is more likely that a Cockatrice doth not kill a Cockatrice, then that a Cockatrice doth not kill an Harmonis: And again, Cockatrices are engendered by Egges, according to the holy Sprite; and therefore one of them killeth not another by touching, biting, or fee- ing, because one of them hatcheth another: But it is a quefion whether the Cockatrice dye by the fight of himfelf? Some have affirmed fo much, but I dare not fubcribe thereunto, because in

reason
reason it is impossible that any thing should hurt it self, that hurteth not another of his own kind, yet if in the secret of nature GOD have ordained such a thing, I will not strive against them that can fell it.

And therefore I cannot without laughing, remember the old Wives tales of the Vulgar Cockatricesthat have been in England

for I have oftentimes heard it related confidently, that once our Nation was full of Cockatrices, and that a certain man did destroy them by going up and down in a glasse, whereby their own shapes were reflected upon their own faces, and so they dyed. But this table is not worth refuting, for it is more likely that the man should first have dyed by the corruption of the air from the Cockatrices, then the Cockatrices to die by the reflection of his own fimilitude from the glasse, except it can be shewed that the poyfoned air could not enter into the glasse wherein the man did breath.

Among all living creatures, there is none that perisheth sooner then doth a man by the poyson of a Cockatrice, for with his sight he killeth him, because the beams of the Cockatrices eyes do corrupt the visible spirit of a man, which visible spirit corrupted, all the other spirits coming from the brain and life of the heart, are thereby corrupted, and so the man dyeth: even as women in their monthly courses do vitiate their looking-glasses; or as a Wolf suddenly meeting a Man, taketh from him his voyage, or at the eldest maketh him hoarse.

To conclude, this poyson infecteth the air, and the air infecteth killeth all living things, and likewise all green things, fruits, and plants of the earth: it burneth up the glasse whereupon it goeth or creepeth, and the fowls of the air fall down dead when they come near his den or lodging. Sometimes he biteth a Man or a Beast, and by that wound the bloody turneth into choler, and so the whole body becometh yellow as gold, presently killing all that touch it, or come near it. The symptoms are thus described by Nicander, with whom I will close this history of the Cockatrice, writing thus:

**Quod ferit his, multa corporis succedentiae igne,**

A membri refoluta fuit caro defuncti, & fit

Luiza & objuncta nigredinis apoia colors,

Nulla etiam volutae quo fada cadaveri pafsum,

Sic volutum hominem tangens, at vultum & omnes
trans luminis dixit, phoebeque rudibus auícula

Whose which may be Englished thus:

When he doth strike, the body burst on five parts,

And from the members falleth off the flesh with blood,

It rotten is, and in the colour black as anywhill.

But how doth feed, all green and small

Are all men so destroyed.

No Vulture or Biter fierce,

Or Weather telling-crow, or Death wildest beast,

Cerastes, nec quaescit: fera per devia ruftra

Dedigit, & tali catium fibit tabulae carnea.

Tum tetet vatus odor bine exhastat in auras,

Aque propriis mancipat retruant non fugiunt arua.

Sin tegunc fana omnes proximum ales,

Tristia fae refert, certamine ex aere mortem.

Which live in dens sustaining greatest famine's force,

But at their tables do this flesh defile.

Then is the one repeat with it's both some snail,

Piercing vital parts of them approaching near,

And if a bird it faoft to fill his hunger fell,

It dies aslaid death, none need it fear.

of the CORDEL.

Altho’ I finde some difference about the nature of this living creature, and namely whether it be a Serpent or a Fith, yet because the greater and better part make it a Serpent, I will also bring it in his due order in this place for a venomed Beast. Gefner is of opinion, that it is no other but a Lizard of the Water; but this cannot agree with the description of Aristotle and Bellinumus, who affirm the Cordil to have Gills like a Fith, and these are not found in any Lizard. The Grezians call this Serpent Cordilus, and Cordilus, whereof the Latinus derive or rather borrow their Cordilus, and Cordyla. Nimium maketh this a kind of Salamander which the Apothecaries do in many Countries falsely fell for the Scincus or Crocodile of the earth, and yet it exceedeth the quantity of a Salamander, being much lezse then the Crocodile of the earth, having gills and wanting fins on the sides, also a long tail, and according to the proportion of the body, like a Squirells, although nothing so big, without febbs: the back being bald and somewhat black, and horrible rough, through some bunches growing thereupon, which being preffed do yeeld a certain humor like milk, which being laid to the Nothhills doth smell like poyson, even as it is in a Salamander. The beak or snout is very blunt or dull, yet armed with very sharp teeth. The claws of his fore-legs are divided into four, and on his hinder-legs into five; there is also a certain flathy fin growing all along from the crown of his head, unto his tail upon the back, when which he swimmeth he erretheth, and by it is his body sustained in the water from finking, for his body is moved with crooked windings, even as an Eel or a Lamprey.

The inward parts of this Serpent are allso thus described. The tongue is soft and spungy, like as is the tongue of a Water-frog, wherewith as it were with glew, he draweth to his mouth, both Leeches and Worms of the earth, whereupon it feedeth. At the root of his tongue there is a certain bunch of flesh, as I think supplyeth the place of the lights, for when it breatheth, that part is especially moved, and it panteth to and fro, so that thereby I gather, either it hath the lights in that place, or else in some other place near the jaws. It wanteth ribs as doth the Salamander, and it hath certain bones in the back, but not like the ordinary back-bone of other such Serpents. The heart is also all spungy, and cleaved to the right side, not to the left: the left ear whereof supplyeth the place of the Pericardium.
The liver is very black, and somewhat cloven at the bending of floop fide: the mift somewhat red, cleaving to the very bottom of the ventricle. The reins are also very fpongous, joined almost to the legs, in which parts it is moft fleephy, but in other places, espeially in the belly and breasts, it is all skinne and bone. It alfo beareth egges in her place of conception, which is forked or double, which are there diſpoed in order, as in other living grifly creatures. Thofe Egges are nourifh'd with a kind of red fat, out of which in due time come the young ones alive, in great plenty and number as the Salamanders. And thefe things are reported by Bellotius, besides whom I finde nothing more faid, that is worthy to be related of this Serpent, and therefore I will here conclude the History thereof.

Of the Crocodile.

Beaufe there be many kindes of Crocodiles, it is no marvel although fome have taken the word Crocodilus for the Genus, and the feveral Species, they dilolving into the Crocodile of the earth and the water. Of the earth are super-diſtributed into the Crocodiles of Breſtilia, and the Scincus: the Crocodiles of the water into this here decribed, which is the vulgar one, and that of Nilus; of all which we fhall entreat in order, one fucceffively following another. But I will not contend about the Genus or Species of this word, for my purpose is to open their feveral natures, fo far as I have learned, wherein the words of Almighty God may be known, and will leave the strife of words to them that spend their wits about terms and syllables only. Thus much I finde, that the Ancients had three general terms for all egge-breeding Serpents. Namely, Rana, Tjiunds, Lacerta. And therefore I may forbear to entreat of Crocodilus as a Genus, and handle it as a Species, or particular kinde. The Hebrews have many words which they ufe for a Crocodile, Koab, Levit. 11. which the Arabians render Hardun; and the Persians, Sanga, which word cometh near the Latine word Scincus for a Crocodile of the earth, and yet that word Koab by Saint Jeram, and the Septuagints is tranflated a Chameleon.

In the fame place of Leviticus the word Zab is interpreted a kinde of Crocodile wherewithall David Kimbi confoundeth Crocodilus, and Rabbi Solomon Figet. The Chaldees tranflate it Zab; the Persians, An Rafia; the Septuagints, a Crocodile of the earth; but it is better to follow Saint Hieron in the fame, becaufc the Text addeth according to his kinde, wherefore it is superfluous to add the diſtinction of the Crocodile of the earth, except it were lawful to eat the Crocodiles of the water.

In Exod. 8. there is a fifth called Zephardeo, which cometh out of the waters and eateeth men, this cannot agree to any fifth in Nilus, save only the Crocodile; and therefore this word is by the Arabians rendered Al Timfeh. Some do hereby
Of the Crocodile.

by understand Pagurera, Grrenlera, and Butrachoi, that is great Frogs. Alitha by the most of the Jews understand a Horshafch, Prov. 30. but David Kimbi taketh and utter it for a Crocodile. For he faith, it is a great Worm, abiding near the Rivers sides, and upon a sudden feteth upon men or car- tel as they passe before him. Liffma and Alina are by Avoient expounded for a Crocodile: and Tenbora for that Crocodile that never moveth his neither or under chap.

Strabo faith, that in the Province of Argina in Egypt, there is a holy Crocodyl worshipped by the Inhabitants; and kept tame by the Peerys in a certain Lake; this sacred Crocodile is called Suchus; and this word cometh neer to Scimus, which as we have said signifieth any Crocodile of the earth, from which the Arabian Tinja semeth also to be derived, as the Egyptian Tampfai doth come neer to the Arabian Tinija. Herodotus calleth them Champsii, and this was the old Emarion word for a Vulgar Crocodile in hedges. Upon occasion whereof Scaliger faith, he asked a Turk, by what name they call a Crocodile at this day in Turkey, and he answered Kimfai, which is most evidently corrupted from Champsii.

The Egyptians vulgarly call the Crocodile of Nius, Cocatrix; the Grecians, Neithchroodex, generally Crocodilus, and at times Demulere. The Lattines, Crocodilus; and Albertus, Crocodilus; and the same word is retained in all languages of Europe. About the Etymology of this word, I finde two opinions not unprofitable to be reheard: the first, that Crocodilus cometh of Crocii, Saffron, because this Beast, especially the Crocodile of the earth, is afraid of Saffron, and therefore the Country people, to defend their Hives of Bees and Honey from them, brose upon the places Saffron. But this is too far fetched, to name a Beast from that which it feareth, and being a secret in nature, it is not likely that it was discovered at the first, and therefore the name must have lome other investigation.

Iuovus as faith, that the name Crocodilus cometh of Crocusc color, the colour of Saffron, because such is the colour of the Crocodile; and this semeth to be more reasonable. For I have seen a Crocodile in England brought out of Egypt dead, and killed with a Musket, the colour whereof was like to Saffron growing upon fields in flowers. Yet is it more likely, that the derivation of Varinus and Euga- thius was the original, for they say that the thores of sands on the Rivers, were called Croce and Cro- cocle; and because the Crocodiles haunt and live in those thores, it might give the name to the Beasts, because the water Crocodiles live and delight in those sands, but the land or earth Crocodiles abhor and fear them.

It is reported that the famous Grammarian Artemidius seeing a Crocodile lying upon the sands, he was so much touched and moved therewith, that he fell into an opinion that his left leg and hand were eaten off by that Serpent, and that thereby he loft the remembrance of all his great learning and knowledge of Arts. And thus much for the name of this Serpent.

In the next place we are to consider the Countries wherein Crocodiles are bred, and keep their habitation, and those are especially Egypt; for that only hath Crocodiles of both kinds, that is, of the water and of the land: for the Crocodiles of Nius are Amphibius, and live in both elements: they are not only in the River Nius, but also in all the pools near adjoyning. The River Bambus neer to Ato in Africa, doth also bring forth Crocodiles; and Pliny faith, that in Darat a River of Alainanta, there are Crocodiles ingendered. Likewise Apollinarius reporteth, that when he passed by the River Indus, he met with many Sea-horses and Crocodiles, such as are found in the River Nius, and besides these Countries do I do not remember any other, wherein are ingendered Crocodiles of the water, which are the greatest and most famous Crocodiles of all other.

The Crocodiles of the earth, which are of lesser note and quantity, are more plentiful, for they are found in Libya, and in Bybiana, where they are called Acaria, and in the Mountain Sayrus in Arabia, and in the Woods of Indus, as is well observed by Avicenn, Disporidius, and Hermes, and therefore I will not prosecute this matter any further.

The kinds being already declared, it follows that we should proceed to their quantity and sev- eral parts. And it appeareth that the water Crocodile is much greater, and more noble then the Cro- cadiles of the earth; for they are not about two cubits long, or sometimnes eight at the most, but the other are sixteen, and sometimnes more. And besides, these Crocodiles, if they lay their eggs in the water (faith Beliuerri) then their young ones are much greater, but if on the land, then they are lesser, and like the Crocodiles of the earth. In the River Ganges there are two kinds of Crocodiles, one of them is harmeless, and doth not hurt to any creature, but the other is a devouring unfruitful Beast, killing all that he layeth his mouth on, without all mercy or excorable quality, in the top of whose whote there groweth a bunch like a horn.

Now a Crocodile is like a Lizard in all points (excepting the tail, and the quantity of a Lizard,) yet it layeth an Egg no greater then a Gooses Egge, and from so small a beginning ariseth this monstrous Serpent, growing all his life long, unto the length of fifteen or twenty cubits. And as Phala- reus witnesseth in the days of Pharnaceus King of Egypt, there was one found of five and twenty cubits long: and before that, in the days of Amnis, one that was above fix and twenty cubits long, the reason whereof was their long life, and continual growth.

We have wheed already, that the colour of a Crocodile is like to Saffron, that is betwixt yellow and red, more inclining to yellow then red, not unlike to the blacker kinde of Chamaeleon: but Peter Martyr faith, that their belly is somewhat whiter then the other parts. Their body is rough all over, being covered with a certain bark or rinde, so thick, firm, and strong as it will not yeeld (and especially about the back) unto a cart-wheel when the cart is loaded, and in all the upper parts,
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parts, and the tail, it is impenetrable with any dart or spear, yeas scarily to a pistol or small gun, but the belly is softer, whereon he receiveth wounds with more facility: for as we shall shew afterwards, there is a kinde of Dolphin which cometh into Nitis, and fighteth with them, wounding them on the belly parts.

The covering of their back is distinguisht in divers divided shells, standing up far above the flesh, and towards the sides they are leffe eminent, but on the belly they are more smooth, white, and very penetrable. The eyes of a Crocodile of the water, are reported to be like unto a Swines, and therefore in the water they see very dimly, but out of the water they are sharp and quick sighted, like to all other four-footed Serpents that lay eggs. They have but one eye-lid, and that groweth from the neather part of the cheek, which by reason of their eyes never twinkleth. And the Egyptians say, that only the Crocodile among all the living creatures in the water, draweth a certain thin bright skin from his fore-head over his eyes, wherewithall he covereth his fight: and this I take to be the only caufe of his dim fight in the waters.

The head of this Beall is very broad, and his nose like a Swines. When he eateth or biteth, he never moveth his neather or under chap. Whereof Aristoteles giveth this reason, that seeing Nature hath given him so short feet, as they are not able to hold or to take the prey, therefore the mouth is framed in head of feet, so as it may more vehemently strike and wound, and also move speedily move and turn after the prey, and this is better done by the upper then the neather chap. But it is likely that he was deceived, for he speaketh of Crocodilus marinus, a Crocodile of the Sea, whereas there is no Crocodile of the Sea but rather some other, and such peradventure Albertus saw, and thereupon inconsiderately affirmed, that all Crocodiles move their under chaps, except that Teuches. But that the learned Vesalius proveth it to be otherwise, because that the neather-chap is so conjointed and fastened to the bones of the temples, that it is not possible for to be moved. And therefore the Crocodile only among all other living creatures, moveth the upper-chap, and holdeth the under-chap unmoveable.

The second wonder unto this, is that the Crocodile hath no tongue, nor so much as any appearance of a tongue. But then the question is, how it cometh to distinguisht the sapours and taint of his meat. Whereunto Aristoteles answereth, that this Crocodile is such a ravening Beall, that his meat tarryeth not in his mouth, but is carried into his stomack, as like as other water Bealls, and therefore they discern sapours, and relish their meat more speedily then other; for the water or humor falleth so fast into their mouths, that they cannot stand long upon the taint or disfaint of their meat. But yet some make question of this, and they anfwer that most men are deceived herein, for whiles they look for his tongue upon his neather-chap, as it is in all other Bealls, and finde none, they conclude him to want that part: but they should consider, that the tongue cleaveth to the moveable part, and as in other Bealls the neather-chap is the seat of the tongue, because of the motion, so in this the tongue cleaveth to the upper-chap, because that it is moveable, and yet not visible as in other, and therefore is very hardly discerned. For all this, I rather conclude with the former Authors, that seeing it liveth both in the waters and on the land, and therefore it refembles a fish and a beall, as it refembles a Bealt, locum obietis lingue, it hath a place for a tongue; but as it refembles a fish, Elingus els, it is without a tongue. It hath great teeth flanding out, all of them stand out before visibly when the mouth is open, and fewer behind. And whereas Aristoteles wright, that there is no living creature which hath both dentes prominenter, & serratis, that is, flanding out, and divided like a faw, yet the Crocodile hath both. Their teeth are white, long, sharp, and a little crooked and hollow, their quantity well refembling the residue of the proportion of the body: and some say, that a Crocodile hath three rows of teeth, like the Lyon of Cynos, and like the Whale, but this is not an approved opinion, because they have no more then four rows of teeth. They have also fixy joynts or bones in the back, which are also tyed together with so many nerves. The opening of his mouth reacheth to the place of his ears, and there be some Crocodiles in Ganges which have a kinde of little horn upon their noses or foun. The milk is very small, and this fawye is onl in them that bring forth egges, their frones are inward and cleave to their loyons. The tail is of the same length that the whole body hath, and the same is also rough and armed with hard skin upon the upper part and the sides, but beneath it is smooth and tender. It hath fins upon the tail, by the benefit whereof it swimmeth, as also by the help of the feet. The feet are like a Bears, except that they are covered with scales in head of hair; their nails are very sharp and strong for it is had a claw as well as it hath feet, the strength thereof would over-turn a ship. It is doubtful whether it hath any place of excrement except the mouth: And thus much for the several parts of the Crocodile.

The knowledge also of the natural actions and inclinations of Crocodiles is requisite to be handled in the next place, because that actions follow the members as sounds do instruments. Firt therefore, although Aristoteles for the most part speaketh of a Crocodile, calleth it aquatili & fluviatili, yet it is not to confine it to the Waters and Rivers, as though it never came out of them like fitches, but only to note that particular kinde which differeth from them of the earth, for it is certain that it liveth in both elements, namely earth and water: and for the time that it abideth in the water, it also taketh air, and not the humor or moisture of the water, yet can they not want either humor of the water or respiration of the air: and for the day time it abideth on the land, and in the night in the water, because in the day, the earth is hothir than the water, and in the night the water warmer than the earth: and while it liveth on the land, it is so delighted with the Sun-shine,
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The eyes of a Crocodile (as we have said) are dull and blinde in the water, yet they appear bright to others, for this cause, when the Egyptians will signify the Sun-rising, they picture a Crocodile looking upward to the earth, and when they will signify the West, they picture a Crocodile diving in the water, and so for the most part the Crocodile lyeth upon the banks, that he may either dive into the water with speed, or ascend to the earth to take his prey.

By reason of the thornyness of his feet, his pace is very slow, and therefore it is not only easie to escape from him by flight, but also, if a man do but turn aside and winde out of the direct way, his body is too unstable to bend it self, that he can neither winde nor turn after it. When they go under the earth into their caves, like to all foore-footed and egge-breeding Serpents, as namely Lizards, Serpents, and Tortoises, they have all their legs joyned to their hides, which are so returned as they may bend to either side; for the necessity of covering their egges; but when they are abroad, and go bearing up all their bodies, then they bend only outward, making their thighs more visible. It is somewhat questionable, whether they lye hid within their caves four months or sixty days, for some Authors affirm one thing, and some another, but the reason of the difference is taken from the condition of the cold weather, for which cause they lye hid in the Winter time. Now as much as the Winter in Egypt is not usually above four months, therefore it is taken that they live but four months, but if it be by accident of cold weather prolonged longer, then for the same cause the Crocodile is longer time in the earth. During the time they lie hid, they eat nothing, but sleep (as it is thought) immoveably, and when they come out again, they do not call their skins as other Serpents do.

The tail of a Crocodile is his strongest part, and they never kill any beast or man, but first of all they strike him down and sloune him with their tails, and for this cause, the Egyptians by a Crocodile tail do signify death and darknesse. They devour both men and beasts if they finde them in their way, or near the banks of Nile, whereas they abide, taking sometimes a cafe from the Cow his Dam, and carrying it whole into the waters. And it appeareth by the pourtrature of Necte, that a Crocodile drew in an Afe into Nile as he was drinking, and therefore the Dogs of Egypt by a kind of natural intimation, do not drink but as they run, for fear of the Crocodiles: whereupon came the proverb, Ut Canis a Nilio bibit & fugit, as a Dog at one time drinketh and runneth by Nile.

When they desire fishes, they put their heads out of the water as it were to sleep, and then suddenly when they euy a booty, they leap into the waters upon them and take them. After that they have eaten and are satisfied, then they turn to the land again, and as they lie gaping upon the earth, the little bird Tryphiun makest clean their teeth, and is satisfied by the remains of the flesh sticking upon it. It is also affirmed by Aristotle, that it is fed with mud, but the holy Crocodile in the Province of Arabia, is fed with bread, flesh, wine sweet and hard, fod flesh and cakes, and such like things as the poor people use unto it when they come to see it. When the Egyptians will write a man eating or at dinner, they paint a Crocodile gaping.

They are exceeding fruitul and prolifical, and therefore also in Hieroglyphicks they are made to signify fruituineffe. They bring forth every year, and lay there egges in the earth or dry land. For during the space of three score days they lay every day an Egge, and in the like space they are hatched into young ones, by sitting or lying upon them by course, the male one while, and the female another. The time of their hatching is in a moderate and temperate time, otherwise they perish and come to nothing, for extremity of heat spoyleth the egge, as the buds of some trees are burned and scorched by the like occasion. The egg is not much greater then the egge of a Goole, and the young one out of the shell is of the same proportion. And so from such a small beginning doth this huge and monstrous Serpent grow to his great stature, the reason whereof, (Iaith Aristotile) is, because it groweth all his life long, even to the length of ten or more cubits. When it hath laid the egges, it carryeth them to the place where it shall be hatched, for by a natural providence and foresight it avoweth the waters of Nile, and therefore ever layeth her egges beyond the compass of her floods; by observation whereof, the people of Egypt know every year the inundation of Nile before it happen. And in the measure of this place it is apparent, that this Beast is not induced only with a spirit of reason, but also with a fatigual or prophetical geographical delineation, for so the placeth her egges in the bank or bank of the flood (before the flood cometh) that the water may cover the nest, but neither fell that firsteth upon the egges. And the like to this is the building of the Beaver, as we have showed in due place before in the History of four-footed Beasts.

So soon as the young ones are hatched, they infantly fall into the depth of the water, but if they meet with Frog, Snail, or any other such thing fit for their meat, they do presently tear it in pieces, the dam beast it with her mouth, as it were punishing the pusillanimity thereof, but if it hunt greater things, and be greedy, ravening, induratus and bloody, that the makest much of, and killing the other, nourisheth and tendereth this above measure: after the example of the wise men, who love their children in judgement, foresee their induratus inclination, and not in affection, without regard of worth, vertue, or merit. It is laid by Plinie, that after the egges is laid by the Crocodile, many times there is a cruel stinging Scorpion which cometh out thereof, and woundeth the Crocodile that lyd it. To conclude, they never prosper but near the waters, and they live three score years, or the age of a mans life.
The nature of this beast is to be fearful, ravening, malicious, and treacherous in getting of his prey, the subtlety of whose sly is by some attributed to the thinness of his boid, and by other to the hardnese of his skyn and hide. How it dealeth with her young ones, we have shewed already, as it were trying their nature whether they will degenerate or no, and the like things are reported of the Alps, Cancers, and Tortoys of Egypt.

From hence came the concept of Petia Crocodill, the piety of the Crocodile. But as we have said, it is a fearful Serpent, abhorring all manner of noise, especially from the brained voyce of a man, and where he findeth himself valiantly assaulted, there also he is discouraged, and therefore Marcel-linus faith of him, Audax Monitum Jucundius, at ubi audaces feeretis timidissim: An audacious Mon-ter to them that run away, but most fearful where he findeth resistance.

Some have written, that the Crocodile runneth away from a man if he wink with his left eye, and look steadfastly upon him with his right eye, but if this be true, it is not to be attributed to the veruue of the right eye, but only to the rareneffe of fight, which is conspicuous to the Serpent from one eye. The greatest terror unto Crocodiles, as both Senex and Pliny affirm, are the Inhabitants of the Ille Tenturus within Nilus: for those people make them run away with their voyces, and many times pursue and take them in snares. Of these people speaketh Salinas in this manner: There is a generation of men in the Ille Tenturus within the waters of Nilus, which are of a most adverfet nature to the Crocodile, dwelling alfo in the same place. And although their peracons or presence be of small nature, yet herein is their courage admired, because at the sudden sight of a Crocodile they are no whit daunted: for one of these dare meet and provoke him to run away. They will also leap into the Rivers and swim after the Crocodile, and meeting with it, without fear call themselves upon the beasts back, riding on them as upon a Horse. And if the beast lift up his head to bite him, when he gapeth they put into his mouth a wedge, holding it hard at both ends with both their hands, and so as it were with a bridle, lead, or rather drive them captive to the land, where with their noise they do terrifie them, that they make them cast up the bodies which they had swallowed into their bellies; and because of this antipathy in nature, the Crocodiles dare not come near to this Island.

The like thing we have before in our general discourse of Serpents, shewed to be in the Indian Pilibus against the greatest Serpents. And Strabo alfo hath recorded, that at what time Crocodiles were brought to Rome, these Tenturius followed and drove them. For whom there was a certain great pool or fish-pond aligned or walled about, except one passage for the beast to come out of the water into the Sun-shine: and when the people came to see them, these Tenturius with nets would draw them to the land, and put them back again into the water at their own pleasure. For they do shew them by their eyes, and bottom of their bellies, which are their tenderest parts, that like as Horses broken by their Riders, they yeld unto them, and forget their strength in the presence of these their Conquerors.

Peter Martyr in his third Book of his Babylonian Lexicon, faith, that from the City Cair to the Sea, the Crocodiles are not so hurtul and violent as they are up the River Nilus into the land, and against the stream. For as you go further up the River, near the mountain and hilly places, so shall you finde them more fierce, bloody and unrefeilible, whereof the Inhabitants gave him many reasons. First, because that part of the River which is betwixt the City Cair and the Sea, is very full of all sorts of fishes, whereby the beast is so filled with devouring of them, that they lift not out come of the water on the land to hunt after men or cattel, and therefore they are the least hurtul, for even the Lyon and Wolf do cease to kill and devour when their bellies are full. But sometimes the Crocodiles beneath the River, follow the pales or troops of fish up the River, like so many father-men, and then the Country Fisher-men inclofe them in nets, and so destroy them. For there is a very great reward propos'd by the law of the Countrie, to him that killeth a Crocodile of any great quantity; and therefore they grow not great, and by reason of their fmalnesse are least adventorous. For so loon as a great Crocodile is discovered, there is such watch and care taken to intercept and kill him for hope of the reward, that he cannot long escape alive.

Thirdly, the Crocodiles up the River, towards the Mountains, are more hurtul, because they are presed with more hunger and famine, and more seldom come within the terror of men, wherefore they forcake the waters, and run up and down to seek prey to satisfie their hunger, when which they meet withall, they devour with an unrefeilible defire, forced and pressed forward by hunger, which breaketh loose walls. But most commonly when the River Nilus is lowest, and sunck down into the channel, then the Crocodiles in the water do grow most hungry, because the fish are gone away with the floods; and then the subtle beast will heal and cover himself over with sand or mud, and so lie the bank of the River, where he knoweth the women come to fetch water, or the cattel to drink, and when he espieh his advantage, he suddenly taketh the woman by the hand that the takef he up water withall, and draweth her into the River, where he eateth her in pieces and eateth her. In like fort dealeth he with Oxen, Cows, Affes, and other cattel. If hunger force him to the land, and he meet with a Camel, Horse, Affe, or such like beast, then with the force and blows of his tail he breakeh his legs, and so laying him flat on the earth, killeth and eateth him: for so great is the strength of a Crocodile's tail, that it hath been seen that one stroke thereof hath broken all the four legs of a beast at one blow.

There is also another perill by Crocodiles, for it is said that when Nilus faileth, and the water waxeth low, the Barks through want of winde, are fain by the Mariners to be tugged up the
the stream with long lines and cords: the stubile Crocodile seeing the fame, doth suddenly with his tail strike the same line with such force, that either he breaketh it, or by his terrible violence turneth the Mariner down into the water, whom he is ready to receive with open mouth before he can recover. Yea many times by means thereof the Bark it felt so tormented and regale, that the violent beak taketh a man out of it, or else clean over-turneth it, to the destruction of all that are in it.

Albanus faith, that among the Ombia which are in Arsinur, the Crocodiles are harmless, having several names when they are called, do put their heads out of the water and take men gently, which means the head and garbage of such fisheries as are brought thither. But in another place he writeth, that among the Ombia or Capite, it is not safe for a man to fetch water from the River, or to wash their feet, or walk on the Rivers side, but with great caution and wariness. For eventhose beaks which are most kindly used by men, do rage against their Benefactors, as namely the Crocodile, the Ichneumon, the Wilde-cats, and fuch like. And yet Plathus in his Book de ani-
mammis, faith, that the Priests, by the custom of meat-giving, have made some of them tame, that they will sufler their mouths and teeth to be cleansed by men. And it is further said, that during the feven Ceremonial days of the nativity of Aph, there is none of them that the weth any wilde trick or cruel part, but as it were by compact between them and the Priests, they lay aside all cruelty and rage during that time.

And therefore Ciera writeth most excellently, saying: **Egyptium marum qui genet et quantum initio** addicet, *quorum carnis decidere putamus, quam sibi, aut adivi, aut Crocoidum violent. That is to say, Who is ignorant of the custom of the Egyptians? whose minds are to be ad- foned and induced with erroneous wickedness, that they had rather undergo any torment, than offer violence to an Ibis, an Aip, or a holy Crocodile. For in divers places, all these, and Cats also, were worshipped by the people, according to the saying of *Juvenal*:

*Crocodiln ad ads part bae Egypt, Ibis paret autum Serpentibus ibim. Which may be Englisht thus:

*This part of Egypt Crocodile adore,
That, the Ibis, fed with Serpents here.*

But the reason of divine worship or honour given to the Crocodiles are worth the noting, that the devout Reader may the better have some taste of that ancient blindenesse whereby our fore-fathers were misled and seduced, to forfake the most glorious and ever-blessed principles of Divinity, for arguments of no weight.

First therefore the Idolatrous Priests thought there was some divine power in the Crocodile, becaufe it wanted a tongue, for the Deity or Divine speech hath no need of a voice to express his meaning, according to the saying of the Grecians, Kai di apelphon bainoun kileuthn hain dikes, te sbeta agkatua sken: For by a mute and silent way it attendeth, and bringeth all things mortal to a vocal justice, which speaketh in action though not in a voice even as that is in the Crocodile, is action and not voice.

Secondly, by reason of a certain thin smooth skin coming from the midst of his fore-head, C sillius, wherewithall it covereth his eyes, so that it is thought to be blinde, yet it feeth: even so it is with the Ibis, for power, for even then when it is not seen, yet doth it see perfectly all mortal things.

Again, by their eggs and nells they usually fore-shew the over-flowing of Niles, to the infinite benefit of their Country wherein they live, for thereby the husband-men know when to till their land, and when not, when to sow and plant, and lead forth their flocks, and when not: which benefits is also attributed to Divinity, and therefore the Crocodile is honoured with divine power.

Again, it layeth three core eggs, and liveth three core years, which number of threccore, was in ancient time the firft dimension of heaven and heavenly things.

Ciera also speaking against this Egyptian vanity, faith, that they never consecraht a bealf for a God, but for some apparent utility, as the Ibis for devouring of Serpents; and the Crocodile for being a terror to thieves: and therefore the Arabians and Lybian thieves durst not come over the River Niles to rob the Egyptians for fear of the Crocodiles.

There is a tale in *Didotis Sicilum* of the original of a Crocodile divine worship, which although it cannot be but fabulous, yet I have thought good to insert it in this place, to shew the vanity of sup- perition and Idolatry. There was a King of Egypt called Mina, or as Herodotus calleth him Mentis, who following his Hounds in hunting into a certain marith of Maris, fell in with his Horse, and there fluck fast, none of his followers daring to come after him to release him, so that he had there perished, had not a Crocodile come and taken him up upon his back, and set him safe upon the dry land. For which miracle, the said King built there a City, and called a Crocodile to be worshipped, which was called Sybonus, by all the Inhabitants of that City, and also gave all the said Marith of Maris, for the bulternece of the same. It was nourished with bread, flesh, and Wine, Cakes, fod flesh, and sweet new Wine: so that when any man came to the Lake wherein it was kept, the Priests would presently call the beall out of the water, and being come to the land, one of them opened his mouth, and the other put in meat, delicacies, and Wine.
This Crocodile of *Marius*, is the name that is called *Aristoc*, and like to that at *Thebes*, about which they did hang jewels of gold, silver, and jems of ear-rings, bracelets, and such other things of price. When it dyed, they did seafon the body thereof with falt, and buried it in the holy Tombes or burying Pots. The name also are called *Ombries*, I mean the people of that *Egypt* which dwell in *Aristoc*, and for the love of the Crocodiles, they abandon all manner of Hawks their enemies, into much that many times they take them and hang them up in publique upon gallows for that purpose erected. And further, they keep certain days of triumphs like the *Olympiades*, and games of honour: and so far they were blinded with that superition, that they thought themselves exceedingly bleffed if they loe their children by them, and thought themselves much honoured, if they saw them with their eyes fetched out of the streets and playing places by Crocodiles.

Again, all the *Egyptians* hold opinion, that the Crocodile is a Divinator, which they prove by the testimony of *Polybeus*, who calling one of the sacred Crocodiles, which was the eldest and best of all, he would not anwer him, and afterward offering him meat, he also refused it, whereas many wondered: and some of the Priests faid, it was some prophetical sign either of the Kings death or his own, and so it fell out shortly after, for the fame Crocodile dyed. As though a Swine might not as well be accouunted divine, seeing it alfo refufeth all meat and provocation at the time of their feafe, and before death.

There is a City in *Egypt* called *Apollinopolis*, the City of *Apollo*, where the Inhabitants abhor and condemn the worship of Crocodiles, for when they take any of them they hang them up and beat them to death, not withftanding their tears and cryings, and afterwards they eat them: but the reafon of their hatred is, because *Typhon* their ancient enemy, was clothed with a Crocodile flape. Others alfo say, the reafon of their hatred is, because a Crocodile took away and devoured the daughter of *Pyramus*, and therefore they enjoyed all their polfetry to hate Crocodiles.

To conclude this discourse of Crocodiles inclination, even the *Egyptians* themfelves account a Crocodile a favage and cruel murthering Beaf, as may appear by their Hieroglyphicks, for when they will decipher a mad man, they picture a Crocodile, who being put from his defired prey by forcible refifiance, he prefently rages againft himself. And they are often taught by lamenetable experience, what fraud and malice to mankind liveth in these Beafes, for they cover themfelves under willows and green hollow banks, till some people come to the Waters side to draw and fetch water, and then suddenly, or ever they be aware, they are taken and drawn into the water. And alfo for this purpose, because he knoweth that he is not able to over-take a man in his courfe or chafe, he taketh a great deal of water in his mouth, and cafteth it in the path-ways, fo that when they endeavour to run from the Crocodile, they fall down in the slippery path, and are over-taken and destroyed by him. The common proverb alfo, *Crocodil lobryme*, the Crocodiles tears, juftifieth the treacherous nature of this Beaf, for there are not many brute Beafes that can weep, but fuch is the nature of the Crocodile, that to get a man within his danger, he will fob, figh, and weep, as though he were in extremity, but suddenly he deftroycythem. Others fay, that the Crocodile weepeth after he hath devoured a man. Howsoever it be, it noteath the wretched nature of hypocriticks, which before-hand will with faigned tears endeavour to do mischief, or else after they have done it be outwardly forry, as *Judas* was for the betraying of Christ, before he went and hanged himself.

The males of this kind do love their females above all measure, yea even to jealoufie, as may appear by this one Hiftory of *P. Martyr*. About the time that he was in those countries, there were certain Mariners which faw two Crocodiles together in carnal copulation upon the fards neer the River, from which the water was lately fallen into a certain Iland of *Nium*, the greedy Mariners forfook their ship, and betook themfelves to a long boat, and with great shouing, hollowing and crying, made towards them in very couragious manner: the male at the firft affault fell amazed, and greatly terrified ran away as falt he could into the waters, leaving his female lying upon her back, (for when they ingender, the male turneth her upon her back, for by reafon of the shortneffe of her legs the cannot do it herfelf) fo the Mariners finding her upon her back and not able to turn over herfelf, they eafily flw her, and took her away with them. Soon after the male returned to the place to fee his female, but not finding her, and perceiving blood upon the land, conjectured truly that she was slain, wherefore he prefently call himself into the River of *Nium* again, and in his rage swam ftrongly againft the fream until he over-took the ship wherein his dead female was, which he prefently fet upon, lifting up himfelf and catching hold on the fides, would certainly have entered the fame, had not the Mariners with all their force battered his head and hands with clubs and flaves, until he was wearied and forced to give over his enterprife, and go with great fighing and fobbing departed from them. By which relation it is moft clear what natural affi- ction they bear one to another, and how they choose out their fellows, as it were fit wives and huf- bands for procreation.

And it is no wonder if they make much of one another, for besides themselves they have few friends in the world, except the Bird *Trochilus* and Swine, of whom I can fay little, except that this that followeth. As for the little Bird *Trochilus*, it affieth and followeth them for the benefit of his own belly; for while the Crocodile greedily eateth, there ficketh falt in his teeth fome part of his prey, which troubleth him very much, and many timesingendereth Worms, then the Beaf to help himself taketh land, and lyeth gaping againft the Sun-beams weftward, the Bird perceiving it,
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lyeth to the jaws of the Beast, and there first with a kind of tickling-scratching, procureth (as it were) licence of the Crocodile to pull forth the Worms, and so eateth them all out, and cleneth the teeth thronghly, for which cause the Beast is content to permit the Bird to go into his mouth. But when all is cleneth, the ingratitude Crocodile devoureth suddenly the Bird, which maketh no reckoning of friendship, but the turn serves, requetheth good with evil. But Nature hath armed this little Bird with sharp thorns upon her head, so that while the Crocodile devoureth to shut his chapts and close his mouth upon it, those sharp thorns prick him into his palate, so that full force against his unkinde nature, he leeth the very faye away. But whereas there be many kinds of Trochili, which are greedy of these Worms or clennings of the Crocodiles, some of them which have not throns on their heads pay for it, for there being not offence to let the closing of the Crocodiles mouth, they must needs be devoured: and therefore this enforced amity betwixt him and the Crocodile, is only to be understood of the Cledoraynmbys, as it is called by Hermolaus.

There be some of that opinion, that he devoreth all without exception that thus come into his mouth, and other some say he devoreth yet, but when he feeleth his mouth sufficiently cleneth, he waggeth his upper chap, as it were to give warning of avoidance, and in favour of the good turn, to let the Bird flye away at his own pleasure. Howbeit, the other and the former narration is more likely to be true, and more constantly affirmed by all good Authors except Plutarch, and Leo Aferi. faith, that it was the conftant and confident report of all Africa, that the Crocodile devoreth all for their love and kindeness, except the Cledoraynmbys, which they cannot, by reason of the thorns upon their head.

That there is an amity and natural concord betwixt Swine and Crocodiles is also gathered, because they only among all other living four-footed Beasts, do without danger dwell, feed and inhabit upon the banks of Nilus, even in the midst of Crocodiles; and therefore it is probable that they are friends in nature. But oh how small a sum of friends hath this Beast, and how unworthy of love amongst all creatures, that never in nature hath but two, in heaven or earth, air or water, that will adventure to come near it, and one of these also, which is the belt destroying, it devoreth and destroyeth if it get it within its danger.

Seeing the friends of it are so few, the enemies of it must needs be many, and therefore require a more large catalogue or story. In the first rank wherefof cometh, (as worthy the first place) the Ichneumon, or Pterodus-mouse, who rageth against their Eggs and their persons, for it is certain that it hunteth with all fanctity of fene, to finde out their nells, and having found them, it spoileth, scattereth, breaketh and empeth all their eggs. They also watch the old ones after, and finding their mouths open against the beams of the Sun suddenly enter into them, and being small, creep down the vast and large throats before they beware, and then putting the Crocodile to exquizes and intolerable torment, by eating their guts awannder, and to their profit belles, while the Crocodile tumbleth to and fro fighting and weeping, now in the depth of water, now on the land, never resting till strength of nature faileth. For the inceffant gnawing of the Ichneumon so provoketh her to seek her rell in the unriff of every part, herb, element, throws, thobs, rowlings, tossings, toffings, mournings, but all in vain, for the enemy within her breatheth through her breath, and sporteth her self in the consumption of those vital parts, which waits and wean away by yeelding to unsatillable teeth, one after another; till the that crept in by stealth at the mouth, like a puny thief, come out at the belly like a Conqueror, through a passage opened by her own labour and industry, as we have also shewed at large in the story of Ichneumon. But whether it be true or no, that the Trochili doth awake the sleeping Crocodile, when he seeth the Ichneumon lie in wait to enter into her, I leave it to the credit of Strabo the reporter, and to the defcretion of the indifferent Reader.

Monkeys are also the haters of Crocodiles, as is shewed in the story, and lie in wait to dis- cover, and if were in their power to destroy them. The Scorpion also and the Crocodile are enemies one to the other, and therefore when the Egyptians will describe the combat of two notable enemies, they paint a Crocodile and a Scorpion fighting together, for ever one of them killeth another: but if they will decipher a speedy overthrow to ones enemy, then they picture a Crocodile; if a flow and slack victorie, they picture a Scorpion. And as we have already shewed out of Abyanes, that out of the egges of Crocodiles, many times come Scorpions, which devoure and destroy them that lay them.

Fishes also in their kindes are enemies to Crocodiles, the first place whereof belongeth to the most noble Dolphin. Of these Dolphins it is thought there be two kindes, one bred in Nilus, the other forain and coming out of the Sea, both of them professed enemies to the Crocodile: for the first, it hath upon the back of it sharp thorny prickles or fins, as sharp as any spears point, which are well known to the fifth that beareth them, as her armour and weapons against all adversaries. In the truth and confidence of these prickles, the Dolphin will allure and draw out the Crocodile from his den or lodging place, into the depth of the River, and there fight with him hand to hand. For the Dolphin as it knoweth his own armour and defence, like other Beasts and Fishes, doth it know the weakest parts of his adversary, and where his advantage of wounding lyeth. Now, as we have said already, the belly of the Crocodile is weak, having but a thin skin, and penetrable with small force, wherefore when the Dolphin hath the Crocodile in the midst of the deep waters, like one afraid of the fight, underneath him he goeth, and with his sharp fins or prickles

Aristotle.
Marcellinus.
Aelianus.
Leo Africanus.

Plutarch.

Diod. Sicul.

Strabo.

Calcidanus.
prickles on his back, giveth his weak and tender belly mortal wounds, whereby his vital spirits, with his guts and entrails, are quickly evacuated. The other Dolphins of the Sea being greater, are likewise armed with these prickles, and of purpose come out of the Sea into Nile to bid battle to the Crocodiles.

When Bibilus (a worthy Roman) was Governor of Egypt, he affirmed that on a feaon the Dolphins and the Crocodiles met in the mouth of Nile, and bade battle the one to the other, as it were for the sovereignty of the waters, and after that sharp combat, it was seen how the Dolphins by diving in the waters, did avoid the biting of the Crocodiles, and the Crocodiles dyed by strokes received from the Dolphins upon their bellies. And when many of them were by this means as it were cut off, the residue betook themselves to flight, and ran away, giving way to the Dolphins. The Crocodiles do also fear to meddle with the Sea-hog, or Hog-fish, because of his bristles all about his head, which hurt him allo when he cometh nigh him: or rather I suppose, as it is friend to the Swan of the earth, and beketh with them a syney in nature, so it is unto the Swine of the water, and forbeareth one in the Sea, as it doth the other on the land.

There is likewise a certain wilde Ox or Bugil among the Pethiæus, which is an enemy to the Crocodile, for as Albermu writeth, if he finde or meet with a Crocodile out of the water, he is not only not afraid of him, but taketh heart and settheth upon him, and with the weight and violent agitation of his body, treadeth him all to pieces: and no marvail, for all Beasts are enemies to the Crocodiles on the land, even as the Crocodile lyeth in wait to destroy all them in the water. Hawks are also enemies to Crocodiles, and especially the Ibis bird, so that if but a feather of the Ibis come upon the Crocodile by chance, or by direction of a mans hand, it maketh it immovable and cannot stir. For which cause, when the Egyptians will write or decipher a ravening, greedy, idle-fellow, they paint a Crocodile, having an Ibis feather sticking in his head. And thus much for the enmity betwixt the Crocodiles and other living creatures.

It hath been seldom feen that Crocodiles were taken, yet it is said that men hunt them in the waters, for Fliny faith, that there is a fisured pervasion, that with the gal & fat of a Water-aider, men are wonderfully holpen, and that it was armed against Crocodiles, and by it enabled to take and destroy them, especially when they carry alfo about them the herb Paramegetum. There is also alio a kind of honry wilde Bean growing in Egypt, which hath many sharp prickles upon the stalks, this is a great terror to the Crocodile, for he is in great dread of his eyes, which are very tender and easie to be wounded. Therefore he avoideth their flight, being more unwilling to adventure upon a man that beseth them, or one of them, then he is to adventure upon a man in compleat Armour, and therefore all the people plant great store of these, and also bear them in their hands when they travail.

There be many who in the hunting and proseling of these Crocodiles, do neither give themselves to run away from them, nor once to turn aside out of their common path or road, but in a foolish hardinesse, give themselves to combat with the Beasts, when they might very well avoid the danger, but many times it happeneth that they pay dearly for their rashness, and repent too late the too much reputation of their own manhood: for whales with their spears and sharp weapons they think to pierce his sides, they are deceived, for there is no part of him penetrable except his belly, and that he keepeth safe enough from his enemies, blunting upon his scales (so lesse hard then plates of Iron) all the violence of their blows and sharpness of weapons, but clubs, beasts, and such like weapons are more irksome to him, when they be set on with strength, battering the scales to his body, and giving him such knocks as doth dismay and astonish him. Indeed there is no great use of the taking of this Serpent, nor profit of merchandize cloth whereby, his skin and fleshe yeelding no great resepct in the world.

In ancient time they took them with hooks baited with fleshe, or else inclofed them with nets as they do fishes, and now and then with a strong Iron instrument call out a boat down in the water upon the head of the Crocodile. And among all other there is this one worthy to be related. The Hunter would take of the skin from a Swines back, and therewithal cover his hook, whereby he allureth and inciteth the Serpent into the midilt of the River, and there making it fast, he went afterward to the next watering place, and there holding another Hog, did beat and strike him, till he cryed ardently, with which voice or cry, the Crocodile being moved goeth prettily to the bait and swalloweth it up, and maketh after the noise: at last, coming to the land, the Hunter with valiant courage and diligence, casteth mud and dirt into his eyes, and so blindeth him that he may opprefse and kill him with ease.

Les Afric. relate also this means or way to take Crocodiles: There be many Trees planted upon the banks of Nile, unto one of these there is a long and strong rope tied, and at the end of the same there is fastened a hook of a cubit long, and a finger in quantity: unto this hook: a bait is tyed a Ram or a Goat, which being fet close to the River, and tormenteth with the hook upon which it is fastened, cryeth out amain, by hearing of whose voice, the hunger-greedy Crocodile is raifed out of his den, and invited as he thinketh to a rich prey, so he cometh (although it self of a trecherous nature, yet lufpecteth not any other) and swalloweth the bait, in which he findeth a hook not to be digested. Then away he hurrieth to go, but the strength of the rope layeth his journey, for as fast as the bait was to the rope and hook, so fast is he also enfatished and tyed unto it, which while he waveth and strauneth to unloose and break, he weareth himself in vain. And to the intent that all his strength may be spent against the tree and the rope, the Hunters are at one end thereof, and cause
cause it to be cast to and fro, pulling it in, and now letting it go again, now terrifying the Beast with one noise and fear, and anon with another, so long as they perceive in him any spirit of moving or refusal: so being quieted, to him they come, and with clubs, spears, beetles, knives, and such manner of instruments, pierce through the most tender parts of his body and so destroy him.

Peter Martyr hath also other means of taking Crocodiles. Their nature is, that when they go to the land to forrage and feek after a prey, they cannot return back again but by the same footsteps of their own which they left imprinted in the land: whereupon, when the Country people perceive their footsteps, instantly with all the haft they can make, they come with spades and mattocks and make a great ditch, and with boughs cover the same, so as the Serpent may not espy it, and upon the boughs they also again lay sand to avoid all occasion of deceit or falsification of fraud at his return: then when all things are thus prepared, they hunt the Crocodile by the foot until they find him, then with nooses of bells, pans, kettles, and such like things, they terrifie and make him return as fast as a fear can make him run towards the waters again, and they follow him as near as they can, until he fall into the ditch, where they come all about him, and kill him with such instruments or weapons as they have prepared for him, and so being slain, they carry him to the great City Cairo, where for their reward they receive ten pieces of gold, which amounteth to the value of tens of thousands of our English coin.

There have been some brought into this City alive, as P. Martyr affirmeth, whereof one was as much as two Oxen and two Camels could bear and draw, and at the same time there was one taken by this device before expressed, which had entered into a Village in Saetum near Nilus, and swallowed up alive three young Infants sleeping in one Cradle, the said Infants scarcely dead were taken again out of his belly, and soon after when no more tokens of life appeared, they were all three buried in a better and more proper grave of the earth. Then also there was another slain, and out of his belly was taken a whole Ram not digested, nor any part of him consumed, and the hand of a woman which was bitten or torn off from her body above the wrist, for there was upon the same a Bracelet of Brass.

We do read that Crocodiles have been taken and brought alive to Rome. The first that ever brought them thither, was Marcus Scaurus, who in the games of his abidity, brought five forth and shewed them to the people in a great pond of water, (which he had provided only for that time) and afterward Heligabalus and Antoninus Pius. The Italians have a kind of Crocodile in Ganges, which hath a horn growing out of his nose like a Rhinoceros: unto this Beast they cast condemned men to be devoured, for in all their executions, they want not the help of men, seeing they are provided of Beasts to do the office of Hang-men.

Aurelius Fellinus writeth, that Firmus a Tyrant of Egypt, being condemned to Nilus to be devoured by Crocodiles, beforehand bought a great quantity of the fat of Crocodiles, and so stripping himself stark naked, laid the same over his body, so he went among the Crocodiles and escaped death: for this savage Beast being deceived with the favour of its own nature, spared the man that had but so cunningly carried it. And this is a wonderful work of Almighty GOD, that so ordereth his actions in the nature of this Beast, that he beguileth the cruel nature of the living, by the said favour and the grace of the dead: howbeit some think that the water Crocodile is daunted with the favour of the fat from the land Crocodile, and the land Crocodile by the water again.

And some again say, that all venomous Beasts run away from the favour of the fat thereof; and therefore no marvel if it also be afraid, being venomous as well as any other. Wherefore the saying of Firmus was not to be attributed to any indulgence of the Crocodile toward their own kind, but rather to a deadly antipathy reflecting themselves upon themselves, though not in shape and figure as the Cockatrice, yet in fenne, favour, and rankneffe of their peltiferous humor.

The use of Crocodiles taken, is for their skin, flesh, caul and medicine arising out of it. Their skin as it is exceeding hard upon their backs while they are alive, so is it also when they are dead, for with that the common people make them better armour than coats of Mail, against Darts, Spears, or Shield, as is well known in all Egypt at this day. For the flesh of Crocodiles, it is also eaten among those people that do not worship it: as namely the people about Ephesia (Antipatropolis). Notwithstanding by the Law of God, Levit. 11. it is accounted an unclean Beast, yet the tail thereof being found pleasant, and the relish good with respect of GOD or health, the common people make use thereof.

The medicines arising out of it are also many. The first place belongeth to the caul, which hath moe benefits or virtues in it then can be expressed. The blood of a Crocodile is held profitable for many things, and among other it is thought to cure the bitings of any Serpent. Also by anointing the eyes, it cures both the dregs or spots of blood in them, and also refores the soundness and clearness to the sight, taking away all dulness or deadness from the eyes. And it is said, that if a man take the liquor which cometh from a piece of a Crocodile fried, and anoint therewith his wound or harmed part, that then he shall be presently rid of all pain and torment. The skin both of the land and water Crocodile dried into powder, and the same powder with Vinegar or Oil, laid upon a part or member of the body, to be feared, cut off, or lanced, taketh away all sence and feeling of pain from the instrument in the action.
All the Egyptians do with the fat or lewet of a Crocodile anoint all them that be sick of Feavers; for it hath the same operation which the fat of a Sea-dog or Dog-fish hath, and if those parts of men and beasts which are hurt or wounded with Crocodiles teeth, be anointed with this fat, it also cureth them. Being concocted with water and Vinegar, and so rowled up and down in the mouth, it cureth the Tooth-ach: and also it is outwardly applied against the biting of Flies, Spiders, Worms, and such like, for this cause, as also because it is thought to cure Wens, bunches in the flesh, and old wounds. It is fold dear, and held precious in Alcair, Scaliger writeth, that it cureth the Gangren. The canine teeth which are hollow, filled with Frankincense, and tried to a man or woman which hath the Tooth-ach, cureth them, if the party know not of the carrying them about: And so they write, that if the little bones which are in their belly be taken forth and so used, they work the same effect against Feavers. The dung is profitable against the falling off of the hair, and many such other things.

The biting of a Crocodile is very sharp, deep, and deadly, so that whereforever he layeth his teeth, seldom or never followeth any cure. But yet the counsel of Physitians is, that so soon as the patient is wounded, he must be brought into a close chamber where are no windows, and there be kept without change of air, or admission of light, for the poisons of the Crocodile worketh by cold air and light; and therefore by the want of both is to be cured. But for remedy (if any be) they prescribe the same which is given for the cure of the biting of a mad Dog, or (as Avetin) the biting of a Dog not mad. But most proper is the dung of a man, the Fish Garum and Myss pounded together, and so applied, or else the broth of salt and flesh, and such other things as are vulgarly known to every Physitian: and therefore seeing we live in a country far from the annoyance of this Serpent, I shall not need to blot any paper to express the cure of this poiyon.

The Crocodile of Nilus only liveth on land and water, all other are contented with one element: the picture of the Crocodile was wont to be stamped upon coin, and the skin hanged up in many famous Cities of the world, for the admiration of the people, and there is one at this day at Paris in France.

Of the Arabian or Egyptian LAND CROCODILE.

The figure of this Crocodile sheweth evidently the difference betwixt him and the other of Nilus; and besides it is neither so tall or long as is the other, the which proportioned Beast is only particular to Egypt and Arabia, and some because of his scaly head, legs, articles, and claws, have observed another difference in it from the former: yet in his nature, manner of living and preying upon other cattel, it differeth not from that of the water. The tail of this Crocodile is very sharp, and flandeeth up like the edges of wedges in bunches above the ground, wherevithal when he hath mounted himself up upon the back of a Bealt, he beateth and finkeith the bealt most cruelly, to make him go with his Rider to the place of his most fit execution, free from all refuse of his Heard-man or Palfor, or annoyance of passengers, where in most cruel and favage manner he tear-eth the limbs and parts one from another till he be devoured. The Apotheories of Italy have this Bealt in their Shops to be seen, and they call it Caudivorbera, that is, a Tail-bearer, for the reason aforesaid. And thus there being nothing in this Beasts nature different from the former, besides his figure, and that which I have already expressed, I will not trouble the Reader with any more Narration about it.
THe figure and proportion of this Serpent was altogether unknown in this part of the world, till of late our discoverers and Navigators brought one of them out of Brefilia. The length of it is about a fathom, and the breadth as much as ten fingers broad: the fore-legs have ten claws, five upon a foot, the hinder-legs eight, and both before and behind they are of equal length. The tail exceeding long, far exceeding the quantity and proportion of his body, being marked all over with certain white and yellowish spots. The skin all covered with an equal, smooth and fine coloured scale, which in the midst of the belly are white, and greater than in other parts. It can abide no water, for a little poured into the mouth killed it, and after it had been two or three days dead, being brought to the fire, it moved and flirred again faintly, even as things do that lye a dying. It is not venomous nor hurtful to eat; and therefore is digged out of his cave by any body safely without danger.

Of the CROCODILE of the Earth called Scincus, a Skink.

There have been some that have reckoned Scinks and Lizards among Worms, but as the Greek words Erpete, and Scolax, differ in most apparent dialect, and significations, and therefore it is an opinion not worth the confuting, for there are no Worms of this quantity. But for the better explication of the nature of this Beast, because some have taken it for one kind, and some for another: some for a Crocodile, and others for a Beast like a Crocodile; we are to know that there are three kinds of Crocodiles: the first is a water Beast or Serpent, and vulgarly termed a Crocodile, the second is a Scink or a Crocodile of the earth, which is in all parts like that of the water, except in his colour and thickneffe of his skin: the third kind of Crocodile is unknown to us at this day, yet Pliny and others make mention of it, and describe it to be a beast having his scales like a Gorgon, growing or turning to his head from the tail, and not as others do, from the head to the tail.

The Greeks call this Beast Skigkse, and some unlearned Apothecaries Stincw, and Myresfus Skig. It is also called Kikire, and the Hebrew, Koseh, both more properly signifie this Beast, then any other Crocodile or Chameleon, or Lizard. Some of the Hebrews do expound Zab for a Scink; and from thence the Chaldees and the Arabians have their Död and Aldab, turning Z into D: So we read Guurit and Addaya, for a Scink or Crocodile of the earth: Alarbian is also for the same Serpent among the Arabians, Balalee, and Balalee Schambur, and Asfhanche, and Askicinc, and Scenurum, and Nalale, and Nalale, are all of them Synonymous, or rather corrupted words for this Crocodile of the earth. But there are at this day certain Fosegeflufy let out to be seen and fold by Apothecaries, that are nothing else but a kinde of water Lizard: but the true difference is between them, that these water Lizards are venomous but this is not, and neither living in the Northern parts of the world, nor yet in the water: and so much shall suffice for the name and first entrance into this Serpents History.
The History of Serpents.

They are brought out of the Eastern Countries, or out of Egypt: yet the Monks of Misraim affirm, that they had been seen or Crocodiles of the earth about Bome, 2 S. 23. and Plataeism in Africa. But howsoever their affections may lead them to conjecture of this Serpent, I rather believe, that it is an African beast, and seldom found in Asia or Europe. They love the banks of the Naius, although they dare not enter the water, and for this cause some have thought (but untruly) that when the Crocodile layeth her eggs in the water, the young is there engendered and bred, and is a Crocodile of the water, but if they lay their eggs on the dry land, from thence cometh the Snell or Crocodile of the earth. This folly is evidently refuted, because that they never lay eggs in the but all upon the dry land. They are found (as I have said before) in Egypt, and also in Africa, and among the Lydians of Mauritania, otherwise called Lydijs, or rather Lydia, among the Ptolemaic or Plow-men Africans, among the Arabians, and near the Red-Sea, for all those at this day fold at Venice, are brought from those parts: The greatest in the world are in India, (as Cardan teacheth) who are in all things like Lizards, saving in their excrements, which smell or favour more strongly, and generally the difference of their quantity ariseth from the country which they inhabit, for in the hotter and moister country they are smaller, and generally they exceed not two or three cubits in length, with an answerable proportionable body, which is thus described.

There be certain croote lines which come along the back one by one, somewhat white, and of a dusky colour, and those that be dusky have also in them some white spots. The upper part of the neck is very dusky, the head and the tail are more white, the feet and all the other parts of the breast and belly are white, with appearance upon them of some scales: or rather the skin figured in the proportion of scales: upon either feet they have five distinct fingers or claws; the length of their legs is a thumb and a half: that is, three inches, the tail two fingers long, the body six, to that the whole length from the head to the tip of the tail, (which is first thick, and then very small at the end) is about eight fingers. When they have taken them they boil them, and fill their bodies with Sugar, and Silk of Wood, and so they sell them for a reasonable price. That which I have written of their length of eight fingers, is not to be understood, as though they never exceeded or came short of that proportion: for sometimes they are brought into these parts of the World twenty or four and twenty fingers long, sometimes again not above five or six fingers long.

When they lay their Eggs, they commit them to the earth, even as the Crocodiles of the water do. They live upon the salt molt odoriferous flowers, and therefore is his flesh so sweet, and his dung of excruciating odoriferous. They are enemies to Bees, and they make Hives, in some fome have thought they did lay their Eggs in Hives, and there hath their young ones. But the occasion of this error was, that they saw young ones brought by their parents into some Hive, to feed upon the labouring Bee. For the compelling of their desire they make meal of any tree, which have ground in the Mill of their own mouths, and that they mix with black Hellebore juice, or with the liquor of Mallowes. This meal so tempered they lay before the Hives, whereof affion as the Bees came, they die, and then cometh the Crocodile with her young ones, and lick them up; and beside Bees, I do not read they are hurtful to any. The Indians have a little Beast about the quantity of a little Dog, which they call Pustage, very like to a Scinc or Crocodile of the earth, having sharp scales, as cutting as a saw.

There is some hurt by this beast unto men, for which cause I may justly reckon it among the venomous, for if it chance to bite any man, the wounded man falleth into a Fever before he make water, he dyeth for it, but if he first make water, the beast dyeth and the man eescapeth.

It is thought that it containeth a kind of natural magnet, witch-craft, or forcibly, and therefore they say hath a stupifying power, changing the mind from love to hatred, and from hatred to love again. The powder of this Serpent drunk in Wine, it hurseth the nerves and sense. There be certain magical devils raised out of this Serpent which are not worth the writing, as not having in them any dram of wit, learning, or earth, and therefore I will not trouble the Reader with them, but follow on the conclusion of this Crocodile Story in the Narration of the medicinal virtues, which are for use and more operative then thoes of the former Crocodile, for I think Almighty G O D blesteth meeknesse and innocency with excefl of grace in men and beasts, as may be seen in the twokinds of Crocodiles, the dung and excrement of the one, being more worth then the body of the other, through haughtie innocence.

The body of this Serpent to be dryed, after it hath lain long in Salt, and to be preserved in Nosewot, as Randle and Merceilles write it: (but truth is, there is no need of Salltwher Nosewot is applied, because the Acimony of this beast doth easily dry up the moisture of this beast, keeping Worms from breeding in it.) With the powder thus prepared, venomous men and women. The Mitchride is called Diaphor, because it is composed of the Snell or Crocodile of the earth: and it containeth in it a multiple Antidote against all poisons. Galen had an Antidote against Scorpions, which among other things containeth in it the flesh of a Crocodile of the earth, wherewithal he cured all them that had been stung with Scorpions in Lybia. It is also good against the bites of wild beasts, and pleuries against poisoned Honey, or the crudity and loathing that cometh in the mouth by eating of sound Honey: It is profitable against empoisoned Arrows or Darts, being taken immediately before or after the wound, as Apelle hath observed.
Scropio did make a medicine compounded of the dung of this Crocodile, and applied the same against the Falling-ficknefe. Of the body of this Sculp, except the head and feet being fof or roifed, and eaten by them that have the Stenitis, and old cough (efpecially children,) or the pain of the loins, giveth them much eafe. They are also mixed with medicines against the pain of the feet, as Gabin did for *Amerantus* the Grammarians. They are also good in medicine against the coldneffe of the finewes. This beaffe is very hot, and therefore increafeth the feed of man, and provoketh luft; and for this purpole the greateft and fattest, and fuch as one as is taken in the Spring time, when they burn in luft for copulation, is preferred. But this is not to be meant of the filthy parts, but only of those parts that are about the reins, if a man drink thereof the weight of a groat in Wine afterward, for the alaying of the heat thereof, the Physifians do preifecribe a decoction of Lentiles with Honey, and the seed of Lettice drunk in Water. The fnot of this Crocodile with the feet drunk in white Wine, hath the fame operation: but we have fhewed already, that these parts are to be cut off and thrown away, because if there be any venom in the beaffe it lyeth in them.

A perfume being made of the body and intrails of this Crocodile under the womb of a woman labouring with childe, is thought to yeld much help, for her safe, speedy, and caife travail, or flocks of Wool perfumed therewith, and laid to her belly. But it is the part of good Physifians to be wary in giving of medicines for ftringing up of luft in any, except in married perfons, and then also when they are young, to procure lawful issue and pofterity into the world: otherwife they fhall both decay the body, for all violent helps of carnal cohabitation, do in the end prove detrimental to nature, if they continue any time, and also they are hurtful to the Soul, when not only the unnatural desire of luft, but also the intemperate pleafure of fin is increafed thereby: and that is a merifable cure, which killeth the Soul to help one part of the body. Besides all kinds of medicines for this purpole, (among which this Crocodile is the chief) have their peculiar venom, and when they are miniftr'd, either they have no effect at all though age or overmuch impotency, or else they work too violently, which is most dangerous, or some one hurt or other followeth the poftion: and fo I will leave the prefection of this part.

The duff of the skin of this Crocodile being anointed with Vinegar or Oyl upon any part or member, which is to be cut off, taketh away the tenfe of pain in the time of execution. The blood is good for the eyes, and taketh away the filthy skin of the body, with the spots and burls in the face, reforing the first, true, native, and lively colour. The fat taketh away the pain in the reins, and caufeth a dilatation of the feed of man, yet this fat touching the hair of a man, maketh it to fall off; and a man anointed herewith, is free from the annoyance of Crocodiles, although they play with him. It alfo cureth the bites of Crocodiles; the infalillation of this Crocodile, folded up in the Wool of a black Sheep of the firft birth, and wherein is no other colour, hath power to drive a quarante Augue. And Rubbs faith, that it being hung over the head of a woman in travail, keepeth her from delivery. In the gall of this Serpent there is a power againft the falling off of the hair, especially if the medicine be made of the roots of Beets to neece withall; and besides, the eyes being anointed therewith, and with Honey, there is nothing more profitable againft suffocations. The flones and reins have power to provoke generation; and *Aelian* prefcribeth an Antidote to be made of the tail of this beaffe, againft the Gout.

Great is the vertue of the dung or excrement of this Serpent, if the fame could be easily found, but while it is fought for, it lofeth the vertue. It is called Crocoddilla, and is profitable to give a good colour to womens faces, that is the belt which is whitest, thort, and not heavy, feeling like leaven betwixt the fingers, that is, smelling somewhat sharp like leaven.

It is adulterated with meal, chalk, white-earth, or painting, but it is dfferenct by the heavineffe. The reason of the this is, because it feedeth upon the sweeteft and beef smellint herbs, whereby it commeth to paffe, that it doth not only smell fragrantly, but alfo contain in it many excellent vertues. First therefore it is good for the comelineffe of the face, to give colour to it, according to the faying of *Horace*: *Colorque fereore fucatus Crocoddil*: A colour in grained with the dung of a Crocodile: and for this caufe alfo is the verfe of Ovid, *Nigrior ad Pharis teneja picea opem*: That is, The black Woman goeth to crave help of the Fifth Pharis, to become more beautiful; for by the fifth Pharis, is understood a Crocodile. As some thinke eight grains of this dung, or rather the weight of eight groats, with half so much Multrard-feed and Vinegar, cureth the falling off of the hair. *Arnoldus* doth prefcribe a composition of the dung and Cantharides, for the regenerating and bringing again of hair that is decayed. If a perfume hereof be made and afflicted by a Tunnel into the holes of Serpents, it will drive them away, by reafon of the sharp and leavenfh favour thereof.

*Trudanus* makheth a medicine thereof for an Eye-salve against the whiteneffe and bloud-eyes. It is good alfo against dimneffe and suffocations, being anointed with the juice of Leeks: and to conclude, it is drunk in sweet Wine and Vinegar, against the Falling-ficknefe, and alfo being applied unto women, firreth up their monthly courtes. And thus much shall suffice for the story of the Crocodile.
A mong the divers kindes of Serpents, there is one of special note, which the Graciens call Acou-
via. The Latiens, Juculares, or Juculi, or Sagitta, a Dart or Arrow. The Graciens at this day
Scavia. The Turk, Oriboumen : In Calabria and Sicilia, Saettone, and of the Germans, Ein schofffer, oder
anfelf lang. The reason of this name is taken from his swift leaping upon a man to wound and kill
him; and therefore the Poets say, Juculi; volves; speaking of these kindes of Serpents. Al-
bertus and Aucren alfo; calleth them Cenexati, and Cenexavi, Albaratit, Asam, and Alcinati.

The manner of this Serpent is to get up into trees or hedges, and from thence to fly like an Ar-
row upon the upper parts of men, and fo to fling, bite, and kill them: and of this kindes it is thought
that was, which came upon the hand of the Apostle Paul, whereof the Poet writeth;

Ecco procini; vaeus steriles derobare trunci
Torfa, & immisit (Juculum vocat Africa) Serpents ;
Perque cupit Pauli transfusellaque tempora fugit.
In English thus;

Loe from afar, a cruel Serpent from an Oke
Come flying like a Dart, in Africa the same
A Dart is cold, the head and temples stroke
Of Paul, by winding spires to work, hit bone :
There is some difference among Authors about the nature of this Serpent: for **Elidanus** confoundeth it with the Snake of the Earth, called **Chepsiadus**, and faith it liveth sometime in the water, and sometime on the land, lying in wait to destroy all living creatures. And (he faith) it ueth this fraud, it ever lyeth hid in secret near the high-ways, and many times climbeth up into trees where it roundeth it self round into a circle, and hideth his head within the folds of his own body, so soon as ever it espieeth a Passenger, either a Man or Beast, it lepeth upon him as swift as a Dart guidance. For it is able to leap twenty cubits space, and so lighting upon the Man or Beast, ticketh far unto it without falling off of his own accord, until they fall down dead.

But herein **Elidanus** seemeth to be deceived, because he maketh but one Serpent of twain: namely, this Dart and the Land-snake, which are most apparently different in nature, kinde, and quality. **Actius** also confoundeth this Serpent with the Millet-serpents, called **Certrizies**, and faith it is of the quantity of two cubits, great on the head, and the fore-part smaller at the tail, being of a greenish colour. And he faith further, that at such time as the Millet-feed groweth and flourisheth, this Serpent is most strong and hurtful, and so with the residue he agreeeth with **Elidanus**, but herein he is also deceived, writing by hear-fay as himself confesseth, and therefore it is more safe for us to have recourse to some eye-witness for the description of this Serpent, then to stand upon the opinions of them which write by the relation of others.

**Bellomus** faith, that he saw one of these in Rhodes, being full of small round black spots, not greater then the seeds of Lentils, every one having a round circle about him like an eye, after such a fashion as is to be seen in the little Fish called the **Turpeas**. In length it exceedeth not three palms, and in bignesse no greater then the little finger. It was of an Ash-colour, coming near to the whitenesse of milk, but under the belly it was altogether white: upon the back it had scales, but upon the belly a thin skin, as in all other Serpents.

The upper part of the back was somewhat black, having two black lines in the middle, which begin at the head, and fo are drawn along the whole body to the tail. As for the **Cepazati**, and **Alter-axis** or **Altimyrius**, those are red Serpents, (as **Actius** faith) which are but small in quantity, yet as deep and deadly in poylon as in any other, for they hurt in the same manner that these Darts do. Some of them do fo wound with their poylon, as the afflicted perfon dyeth incessantly without sense or pain: Some again die by languishing pain after many hopes of recovery, losing life. Among all the people of the World, the **Sべべ** are most annoyed with this kinde of red Serpents; for they have many odorous and sweet smelling Woods, in the which these Serpents do abound, but such is their rage and hatred against men, that they leap upon them and wound them deadly, whensoever they come within their compass. And surely if it be lawful to conjecture what kinde of Serpents those were, which in the Scripture are called fiery Serpents, and did ring the **Israelites** to death in the Wilderness, until the Bharan Serpent was erected for their cure; among all the Serpents in the world, that kinde of pain and death can be ascribed to none more properly then to these **Cepazati**, or Red-dart-serpents.

For firft the Wilderness which was the place wherein they annoyed the people, doth very well agree to their habitation. Secondly, those fiery Serpents are so called by figure, not that they were fiery, but as all Writers do agree, either because they were red like fire; or else because the pain which they inflicted, did burn like fire, or rather for both these causes together which are joyntly and severally found in the red Serpents; and therefore I will conclude for my opinion, that these Serpents (as the highest poylon in nature) were sent by GOD to afflict the sinning Israelites, whose poylon was incurable, except by Divine miracle.

**Mattisius** also telleth a flory of a Shepheard which was slain in Italy by one of these, as he was sleeping in the heat of the day under the shadow of a tree, his fellow Shephards being not far off looking to their flocks, suddenly there came one of these Dart-serpents out of the tree, and wounded him upon his left pap, at the biting whereof the man awaked and cryed out, and so dyed incessantly: his fellow Shephards hearing this noise, came unto him to see what he ailed, and found him dead, with a Serpent upon his breast; now knowing what kinde of Serpent this was, they forsook their flocks and ran away for fear.

The curse of this Serpent bington, if there be any at all, is the fame which cureth the Vipers, as **Actius** and **Avius** write, and therefore I will not relate it in this place. The gall of this Beast mixed with the **Sevthian Stone**, yeeldeth a very good Eye-falve. The which gall lyeth betwixt the back and the liver: And thus much shall suffice for this Serpent.

**Vipers**

Of the **Dipsas**.

His Dipsas hath many names from many occasions: Firft **Dipsas** in Greek signifieth thrift, as **Stis** doth in Latin, and thereof also it is called **Stula**, because whosoever is wounded by this Serpent dyeth. It is also called by some **Prefer**; and by some **Caunion**, because it setteth the whole body on fire: but we shall shew afterwards, that the **Prefer** is a different Serpent from this. It is called likewise **Melanuras**, because of his black tail, and **Annaurus**, because it lyeth in the sand, and there hurketh a man. It is not therefore unifitly defined by **Avius**, to be
The History of Serpents.

Vipera sitim facient, that is, A Viper causing thirst, and therefore Ovid sporting at an old drunken woman named Lenæ, calleth her Dipfus in these verses;

Est quædam nomine Dipfas anus,
Ex re nomen habet, nigri non illa parentem
Memnonis in rebus ab artibus. equis.

In English thus;

There is a woman old, which Dipfas may be right,
And not without some cause: thirsty for ever is,
For never Memmons fire, all black and seldom bright,
Did she in water sweet beholdin soberness.

They live for the most part near the waters, and in said marshy places: whereupon Lucan said;

Stat in marginis fusc
Affides, et mediis stricteant Dipsades undis.

That is to say;

Upon pitt brink, dry Aths there flood,
And Dipsads thirst in midst of water flood.

It is called Torrida Dipsas, and Arida Dipsas, because of the perpetual thirst, and therefore the Egyptians when they will signify thirst, do picture a Dipsas: whereupon Lucianus relateth this story, there is (faith he) a statue or monument upon a Grave, right over against the great Syrtes between Silia and Egypt, with this Epigram:

Talus passus erat quoque Tantalus Aethiopi ortus,
Qui nulli petitus fonte leisure situm.
Tale nec Danae natam impulere puellas
Affidit undis van potissima tor.

That is to say;

Such Tantalus inducendus in Aethiopi bred,
Which never could by water quench his thirst,
Nor could the Grecian Maidis with water fed,
That with daily pourings till the vessel curst.

The statue was the picture of a man like unto Tantalus, standing in the midst of a water ready to drink, by drawing in of the water, about whole foot was folded a Dipsas: close by flood certain women bringing water, and pouring it into him to make it run into his mouth; besides, there were certain Egges as it were of Eftriches lay pictured beside them, such as the Caramans in Lybia seek after. For it is reported by Lucianus, that the people of that Country do earnestly seek after the Eftriches Egges upon the sands, not only to eat the meat that is in them, but also to make sundry vessels or instruments of the shell, and among other things they make Caps of them. Near unto those Egges do these treacherous Serpents lie in wait, and so while the poor Country man cometh to seek for meat, suddenly he leapteth upon him, and giveth him a mortal wound.

Aciatus hath an Embleme, which he semeth to have translated out of Greek from Antipater Sidonius, of a Falconer, which while he was looking after Birds for meat for his Hawks, suddenly a Dipsas came behind him and flung him to death. The title of his Embleme is, Qui alta contemplatione cedere, he that looketh high may fall, and the Embleme it self is this that followeth:

Dum turdes viso, pedica dum fallit alaudus,
Et jella altidam fugit a rundo grumem,
Dipsada non prudent asceptis pede percussi, utrinx
Illa malis, emissam virus ab ore jacit.
Sic obit, exento qui sidera repsectus arce,
Secums sita quod jacet ante pedes.

Which may be thus Englished;

While Thrush with line, and Lark deceived with net,
And Crane high flying pierced with force of steel,
By Falconer was beholden a Dipsas on the foot did sit,
As if it would revenge his bloudy foul inflicted,
For poynon out of mouth it cast, and bit his foot,
Whereof he dyed, like Birds by him deceived,
While bending bow aloft unto the stars did look,
Saw not his fate below, which him of life bereaved.

This Dipsas is inferior in quantity unto a Viper, but yet killeth by poynon, much more speedily, according to these verses;

Exigua simili spectatur Dipsas cebidna
Sed feutina magis moribus occupata egit
Parsa & horida cui circa ultima cande nigrefcit.
Of the Dipsas.

That is to say, 

2 bin. Dip as like unto the Viper small, 
But kills by bite with greater pain and speed,  
While tail at end is soft and black without, 
That at your death avoid, with careful heed. 

It is but a short Serpent, and so small (as Arnoldus writeth,) it killeth before it be espied, the length of it not yet a cubit, the fore-part being very thick, except the head which is small, and so backward it groweth smaller and smaller: the tail being exceeding little, the colour of the fore-part somewhat white, but yet over with black and yellow spots, the tail very black. Galen writeth, that the ancient Marphi which were appointed for hunting Serpents and Vipers about Rome, did tell them that there was no means outwardly to dilinguith betwixt the Viper and the Dipsas, except in the place of their abide, for the Dipsas (he faith) keepeth in the salt places; and therefore the nature thereof is more fiery, but the Vipers keep in the dryer Countries, wherefore there are not many of the Dipsades in Italy, because of the moistnesse of that Country, but in Lybia, where there are great store of salt marithes. As we have said already, a man or beast wounded with this Serpent, is afflicted with intolerable thirst, inomuch as it is easier for him to break his belly, then to quench his thirst with drinking, always gaping like a Bull, casteth himself down into the water, and maketh no space of the cold liquor, but continually sucketh it in till either the belly break, or the poison drive out the life, by overcoming the vital spirits. To conclude, besides all the symptoms which follow the biting of Vipers, which are common to this Serpent, this also followeth them, that the party afflicted cannot make water, vomit, nor sweat, so that they perish by one of these two ways; first either they are burned up by the heat of the poysion, if they come not at water to drink, or else if they come by water, they are so unfatiable, that their bellies first swell above measure, and soon break about their privy parts. To conclude, all the affections which the thick poysion of this Serpent are excellently described by Lucian in these verses following;

Signiferum juvenem Tyrhenni sanguinis Aulum  
Torta cupas tertii Dipas calciata monomorbi.  
Visc dolor aut enfuga densis fuit: ipsaque leti  
Frang certe invicida: nec quisqueum plagae minatur.  
Exe fubit virus tacitum, carique molestas  
Ignis edax, calidique incenditi uijera taceat.  
Exhibit humberem circum vitalis suam  
Fesia, & in facto linguam torrefa palato.  
Capit, des solit irrit qui suavum in artus  
Num fuit, atque ocular lebrymarum venas refugit.  
Non decem impetris, non maiori jura Catonis  
Ardenum tenet virum, quin jargarque signa

Tyrrhenian Aulum, the ancient beater young,  
Was bit by Dipsas, turning heed to heed,  
(Strong, No pain or sense of teeth appeared,) though poysion  
Death doth not frown, its man no harm did feel;  
But he, fles poysion takes the marrow, and eating fire  
Burning the bowels in the arm till all consumed,  
Drinking up the humor about the vital fire,  
And in dry palat was the tongue up burned.  
There was no sweat the finemis to reflesh,  
And tears flered from the vein that feeds the eyes,  
Then Catos law, nor Empires honor fete,  
This fiery youth could hold but down the firesteamer flies

Audaret, totisque fures exquereret agris,  
Quot pofoebat aquas, sitiens in corde venenum.  
Ite in Tanai mihius, Rhodanumque Fadameque,  
Arderet, Nilanque bibens per rara vagamem:  
Accepti morti Libye : fatique minorem  
Vam Dipas habet teria adjuta pulsus.  
Sornitur venas putreui fuidumis arenae:  
Nunc redit ad Syttes & flidus accepti are:  
Aquerosque placet, fed non & sufficiet humor.  
Ne sentit fatique genus, mortemque veneni:  
Sed putat effe jum: seraque operiere tumenter  
S u s u n i u m venas, atque impleire curare.  
Lucan. lib. 9.

In English thus;

And like a mad man about the fields he was,  
Poysons force in heart did waters crave:  
Though unto Tanair, Rhodanum, Paddus be comes,  
Or Nilus: yet all too little for his best to have.  
But dry was death, as though the Dipsas force  
Were not enough, but help by heat of earth,  
Then doth he search the sands; but no remorse,  
To Syttes floud be bier, his mouth of them he filleth,  
Salt water pleaseth, but it cannot suffice,  
Nor knew he fate, or this kind venenis death,  
But thought it thrist, and seeing his veins arise  
Them cut, which blood flipt mouth and breath.

The sigues of death following the biting of this Serpent, are extreme drought and inflammation both of the inward and outward parts, so that outwardly the parts are as dry as Parchment, or as a skin set against the fire, which cometh to paffe by addition and commutation of the blood, into the nature of the poyson. For this cause many of the ancients have thought it to be incurable; and therefore were ignorant of the proper medicins, practising only common medicines prescribed against Vipers: but this is generally observed, that if once the belly begin to break, there can be no cure but death. First therefore they use scarification, and make ulcer in the body, cutting off the member wounded. If it be in the extremity, they lay also plasters unto it, as Triacle, liquid Pith with Oyl, Hens cut afunder alive, and so laid to hot, or else the leaves of Purlain beaten in Vinegar, Barley meal, Bramble leaves pounded with Honey, also Plantain, Hytop, white Garlick, Leeks, Rue and Nettles. Then must the government of their body be no leffe looked unto; first, that they be kept from all sharp and salt meats, then, that they be made continually to drink Oyl, to procure vomit, and with their vomits which they cast out of their stomac, to give them glivers; so the waters may be drawn to their lower parts. Besides,
some take medicines out of Fifhes, especially such as are falt, and the leaves, bark, or fprings of Lau-
rel: and to conclude, there is nothing better then Triacle compounded of Vipers flefh. And thus
much for the Dipfas.

Of the DOUBLE-HEAD.

Beaute the Grecians call this Serpent Amphibiana, and the Latins from thence Amphibius, be-
caufe it goeth both ways, as if it had two heads and no tail: and for this purpose it is never
seen to turn his body, as it were turn about his head. When it hath a purpofe to avoid that thing
which he feareth, or wherewith it is offended, he doth but only change his course backward as he
went forward; fo that it was happy as Lynceus, whom the Poets faigne to be very quick-fighed, or as
thofe Monefrs which are faid to have eyes in their backs, or rather like to Jamus, which is faid to
have two faces, one forward, and another backward, and therefore I have called it Double-head, I
trull flily enough to exprefle the Greek word, althought compounded of two words together, for fo is
the Greek word alfo, which the French do exprefle by a like compounded word, Double-marche, that
is, going two ways. It is likewise called Alzofimne, Abibifimnus, and Amphifidnus. And thus much ma
fuffice for the name.

It is faid that this Serpent is found in the Island Lemnos, but among the Germans it is unknown.
There is some queftion whether it may be faid to have two heads or no. Galen afferteth, that it is like
a Ship having two fore-parts, that is, one behind, and another before. Pline alfo afcribes this hent
unto, and maketh it a very pleifant Serpent, Geminius habet caput Amphibiaum, tanquam param
efect, uno are fundi venenum, faith he. It hath a double-head, as though one mouth were not enough to
utter his poyfon, according to the faying of the Poet:

Est gravus in geminis surgitae caput Amphibius
Serpent qui viuus necet & fibilis

Which may be Englished thus:

This Serpent Double head, is grievous to be seen,
Whose cloven-head doth hold with fight and fifting keen.

Unto this alfo Ethimus subscribeth, that it is a true Serpent, and hath two heads, fo that when-
soever it is to go forward, one of them fiandeth in the place of the tail, but when it is to go backward,
then the head becometh the tail, and the tail the head. So alfo Mammalian faith it is a double-headed
Serpent, and a fearful linging Af. And fo generally all the Ancients, until Matthius and Grecinus
time, who firft of all began to contrary this opinion, affirmin it to be imposfible in nature, for one
Serpent to have two heads, except it be monfrours, and exceed the common course of nature.
Such a one was that Serpent with two heads that Arifotle fpakeoth of, which doth easily happen
to all thofe creatures which at one birth bring forth many young ones; fo for their bodies may be
conroyed into one, while their heads fiand afunder like twain. And they fay that this Serpent
doth reembe a Worm of the earth, whose head and tail is hard to be diftinguifhed afunder except you
fee it going. And they fay further, that this Serpent is like to the Sejui, of which we shall
fpake afterwards, differing from it in nothing except in going backward and forward, and this is
all that they can bring againft the opinion of the Ancients, whom I will not fland to confute, but
leave the Reader to believe one or other: for it fhall not bring to me any great disadvantage,
except the loffe of this new English name, for I have dealt faithfully with the Reader in fetting down
the opinion of both fides, and if I do fail in a fit name, yet will I not fweare from the fett deprefli-
on of his nature.

The whole proportion of his body is of equal magnitude or greatnefs, and the two extremities do
anfwer the middle. His eyes are for the moft part fubt, the colour like earth, not black, but tending
to blacknefe, the skin rough and hard, and fet over with divers spots: which all properties, or
rather parts are thus described by Neander.

Genius perpetuus eft cecum caliginos lumen,
Quod latus urgin, genas porrectat: menta,
Terres effe color, & densissimapellis
Plurima quam varii diftinguuntur signa figurant,
Plus alius also Serpentibus aggeretendas.

In English thus:

When eye is ever void of light, because
Two cheeks both broad and standing up it hides,
The colour earth, thick skin, with spots in rows,
Then other Serpents with greater bulk it glides.

Solini Polibifher affirmeth, that they ingender and bring egges forth of the mouth, that is, out
of that mouth which is toward the tail, if there be any fuch. There is no Serpent that doth more
boldly adventure to induce the cold then this doth, for it cometh out of his den not only before
other Serpents, but alfo before the Cuckoe flog, or the Grathopper cometh forth. They are

Said to exceed...
Of the Dragon.

exceeding careful of their egges, and therefore seldom depart from them until they be hatched, whereby also may be collected their great love to their young ones. And further, by their forward and timely coming out of their holes, Grevius makes it a good observation, that their temperament or constitution, is more hot then any other Serpent.

The Grevians have all observed, that this kind of Serpent is hard to be killed, except with a Vine-branch, which they say was demonstrated by Dionysius, who being turned by Juno into man and one day falling fast asleep, this Serpent leaped upon him and awaked him, whereas he being angry, presently killed it with a Vine-branch. Some have affirmed that a small rod or bat covered with the skin of this Serpent, and so laid beside a man, driveth away all manner of venomous Beasts. A wide Olive-branch or sprig wapped in this skin, doth cure the leprous and benumbed eftate of the fined, and also is good for many things, as Nicander expresseth in these verses:

Hec ubi jam crevies, cadentes figna coloni
Settandeglabrant deafril ex abore virgum,
Squalis polum, frigidae; prehensis pelibus Angis
Infeclam abolvant, quas certe deinde diebus
Exarctere sint, cantantes ante ovisad.

Which may be Englished thus;

When this is grown, the Peasants cutting wood,
Do peel a branch taken from Olive-wilde,
A foot in length, of strained Snakes-skin good,
Rowling it up bereaf, till days suffis,

Utile hic baculis frigentibus artibus esse,
Ferminibi ex animus digitus torpido fatigat,
Tunc quia confirrit, & corum vincula, nervos
Cufcius immiffio vnet extensitdty colore.

And let it dry before Grasshoppers grow:
Thus made, it is good for Sifews cold,
Or nummed fingers, whose face hath been
By heat extending what cold band did hold.

The wounds that come by the biting or flinging of this Serpent, are not great, but very small, and scarcely to be discerned outwardly, yet the accidents that follow, are like to those which ensue the bitings of Vipers, namely, inflammation, and a lingering death. The cure thereof must be the same which is applied unto the sting of Vipers. And particularly I finde not any medicine serving for the cure of this poison alone, except that which Plum speaketh of, namely Coriander drunk by the patient, or laid to the fore.

It is reported by Galden and Grevius, that if a woman with child do chance to go over one of these Double-headed Serpents dead, she shall suffer abortion, and yet that they may keep them in their pockets alive without danger in boxes. The reason of this is given by Grevius, because of the vapour ascending from the dead Serpent, by a secret antipathy against humane nature, which sufcocateth the child in the mothers womb. And thus much for this Serpent.

of the DRAGON.

A mong all the kindes of Serpents, there is none comparable to the Dragon, or that affordeth and yieldeth so much plentiful matter in History for the ample discovery of the nature thereof: and therefore herein I must borrow more time from the residue, then peradventure the Reader would
would be willing to spare from reading the particular stories of many other. But such is the necessity hereof, that I can omit nothing making to the purpose, either for the nature or morality of this Serpent, therefore I will strive to make the description pleasant, with variable histroy, seeing I may not avoid the lengththereof, that so the sweetneffe of the one, (if my pen could so express it) may counteract the tediousneffe of the other.

The Helbrus call it Ταμιν, and Wolphius translateth Oasch a Dragon, in his Commentaries upon Nehemias. The Chaldæer call it Darken, and it feemeth that the Greek word Draschin is derived of the Chaldæer. We read of Albedifimon, or Albedisimon, for a kinde of Dragon, and also Albaras, and Hauenth, Haren carnem, and such other terms, that may be referred to this place. The Grecians at this day call it Drakes; the German, Truch Lindaewarm; the French, Un Dragon; the Italian, Drago, and Dragons. The derivation of the Greek word, bevide the conjecture afore expressed, fome think to be derived from Derkein, because of their vigilant eye-fight, and therefore it is faigned that they had the custodty not only of the Golden-fleece, but also of many other treasuress. And among other things, Acis hath an emblem of their vigilancy standing by an unmarried Virgin.

Vera haec effigies immunda est Palladis: ejae
Draco, qui dominat constringit ante pedes.
Cur Draca temere hoc animal? custodia rerum
Which may be Engliſh thus:

His Dragon great which Lady Pallis stands before,
Is the true picture of unmarred Maids:
But why a comfor to the Goddes in this? and more
Then other beasts more meek, who never fades?

Because the safegard of all things belong to this,
Whereby his house in Graves and sacred Temples
Unmarried Maids of guards must never mife,
Which watchful are to void loves saecres and net.

For this caufe the Egyptian did picture Serapis their God with three heads, that is to fay, of a Lyon in the middle, on the right hand a meek fawning Dog, and on the left hand a raveng wolf, all which forms are joyned together by the winding body of a Dragon, turning his head to the right hand of the God; which three heads are interpreted to imagine three times; that is to fay, by the Lyon, the present time; by the Wolf, the time past; and by the fawning Dog, the time to come; all which are guarded by the vigilancy of the Dragon. For this caufe also among the fixed Stars of the North, there is one called Dracon, a Dragon, all of them ending their course with the Sun and Moone, and they are in the Sphere called by Astronomers the Inferences of the Circles, the superior of thefe ascending, is called the head of the Dragon, and the inferior descending, is called the tail of the Dragon. And some think that GOD in the 38. of Job, by the word Gniew, meaneth this Sign or Constellation.

To conclude, the ancient Romans (as Vegetius wrieth) carried in all their Bands the Eſcutcheon of a Dragon, to signify their fortitude and vigilancy, which were born up by certain men called for that purpose Draconii. And therefore when Constantius the Emperor entered into the City of Rome, his fouldiers are faid to bear upon the tops of their Spears, Dragons gaping with wide mouths, and made fast with golden chains and pearl, the winde whifling in their throats, as if they had been alive, threatening destruction, and their tails hanging loose in the air, were likewife by the winde toſte and fro, as though they strove to come off from the spears, but when the winde was laid, all their motion was ended, whereupon the Poet faith:

Manufactus varii vento cessante Dracones,
In English thus;

When whifling winde in air ceaseth,
The Dragon tamed then did reft.

The tale also of the Golden-fleece, if it be worth any place in this story, deserveth to be inferted here, as it is reported by Diodorus Siculus. When Aetes reigned in Pomus, he receiveth an answer from the Oracle, that he shou'd then dye when strangers should come richer with ships and fetch away the Golden-fleece. Upon which occasion he thwrew himself to be of a cruel nature, for he did not only make Proclamation that he would sacrifice all strangers which came within his Dominions, but did also perform the fame, that by the fame and report of fuch cruelty, he might terrifie all other Nations from having accesse unto that Temple. Not contented herewith, he raised a great strong wall round about the Temple wherein the Fleece was kept, and caused a fure watch or guard to attend the fame day and night, of whom the Grecians tell many strange fables. For they lay there were Bulls breathing out fire, and a Dragon warding the Temple and defending the Fleece, but the truth is that their watchmen because of their strength were called Bulls, because of their cruelty, were faid to breathe out fire, and because of their vigilance, cruelty, strength and terror, to be Dragons.

Some affirm again, that in the Gardens of Hesperides in Libya, there were golden Apples, which were kept by a terrible Dragon, which Dragon was afterward slain by Hercules, and the Apples taken away by him, and fo brought to Eurystheus. Others affirm that Hesperides had certain flocks of sheep, the colour of whose wool was like gold, and they were kept by a valiant shepheard called Draco: but I rather agree with Sothinus, who giveth a more true reflation of this fable, Ne fane licentia

vulnearing
they signify by were whereof, fure, lemphrum'. old phet appearance Temples. hath Son Verf. Verf. Earth, magnitude mentodeftroy therefore therefore knew of therefore Dragon, whereby neffe, Tranllators Hea ven, Serpents Terra rium, Dracones Temporum: that is to say, Snakes are of the water, Serpents of the earth, and Dragons of the Temples. And I think it was a juft judgement of God, that the ancient Temples of the Heathen Idolaters were annoyed with Dragons, that as the Devil was there worshipp'd, so there might be appearance of his person in the ugly form and nature of a Dragon. For God himself in holy Scripture, doth compare the Devil unto a Dragon, as Rev. 12. verf. 3. And there appeared another wonder in Heaven, for behold a great red Dragon, having ten heads, and ten horns, and seven crowns upon his head. Verf. 4. And his tail drew the third part of the stars of heaven, and did cast them to the earth: and the Dragon fixed before the Woman which was ready to be delivered, to devour her child the time when she was brought forth. Verf. 5. So she brought forth a man child, which should rule all Nations with a rod of Iron. And her Son was taken up unto God and to his throne. Verf. 6. And the Woman fled into the Wilderness, where she hath a place prepared of God, that they should feed her there 1260 days. Verf. 7. And there was a battail in heaven, Michael and his Angels fought against the Devil, and the Devil fought and his Angels. Verf. 8. But they prevailed not, neither was their place found any more in heaven. Verf. 9. And the great Dragon that old Satan called the Devil and Satan, was cast out, which deceiveth all the world, he was cast out unto the earth, and his Angels were cast out with him. Verf. 13. And when the Dragon saw that he was cast out unto the earth, he persecuted the Woman which had brought forth a man child: and so forth, as it followeth in the Text. Whereupon Saint Augustine writeth. Diabolus Dracon dicitur proprius infidibus, quia occulta insidiatque: that is, the Devil is called a Dragon because of his treachery, for he doth treacherously fet upon men to destroy them.

It was wont to be said, because Dragons are the greatest Serpents, that except a Dragon eat a Serpent, he shall never live a Dragon: for their opinion was, that they grew to great by devouring others of their kinde; and indeed in Ethiopia they grow to be thirty years old, neither have they any other name for those Dragons but Elephant-killers, and they live very long. Unjfectius writeth, that one Apifersas an Indian, did nourish two Serpents Dragons, whereof one was fix and forty cubits long, and the other fourcore: and for the more famous verification of the fact, he was a very earnest letter to Alexander the Great, when he was in India, to come and fee them, but the King being afraid, refused. The Chronicles of the affairs of Cosm do write, that in a certain Valley near to the foot of the Mountain Pellenaeus, was a Valley full of straight tall trees, wherein was bred a Dragon of wonderful magnitude or greatness, whose only povye or hisling, did terrifie all the Inhabitants of Chius, and therefore there was no man that durst come nigh unto him, to consider or to take a perfect view of his quantity, suspecting only his greatness by the loudness of his voice, until at length they knew him better by a singular accidental worthy of eternal memory. For it happened on a time that such a violent earthquake did shock all the trees in the Wood, by which violent collision the branches fell to be on fire, and so all the Wood was burned suddenly, compaßing the Dragon, whereby he had no means to escape alive, & so the trrees fell down upon him and burned him. Afterward, when the fire had made the place bare of wood, the Inhabitants might see the quantity of the Dragon, for they found divers of his bones and his head, which were of such unusual greatness, as did sufficiently confirm them in their former opinion: and thus by divine miracle was this monster confirmd, whom never any man durst behold being alive, & the Inhabitants of the Countrie safely delivered from their jux conceiv'd fear.

It is also reported, that Alexander among many other Beasts which he saw in India, did there finde in a certain den a Dragon of feavenity cubits long, which the Indians accounted a sacred Beast, and therefore intreated Alexander to do it no harm. When it uttered the voyse with full breath, it terrifi'd his whole Army: they could never fee the proportion of his body, but only the head; and by that they guessed the quantity of the whole body, for one of his eyes in their appearance seemed as great as a Macedonian buckler. Maximus Tyrius writeth that in the days of Alexander, there was likewise seen a Dragon in India, as long as five roods of lands are broad, which is incredible. For he
likewise faith that the inuest did feed him every day with many several Oxen and Sheep. It may be that it was the same spoken of before, which some ignorant men, and such as were given to let forth fables, ampliyd beyond measure and credit.

Whereas Dragons are bred in India and Africa, the greatest of all are in India, for in bibliothec, Nabban and Historia, the Daungs are confined within the length of five cubits and twenty cubits: for in thertime of Usert, there were three brought to Egypt, one was nine cubits long, which with great care was nourished in the Temple of Epsoluphe, the other two were leaven cubits long. About the place where once the Tower of Babel was built, are Dragons of great quantity, and under the Equ noctua, as N[e]cchonni Callistius writeth, there are Serpents as thick as beams, in testimony whereof their skins have been brought to Rome. And therefore it is no marvel, although S. Augtin writing upon the t.q.B. Palm, doth say, Dragons magna sudeum sunt animantis, majora non sunt super terram: Dragons are certain great beasts, and there are none greater upon the earth. Neither is it to be thought incredible, that the soildiers of Attiullus Regulus did kill a Dragon which was a hundred and twenty foot long, or that the Dragons in the dens of the Mountain Atlas, should grow to so great a size, that they can iracirr move the fore-parts of their body. I am yet therefore to speak of the Dragons in the Mountains Eumedit or of Asia, or of Diaumabades, or the Regions of the East, or of that which Augustus showed publiquely to the people of Rome, being-fifty cubits long; or of thole which be in the Aper, which are found in certain Caves of the South-fides of the hills, so that this which hath been laid, shall suffice for the quantity and Countries of Dragons. Besides, there are other kinde of Dragons which I must speak of in order: and first of all the Epidauran Dragons, which is bred no where but in that Country, being tame, and of yellow golden colour, wherefore they were dedicated to Epsoluphe, of whom Aeander writeth in this manner.

**Nunc viridem & temperamenti dixi venena Draconum**

Dacipis, quem patula fagi Phaloea proles
In gelida Pelii nitritur culmine, juxta
Levis Pelethnum. quondam decerrat valor.

In English thus:

After these venoms now behold the Dragon black and green,
Now nourished by Apollo under a Beech full broad,
On top of the cold Pelus, as often bath been seen,
By furtile vale of Pelusum us sliding road.

There are likewise other kinde of tame Dragons in Macedinis, where they are so meek, that women feed them, and suffer them to suck their breasts like little children; their Infants also play with them, riding upon them and pinching them, as they would do with Dogs, without any harm, and sleeping with them in their beds. But among all Dragons, there was none more famous than the Dragon Pythion or Python, as the Poets faigne, which was bred of the flame of the earth, after the flood of Deucelion, and flourished afterwards by Apollo, whereof there lyeth this tale: That when Latona was with child by Jupiter or Apollo and Diana, who resitified their birth but when they were born and laid in the Cradle, the fent the Dragon Python to devour them. Apollo being but a young infant, did kill the Dragon with a dart. But this tale seemeth too fabulous and incredible, and therefore they have mended the matter with another device; For they say that Python by the commandment of Juno, did perfecte Latona throughout all the world, seeking to devour her, so as she had no rest until she came unto her father Aferis, who received her into Delta, where she was safely delivered of Apollo and Diana. Afterward, when the child was grown up, he flew the Dragon in remembrance and revenge of the wrong done to his mother. But the true caue of this History is delivered by Pausanias and Macrofibius, to be thus: That Apollo killed one Python, a very wicked man in Pelopon, and that the Poets in excuse of the fact, did faigne him to be a Dragon, as aforesaid. And so I shall not need to say any more of Python, except these verses following out of Ovid about his generation:

**Sed e quos: maximia Python, sed eque:**

Tum genitus populis, nonas incognite Serpentes
Terror exo: tamquam精益 de monte tenebat.

Hunc Licr arcitium: et quamquam tebali armis
Aeol. nus in damis, caprisque scissibus usus:
Mille gravem telis tectum flebantem paterem:
Perditis effuso per valvulam nigra venena.

Note opus famosum pestis detrao velutlus,
Infinius favus celebris quintime nubes
Pythia perdicrina Serpentis nuncum dellos.
Caelum tall presfstram Apollino Python.

Which may be Englished thus:

But yet thou ugly Python was enraged by her, the
A terror to the new-made folk, which never erst had known,
So foul a Dragon in their life: so monstrously fore-growed,
So great a ground thy poison'd paunch did underneath the hide,
The God of floods, who no where before that present tide
Toose kinds of weapons put in me but at the sickled Deer,
Or at the Ross so light of foot, a thousand shafts well near
Of the Dragon.

Of the Indian Dragons there are also said to be two kinds, one of them fenny, and living in the marshes, which are low of pace and without combs on their heads like females: the other in the Mountains, which are more sharp and great, and have combs on their head, their backs being somewhat brown, and all their bodies little fally then the other. When they come down from the Mountains into the plain to hunt, they are neither afraid of marshes nor violent waters, but thrust themselves greedily into all hazards and dangers: and because they are of longer and stronger bodies than the Dragons of the fens, they beguile them of their meat, and take away from them their prepared booties. Some of them are of a yellowish fiery colour, having also sharp backs like faws; the other also have beards, and when they set up their scales they shine like silver. The apples of their eyes are precious fones, and as bright as fire, in which there is affirmed to be much virtue against many diseases, and therefore they bring unto the Hunters and killers of Dragons no small gain, besides the profit of their skin, and their teeth: and they are taken when they descend from the Mountains into the Valleys to hunt the Elephants, so as both of them are kill'd together by the Hunters.

Their members are very great, like unto the members of the greatest Swine, but their bodies are leaner, flexibly turning to every fide, according to the necessity of motion: Their fouts are very strong, resembling the greatest ravening Fihers; they have beards of a yellow golden colour, being full of brillities: and the Mountain-dragons commonly have more deep eye-lids then the Dragons of the Fens. Their fides are very fierce and grim, and whenever they move upon the earth, their eyes give a found from their eye-lids, much like unto the tinckling of Braffe, and sometimes they boldly venture into the Sea and take Fihers.

Of the WINGED DRAGON.

There be some Dragons which have wings and no feet, some again have both feet and wings, and some neither feet nor wings, but are only distinguished from the common fort of Serpents by the comb growing upon their heads, and the beard under their cheeks.

Saint Augustine faith, that Dragons abide in deep Caves and hollow places of the earth, and that sometimes when they perceive moistnes in the air, they come out of their holes, & beating the air with their wings, as it were with the strokes of Oars, they forfake the earth and fly aloft: which wings of theirs are of a skinny subfSANCE, and very volatile, and spreading themselves wide, according to the quantity and largeneffe of the Dragons body, which caused Lucan the Poet in his verses to write in this manner following:

`Vos queis qui canum innoxia memina terris
Serpitis, aurato niditi fulgore Dracones,
Pelliferos ardens facit Africa: ducentis alium
Aera cum pelmis, &c.——-

In English thus;

You shining Dragons creeping on the earth,
Which fiery Africk holds with skins like gold,
Yet pestilent by hot inflicting breath:
Mounted with wings in the air we do behold.

The Inhabitants of the Kingdom of Georgia, once called Medias, do say that in their Valleys there are divers Dragons which have both wings and feet, and that their feet are like unto the feet of Geese. Besides, there are Dragons of fundry colours, for some of them are black, some red, some of an ash-colour, some yellow, and their shape and outward appearance very beautiful, according to the verses of Naiunder.
The History of Serpents.

Gildas, Pliarius, and Grecius, following the authority of this Poet, do affirm, that a Dragon is of a black colour, the belly somewhat green, and very beautiful to behold, having a treble row of teeth in their mouths upon every jaw, and with most bright and clear seeing eyes, which caused the Poets to faign in their writings, that thee Dragons are the watchfull keepers of Treasures. They have also two dewlaps growing under their chin, and hanging down like a beard, which are of a red colour: their bodies are set all over with very sharp scales, and over their eyes stand certain flexible eye-lids. When they gape wide with their mouth, and thrust forth their tongue, their teeth seem very much to resemble the teeth of wild Swine: And their necks have many times groffe thick hair growing upon them, much like unto the briddles of a wilde Boar.

Their mouth, (especially of the most tameable Dragons) is but little, not much bigger then a pipe, through which they draw in their breath, for they would not with their mouth, but with their tails only beating with them when they are angry. But the Indian, Aspinius, and Persian Dragons, have very wide mouths, through which they often swallow in whole fowls and beasts. Their tongue is cloven as if it were double, and the Inquirers of nature do fay, that they have fifteen teeth of a side. The males have combs on their heads, but the females have none, and they are likewise diftinguished by their beards.

They have most excellent senses both of seeing and hearing, and for this cause their name Dracon- cometh of Derkens, and this was one cause why Jupiter the Heavens God, is said to be metamorphosed into a Dragon, whereof their flyech this tale: when he fell in love with Preripina, he ravished her in the likeness of a Dragon, for he came unto her and covered her with the spires of his body; and for this cause the people of Sabazii did observe in their mysteries or sacrifies the shape of a Dragon rowed up within the compasse of his spires: so that as he begot Ceres with child in the likeness of a Bull, he likewise deluded her daughter Preripina in the likeness of a Dragon; but of these transmutations we shall speak more afterwards, and I think the vanity of these took first ground from the Afcritos, who believe that the original of Dragons took beginning from the unnatural conjunction of an Eagle and a the Wolf. And fo they fay that the Wolf growing great by this conception, doth not bring forth as at other times, but her belly breaketh and the Dragon cometh out, who in his beak and wings resembleth the Dragon his father, and in his feet and tail, the Wolf his mother, but in the skin neither of them both: but this kinde of fabulous generation is already sufficiently confused. Their meats are fruits and herbs, or any venemous creature, therefore they live long without food, and when they eat, they are not eaily filled. They grow most fat by eating of eggs, in devouring whereof, they use this Art, if it be a great Dragon, he swollceth it up whole, and then rowleth himsef, whereby he crucifereth the eggge to pieces in his belly, and so nature caltheth out the hellis, and kepeth in the meat: But if it were a young Dragon, as if it be a Dragons whelp, he taketh the eggge within the spire of his tail, and so crucifereth it hard and holdeith it fast, until his scales open the shelle like a knife than fuccket he out of the place opened all the mest of the egg. In like sort do the young ones pull off the feathers from the fowles which they eate, and the old ones fswallow them whole, calling the feathers out of their bellies again.

The Dragons of Pergia when they are hungry, turn themselves towards the West, and gaping wide, with the force of their breath do draw the Birds that flie over their heads into their throats, which some have thought is but a voluntary lapfe of the Fowls, to be drawn by the breath of the Dragon, as by a thing they love, but it is more probable, that some vaporuous and venemous breath is sent up from the Dragon to them, that papooneth and infecteth the air about them, whereby their feathers are taken from them, and they astonifh fall down into his mouth. But if it fortune the Dragons finde not food enough to satisfie their hunger, then they hide themselves untill the people be returned from the market, or the heard-men bring home their flocks, and upon a sudden they devour either Men or Beasts, which come first to their mouths: then they go again and hide themselves in their dens and hollow Caves of the earth, for their bodies being exceeding hot, they very seldom come out of the cold earth, except to seek meat and nourishment. And because they live only in the hottest Countries, therefore they commonly make their lodgings neer unto the waters, or else in the coldeft places among the rocks and stones.

They greatly preferre their health (as Aristote affirmed) by eating of wilde Lattice, for that they make them to vomit, and call forth of their stomack whatsoever meat offendeth them, and they are most specially offended by eating of Apples, for their bodies are much subject to be filled with winde, and therefore they never eat Apples, but first they eat wilde Lattice. Their sight also (as Plutarch faith) doth many times grow weak and feeble, and therefore they renew and recover the fame again by rubbing their eyes against Fennel, or else by eating of it.

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Their age could never yet be certainly known, but it is conjectured that they live long, and in great health, like to all other Serpents, and therefore they grow so great. They do not only live on the land, as we have said already, but also swim in the water, for many times they take the Sea in Ethiopia, four or five of them together, folding their tails like hurdles, and holding up their heads, so swim they over to seek better food in Arabia.

We have said already, that when they set upon Elephants, they are taken and killed of men: now the manner how the Indians kill the Mountain Dragons is thus: they take a garment of Scarlets, and picture upon it a charm in golden letters, this they lay upon the mouth of the Dragons den; for with the red colour and the gold, the eyes of the Dragon are overcome, and he falleth asleep, the Indians in the mean season watching, and muttering secretly words of Incantation; when they perceive he is fast asleep, suddenly they strike off his neck with an Ax, and to take out the balls of his eyes, wherein are lodged those rare and precious stones which contain in them virtues immutable, as hath been evidently proved by one of them, that was included in the Ring of Gyges. Many times it felleth out, that the Dragon draweth in the Indian both with his Ax and Instruments into his den, and there devoureth him, in the rage whereof, he do beateth the Mountain that it shaketh. When the Dragon is killed, they make use of the skin, eyes, teeth, and flesh; as for the flesh, it is of a vitriall or glassic colour, and the Ethiopians do eat it very greedily, for they say it hath in it a refrigerative power. And there be some which by certain incanting verses do tame Dragons, and rideth upon their necks, as a man would ride upon a Horse, guiding and governing them with a bridle.

Now because we have already shewed, that some Dragons have wings, left it should seem uncreditable, as the foolish world is apt to believe no more then they see. I have therefore thought good to add in this place, a particular relation of the testimonies of sundry learned men, concerning these winged Serpents or Dragons.

First of all Mr. Agrippinus wrieth, that in India there be certain flying Serpents, which hurt not in the day, but in the night-time, and these do render or make a kind of urine, by the touching whereof, all the parts of mortal creatures do rot away. And there is a Mountain which divideth aunder the Kingdom of Narthaks from Aethiopia, wherein be many winged Serpents sitting upon trees, which they say annoy men with their breath. There be many peltillant winged Serpents which come out of Arabia every year by troops into Egypt, these are destroyed by a certain black Bird called Iblis, who fighteth with them in the defense of that Countrey where the liveth, so that there lie great heaps of them many times destroyed upon the earth by these Birds, whose bodies may be there visibly seen to have both wings and legs, and their bones being of great quantity and stature, remain unconfumed for many years after. These kindes of Serpents or Dragons, covet to keep about Trees of Frankincense which grow in Arabia, and when they are driven away from thence with the fume or smoke of Straex, then they fly (as is aforesaid) into Egypt, and this is to be considered, that if it were not for this Straex, all that Countrey would be confumed with Dragons.

Neither have we in Europe only heard of Dragons and never seen them, but also even in our own Country, there have (by the testimony of sundry Writers) divers been discovered and kill'd. And first of all, there was a Dragon or winged Serpent brought unto Francis the French King, when he lay at Sandun, by a certain Countreyman, who had lin'd the same Serpent himsell with a Spade, when it fell upon him in the fields to kill him. And this thing was witnessed by many learned and credibellc men which saw the same: and they thought it was not bred in that Countrey, but rather driven by the winde thither from some forain Nation. For France was never known to breed any such Monsters. Among the Tyrens also, there is a cruel kind of Serpent, not paft four foot long, and as thick as a mans arm, out of whose fides grow wings much like unto griffles.

Gjefir also faith, that in the year of our Lord 1543. there came many Serpents both with wings and legs into the parts of Germany near Stidrig, who did bite and wound many men incurably. Cardan, also describeth certain Serpents with wings, which he saw at Paris, whose dead bodies were in the hands of Guliemus Muscian, he faith that they had two legs and small wings, so that they could scarce fly, the head was little, and like to the head of a Serpent, their colour bright, and without hair or feathers, the quantity of that which was greatest, did not exceed the bignepse of a Cony, and it is faid they were brought out of India. Besides, a further confirmation of these Beasts, there have been noted in all ages; for it is written in the Roman Chronicles, the times of their apparition and manifellation.

When the River of Tiber over-flew above the banks, then were many Serpents discovered, and many Dragons, as in the time of Mauritius the Emperor, at what time a Dragon came along by the City of Rome, upon the waters in the fight of all men, and so paffed to the Sea: after which prodigy, there followed a great mortal pestilence. In the year 1499. the 26. day of May, there came a Dragon to the City of Lucerne, which came out of the Lake through Rafa, down along the River, many people of all forts beholding the same.

There have been also Dragons many times seen in Germany, flying in the air at mid-day, and signifying great and fearful fires to follow, as it happened near to the City called Nählerborge, near to the shore of the Rhine, in a marvellous clear Sun-shine, there came a Dragon three times succettively together in one day, and did ascend in the air over a Town called Sangiagarrina, shaking his head over that Town every time: it appeared visibly in the sight of many of the Inhabitants, and afterwards it came to paffe, that the said Town was three times burned with fire, to the great harm and undoing.
undoeing of all the people dwelling in the same: for they were not able to make any resistancce to quench the fire, with all the might, Art, and power that they could raise. And it was further observed, that about that time there were many Dragons seen washing themselves in a certain Fountain or Well near the Town, and if any of the people did chance to drink of the water of that Well, their bellies did instantly begin to swell, and they dyed as if they had been poison'd. Whereupon it was publicly decreed, that the said Well should be fill'd up with stones, to the intent that neither any man should afterwards be poison'd with that water; and so a memory thereof was continued, and these things are written by Justinus Goblenus, in an Epistle to Genser, affirming that he did not write fainaign things, but such things as were true, and as he had learned from men of great honesty and credit, whose eyes did fee and behold both the Dragons, and the mishaps that followed by fire.

When the body of Cleomenes was crucified, and hung upon the Cross, it is reported by them that were the watch-men about it, that there came a Dragon and did winde it fellow about his body, and with his head cover'd the face of the dead King, oftentimes licking the same, and not suffering any Bird to come neer and touch the carcasse. For which cause there began to be a reverent opinion of divinity attributed to the King, until fuch time as wife and prudent men, fluidious of the truth, found out the true cause hereof. For they lay that as Bees are generated out of the body of Oxen, and Drones of Horses, and Hornets of Affes: so do the bodies of men ingender out of their marrow a Serpent, and for this cause the Ancients were mov'd to confecrate the Dragon to Noble-spirited men, and therefore there was a monument kept of the firit Africiatus, because that under an Olive planted with his own hand, a Dragon was faid to profecrate the affass. But I will not mingle fables and truths together, and therefore I will reserve the moral discourse of this Beaf into another place, and this which I have written, may be fufficient to fatisfie any reasonable man, that there are winged Serpents and Dragons in the world. And I pray God that we never have better arguments to fatisfie us, by his corporal and lively presence in our Country, left some great calamity follow thereupon. Now therefore we will proceed to the love and hatred of this Beaf, that is observ'd with man and other creatures.

And first of all, that Dragons be natural enemies to men, like unto all other Serpents, yet many times (if there be any truth in story) they have been posseffed with extraordinary love, both to men, women and children, as may appear by these particulars following. There was one Attus a Teffalian Neatherd; which did keepe Oxen in Offa, hard by the Fountain Hemnins, there was a Dragon fell in love with this man, for his hair was as yellow as any gold, unto him for his hair did this Dragon often come, creeping closely as a Lover to his Love: and when he came unto him, he would lick his hair and face so gently, and in fo sweet a manner, as the man profecfled he never felt the like, fo as without all fear confedered with him, and as he came, fo would he go away again, never returning to him empty, but bringing some one gift or other, such as his nature and kinde could lay hold on.

There was a Dragon alfo which loved Pindus the fon of Macedo King of Emathia: This Pindus having many Brothers molt wicked and lewd persons, and he only being a valiant man of honest disipation, having likewise a comely and goodly perfonage, understanding the treachery of his Brethren against him, betook himself how to avoid their hands and tyranny. Now forasmuch as he knew that the Kingdom which he posseffed, was the only mark they all flot at, he thought it better to leave that to them, and fo to rid himfelf from envy, fear, and peril, then to embrow his hand in their blood, or to lose his life and Kingdom both together. Wherefore he renounced and gave over the government, and betook himself to the exercize of hunting, for he was a ftrong man, fit to combine with wild Beafs, by deftruction of whom, he made more room for many men upon the earth, fo that he pass'd all his days in that exercife. It hapned on a day that he was hunting of a Hind-calf, and spurring his Horfe with all his might and main in the eage perfuit thereof, he rode out of the light of all his company, and suddenly the Hind-calf leap'd into a very deep Cave, out of the light of Pindus the Hunter, and fo faved himfelf. Then he alighted from his Horfe, and tyed him to the next Tree, fecting out as diligently as he could for a way into the Cave, whereinto the Hind-calf had leap'd: and when he had look'd a good while about him, and could finde none, he heard a voyce speaking unto him, and forbidding him to touch the Hind-calf, which made him look about again, to fee if he could perceiue the perfon from whom the voyce proceeded; but eyping none, he grew to be afraid, and thought that the voyce proceeded from some other greater caufe, and fo leap'd upon his Horfe haftily, and departed again to his fellows. The day after he returned to the fame place, and when he came thither, being terrified with the remembrance of the former voyce, he durft not enter into the place, but flood there doubting and wondering with himself, what Shepheards or Hunters, or other men might be in that place to defpair him from his game, and therefore he went round about to feek for some, or to learn from whence the voyce proceeded. While he was thus feeking, there appeared unto him a Dragon of a great ftature, creeping upon the great part of his body, except his neck and head lifted up a little, and that little was as high as the ftature of any man can reach, and in this fashion he made toward Pindus, who at the firft light was not a little afraid of him, but yet did not run away, but rather gathering his wits together, remembered that he had about him Birds, and divers parts of Sacrifices, which instantly he gave unto the Dragon, and so mitigated his fury by these gifts, and as it were with a royall feast, changed the cruel nature of the Dragon into kinde ufage. For the Dragon being smooth'd over with thefe
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these gifts, &c. as it were overaken with the liberality of Pindus, was contented to forfake the old place of his habitation, and to go away with him. Pindus also being no less glad of the company of the Dragon, did daily give unto him the greatest part of his hunting, as a delvered price and ranfome of his life, and conquest of such a Beast. Neither was he unrequited for it, for Fortue fo favoured his game, that whether he hunted fowls of the air, or beasts of the earth, he still obtained and never miffed. So that his fame for hunting procured him more love and honor, than ever could the Imperial Crown of his Country. For all young men defired to follow him, admiring his goodly perfonage and strength, the Virgins and Maids falling in love, contended among themselves who fhould marry him: the wives forfaking their husbands, contrary to all womanly moityly, rather defired his company then the society of their husbands, or to be preferred among the number of the Goddefs. Only his Brethren inraged againſt him, fought all means to kill and destroy him. Therefore they watched all opportunities, lying in continual ambush where he hunted to accomplish their accursed enterprize, which at laft they obtained. For as he followed the game, they enclofed him in a narrow ftraight neer to a Rivers fide, where he had no means to avoid their hands, they and their company being many, and he alone, wherefore they drew out their fwords and flie him. When he faw no remedy but death, he cryed out aloud for help, whose voyce foon came to the ears of the watchfull Dragon, (for no Beast heareth or feets better) out he cometh from his den, and finding the murtherers flanding about the dead body, he prefently furprized and killed them, fo revenging the quarrel of Pindus, and then fell upon the dead body of his friend, never forfaking the cruelty thereof, until the neighbours adjoyning to the place, taking knowledge of the fate, came to bury the bodies. But when they came and faw the Dragon among them, they were afraid, and durft not come neer, but flold afar of, confulting what to do; till at laft they perceived that the Dragon began to take knowledge of their fear, who with an admirable curtefie of nature, perceiving their mourning and lamentation for their dead friend, and withall, their abifhine from approaching to execute his exequies, or funerals, began to think that he might be the caufe of this their terror, and far flanding off from the dead bodies, wherefore he departed, taking his farewell of the body which he loved, and fo gave them leave by his abience, to beftow upon him an honourable bu- rial, which they performed accordingly, and the River adjoyning, was named by the name of Pindus-death.

By which Rory may appear, that these favage Dragons are made loving and tame to men, by good turns and benefits beftowed upon them, for there is no nature which may not be overcome by kindneffe. And yet I may not leave this matter thus, nor from these examples alone, conclude the pratiſe and poſsibility of love betwixt Men and Dragons: I will therefore add some three or four examples more.

There was a Dragon the lover of Amtbus (as Plutarch writeth) who came unto her every night, and did her body no harm, but gently fliding over her, played with her till morning, then forth would he depart away affoon as light appeared, that he might not be fpyed. The Maidens friends came to the knowledge hereof, and fo removed her faraway, to the intent the Dragon might come no more at her: and thus they remained annuer a great while, the Dragon earnily seeking for the Maiden, wandered far and neer to finde her out. At laft he met with her, and not faluting her gently as he was wont, flew upon her, binding her hands down with the fpire of his body, hiffing foltly in her face, and beating gently with his tail her back-partes, as it were taking a moderate revenge upon her, for the neglect of his love by her long abience.

Another like story unto this is reported by Edianus, of a great Dragon which loved a fair Woman, beloved alfo of a fair Man, the Woman oftimes did fliep with this Dragon, but not fo willingly as with the Man: wherefore the forfook the habitation of her place for a month, and went away where the Dragon did not find her, thinking that her abience might quench his defire. But he came ofte to the place where he was wont to meet with the woman, and not finding her, returned quietly back again, and came again another time: at laft he grew fupercious, and like a lover failing in his expeation, grew very forrowful, and fo continued till the month was expired, every night vifiting the acculturled place. At laft the Woman returned, and the Dragon prefently met with her, and in an amorous fation, full of fupercious and jealoufie, vifiting about her body, did beat her as you have heard in the former Rory: and this (faid Edianus) happened in Judea, in the days of He- rod the King.

There was a little Dragon-whelp bred in Arcadia, and brought up familiarly with a little boy from his infancy, until the Boy became a young Man, and the Dragon alfo became of great nature, fo that one of them loved another so well as Man and Beast could love together, or rather two play- fellows from the Cradle. At laft the friends of the Boy feeing the Dragon grow fo great in fo fhort a space, began to be fupercious of him; whereupon they took the bed wherein the Boy and the Dragon were lodged, and carried the family into a far remote place of Woods and Wilderneffe, and there fet down the bed with the Boy and the Dragon together. The Boy after a little while returned, and came home again to his friends; the Dragon wandered up and down in the Woods, feeding upon herbs and poyfon, according to his nature, and never more cared for the habitation of men, but relift contented with a folytary life. In the length of time it came to paffe that the boy grew to be a perfeft man, and the Dragon alfo remained in the Wood, and although abfent one from the other, yet mutually loving as well as ever. It hapned that this young man travelled through that place where the Dragon was lodged, and fell among theenes, when the young man faw their fwords about his ears,
he cried out, and the Dragons den being not far off, his cry came to the Dragons ears, who instantly knowing the voice of his play-fellow, answered the same with another, at whose height the theeves grew afraid, and began to run away, but their legs could not carry them so fast, as to escape the Dragons teeth and claws; for he came speedily to releafe his friend, and all the theeves that he could find, he put to cruel death, then did he accompany his friend out of the place of peril, and returned back again to his den, neither remembering wrath, for that he was exposed to the Wilderneffe, and there left by his play-fellow, nor yet like perverse men, forfaking their old friend in danger.

They that desire to read more of this subject, shall finde th'oore of examples in Eliusius his first and thirteen Books. To conclude, when Missalina the wife of Claudius, did lend certain men to take away the life of Nero, who was a rival of Britannicus; it is said that when they had him in their hands to strangle him, a Dragon appeared out of the earth, or floor of the chamber, and did so terrifie these hangmen, that they ran away and spared Nero's life. By which example, another example of piety in Dragons is observed.

Again, Telephus ignorantly lying with his mother, had committed incest with her, had not a Dragon by divine providence come and parted them alounder: therefore Dragons familiis est virtus magica, quae diligenter omnia persequatur, remana: fides eius, the virtue of discretion or perfect knowledge, is like a Dragon, which diligently searcheth all things, and studiously looketh into every chink: to did this Dragon preserve the chastity of the mother and the son, when they ignorantly and in the dark had defiled each other, but for his appearance and demonstration. I will add but this one example more of their love of chastity in men and women.

In Lavinium there was a great holy Wood, nect unto which stood a Temple of Juno, in that wood there was a great deep den of a Dragon, unto the which Dragon the Virginis came every year being binded folded with cloaths, and carrying Marchpans in their hands: When they entred the Wood, there was a certain spirit (as it was said) without offence did lead them to the den of the Dragon, and so every one of the Virginis did severally offer up their Marchpans to the Dragon: The Dragon received the Marchpans at the hand of every pure Virgin and unpolluted, but if they were defiled, and held only the name of Virginis, then the Dragon refused the Marchpans, and therefore they were all examined at his coming forth, that those which had lost their Virginity might be punished by the Law. And by this story, (although none but Heathens will believe it to be true, because it is a fable meerly invented to defend Idolatry, which with my soul and spirit I do detest) yet I may collect this much as a moral out of a fable, that Dragons in ancient time did honor Virginity. And thus seeing they neither love, nor are beloved of any other creature, I will here leave to talk of their love and friendship, and passe onto their hatred and adversaries.

The examples before expressed being all extraordinary and beside nature, do not conclude, but that there is an ordinary hatred betwixt Men and Dragons, and therefore in the discourse of their enemies, Men must have the first place, as their most worthy adversary, for both Dragons have perished by Men, and Men by Dragons, as may appear by these stories following. When the Region of Helvetia began first to be purged from noyseome Beasts, there was a horible Dragon found near a Countrie Town called Wylfes, who did destroy all men and beasts that came within his danger in the time of his hunger, Infomuch that that Town and the fields there to adjoyning, was called Dedauiler, that is, a Village of the Wilderneffe, for all the people and Inhabitants had forfaken the same, and fled to other places.

There was a man of that Town whose name was Wincklebriedt, who was banished for man-slaughter, this man promised if he might have his pardon, and be restored again to his former Inheritance, that he would combine with that Dragon and by Gods help destroy him: which thing was granted unto him with great joyfulneffe. Wherefore he was recalled home, and in the presence of many people went forth to fight with the Dragon, whom he flew and overcame, whereat for joy he lifted up his sword imbrued in the Dragons blood, in token of victory, but the blood distilled down from his sword upon his body, and cauased him infantly to fall down dead. And thus this noble Conqueror, a man worthy to be remembred in all ages and Nations, who had strength to kill the Dragon being alive, yet had no power to resift the venom of his blood, he being dead. But had it not been that his hand had been before imbrrewed in the blood of a man, I do not believe that the blood of a Dragon could have fallen so heavy upon him. But this is the judgement of GOD, either to punish murder in the same kinde, or else to teach us, that we should not rejoyce in our own merities, but God see it and be angry. For our Saviour Christ forbade his Disciples that they should rejoyce that the Devils were subject to them; and therefore much leffe may we poor creatures rejoyce for overcoming men or beasts.

And yet one thing more is to be considered in the death of this man, who was banished for killing a man, and was pardoned for killing a Dragon, and yet killed by the Dragon after the Dragon was slain. Thus bloud was the sin because it brought death, & death again brought bloud to be the revenger of the first, that the bloud of man might be washed away with the bloud of man, and the bloud of a Serpent coming betwixt. And thus I may truly say as the Christian Poet faith in another cafe, "Sanquine faccruut, sanquine finis eit, as it grew, so shall it end in bloud.

In the days of Philip King of Macedon, there was a way into a Mountain of Armenia, over which the King had prayed, that never man might go but he might die: wherefore Socrates, to try the effect of the Kings prayer, set his Optick Philosophical glasse that he might see what was
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in that way, and pretently he perceived two great Dragons, who coming out of their dens, did in- fact the air thereabouts with a pestilential evaporation of their own breath. This he declared to the King, who for the recollection of his own prayer, armed divers men to go out against them and kill them: who like wise performed the same, and so cleared the way from that annoyance. And thus we fee another story of Dragons slain by men.

Hereunto may be added, how Hercules, when he was a child in his cradle, flew two Dragons, as Pindarus relates. And the Corcyreans did worship Dismedes for killing of a Dragon. Donatus a holy Bishop in Germany, finding a Dragon to lie secretly hid beside a bridge, killing Men, Oxen, Horfe, Sheep, and Goats, he came boldly unto him in the name of Christ, and when the Dragon opened his mouth to devour him, the holy Bishop spitting into his mouth killed him.

When Ophius was in hawking, and while he intended his sport, suddenly a Dragon set upon him, but his hawking Spaniels or Dogs released him of that danger, for they tore the Dragon in pieces. Many such stories it is true, but I spare them here, because I have handled them in the beginning of this story: and so I passe over the slaughter of Dragons by Men, and come to the slaughter of Men by Dragons, which are briefly these that follow.

Petru Damianus declareth of a certain husband-man, who rising early in the morning, and travelling by the way side, saw a great Dragon lie still upon the earth without motion, he being weary, thought him to be a trunk of some tree, wherefore he fell down upon him, & the beast endured him a little while, but at the last he turned his head in anger, and swallowed him up. After that the Gra-cians signified as though they would go away from Troy, and Simon the Traytor was received by the Trojans into the City, there were two Dragons which flew the fons of Lacon as they landed in the Island P Troy, Carthage, and Carthage, which is thus des cribed by Virgil:

At gemini lapsa delabra ad summa Dracones
Effugiant, lavaeque pterus Tritonidos aeternos.
Sub pedibusque Draconi sub atque regionum
Tutus sed tremens fata nova per terrae virtus.

Which may be Englished thus;

Two Dragons flew, and to the top of Temple rise, Making their way unto the fort of Triton force, Under the Goddesse feet and shield, in circle down they lie, What fear did mortal breast possess then cannot I re absolute ; For then Lacon did begin to think on his former sin, When he did burn the sacred thing, by thrufling fear within.

About the Temple of Jupiter Nemesis, there is a Grove of Cyprus trees, among which there is a place wherein a Dragon did destroy Ophelia, when he was laid under a green bush by his Nurse. There is a proverb, Bonus viros vel à mare molisc, non in Draconis dentes audire admonis : that is to say, every Mouse will bite a good man, but evil men are not touched with the teeth of Dragons.

Acius hath a pretty Emblem, whose title is, Ex arduis perpetuum nomen, from difficult things and great labours, arithet immortal fame: wherein he pictureth a Dragon following young Sparrows to take and eat them. His verses in Latine are these:

Crediderat pliianus ramis sua pigraur paffer,
Et bene, ni leuus vfae Draconis forest.
Cuihis bicullos omnes, miseramque parentem
Duxit uxor, quam statim mortuus.

Which may be thus Englished:

To Platains leaves the Sparrow did her young commit, And safe enough, had not the Dragon them effayed, He eat the young ones all, the dam with firs defforad.

Saxum & tali dignos obire neces.
Hec nifi montibus Colloris, monumenta laboris
Sunt longi, quae fama perennis est.

Well worthy such a death, of life to be destroyed: This is by Chalons said, a type of labour long, Whole fame eternal lives in every tongue.

There be certain beasts called Dracontopides, very great and potent Serpents, whose faces are like to the faces of Virgins, and the residive of their body like to Dragons. It is thought that such a one was the Serpent that deceived Eve, for Eden faith, it had a Virgins countenance, and therefore the woman seeing the likenesse of her own face, was the more easily drawn to believe it: into which when the Devil had entred, they saw he taught it to cover the body with leaves, and to chew nothing but the head and face. But this fable is not worthy to be refuted, because the Scripture it self doth directly gainfay every part of it. For first of all it is called a Serpent, and if it had been a Dragon, Moses would have faid fo, and therefore for ordinary punishment, God doth appoint it to creep upon the belly, wherefore it is not likely that it had either wings or feet. Secondly, it was impossible and unlikely, that any part of the body was covered or concealed from the sight of the woman, seeing the knew it directly to be a Serpent, as afterward the confessed before GOD and her husband.

There be also certain little Dragons called in Arabia, Vefa, and in Catalonia, Dragons of houfe, these when they bite, leave their teeth behind them, fo as the wound never ceaeth swelling as long as the teeth remain therin, and therefore for the better cure thereof, the teeth are drawn forth, and so the wound will soon be healed. And thus much for the hatred betwixt Men and Dragons, now we will proceed to other creatures.
The greatest discord is betwixt the Eagle and the Dragon, for the Vultures, Eagles, Swans and Dragons, are enemies one to another. The Eagles when they shake their wings, make the Dragons afraid with their rattling noise, then the Dragon hideth himself within his den, so that he never flieth but in the air, either when the Eagle hath taken away his young ones, and he to recover them flyeth aloft after her, or else when the Eagle meeteth him in her nest, destroying her Eagles and young ones: for the Eagle devoureth the Dragons and little Serpents upon earth, and the Dragons again and Serpents do the like against the Eagles in the air. Yea many times the Dragon attempteth to take away the prey out of the Eagles talons, both on the ground and in the air, so that there ariseth betwixt them a very hard and dangerous fight, which is in this manner described by Nicander.

\[
\begin{align*}
\text{Extrabit & ex rapidis vi fraudque fuerit unci.} \\
\text{Cumque genus parat acre juin ex aterna bellum:} \\
\text{Pacientem in silvis quam primem siderit illum,} \\
\text{Quod tota foris in ni nodor mittibus avis,} \\
\text{Et simul ipse terens, & vasigna pingora perad.} \\
\text{Non timent hos Serpentes, imb condam impe te dumis} \\
\text{Profident, ipsamque aquilam, lateremque terrulum} \\
\end{align*}
\]

Which may be Englished thus:

\[
\begin{align*}
\text{Whin at the Eagle, Jones great Bird, did see her enemy,} \\
\text{Sharp war in air with bow, she did prepare} \\
\text{Gainst Serpent feeding in the Wood, after eyfe} \\
\text{Cause it her Eagles and young fiercely in pieces rare.} \\
\text{The Serpent not afraid of this, leaps out of thorns} \\
\text{With force upon the Eagle, holding tender flake,} \\
\text{Out of her talons by fraud and force more strong,} \\
\text{That takes and snatches delight her enemies fear.} \\
\text{But why Bird avoids the force, and so they fight aneh,} \\
\text{That Valor one of them might joy the prey alone,} \\
\text{The flying soul by winding Snake is burst all in vain,} \\
\text{Though up and down his nimble eyes this and that way be gone.} \\
\end{align*}
\]

In the next place we are to consider the enmity that is betwixt Dragons and Elephants, for so great is their hatred one to the other, that in Ἐθείσπα the greatest Dragons have no other name but Elephant-killers. Among the Indians also the fame hatred remained, against whom the Dragons have many subtle inventions: for besides the great length of their bodies, wherewithall they clape and begirt the body of the Elephant, continually biting of him until he fall down dead, and in the which fall they are also bruised to pieces; for the safeguard of themselves they have this device. they get and hide themselves in trees, covering their head and letting the other part hang down like a rope: in those trees they watch until the Elephant come to eat and crop of the branches, then suddenly before he be aware, they leap into his face, and dig out his eyes, then do they clap themselves about his neck, and with their tails or hinder-parts, beat and vex the Elephant, until they have made him breathlefe, so they trangle him with their fore-parts, as they beat them with the hinder, so that in this combat they both perish: and this is the disposition of the Dragon, that he never feteth upon the Elephant, but with the advantage of the place, and namely from some high tree or rock.

Sometimes again a multitude of Dragons do together observe the paths of the Elephants, & crofs those paths they tie together, their tails as it were in knots, so that when the Elephant cometh along in them, they inflaie his legs, and suddenly leap up to his eyes, for that is the part they aim at above all other, which they speedily pull out, and so not being able to do him any harm, the poor beast delivereth himself from present death by his own strength, and yet through his blindnedece received in that combat, he perrieth by hunger, because he cannot choose his meat by imelling, but by his eye-sight.

There is no man living that is able to give a sufficient reason of this contrariety in nature betwixt the Elephant and the Dragon, although many men have laboured their wits, and strained their inventions to finde out the true causes thereof, but all in vain, except this be one that followeth. The Elephants bloud is said to be the coldest of all other Beasts, and for this cause it is thought by most Writers, that the Dragons in the Summer time do hide themselves in great plenty in the waters where the Elephant cometh to drink, and then suddenly they leap up upon his ears, because those places cannot be defended with his trunck, and there they hang fast, and suck out all the bloud of his body, until such a time as he poor beast through faintness fall down and die, and they being drunk with his bloud, do likewise perish in the fall.

The Gryffins are likewise fast to fight with the Dragons and overcome them. The Panther also is an enemy unto the Dragons, and driveth them many times into their dens. There is a little Bird called Capillus, by eating of which the Dragon refresheth himself when he is wearied in hunting of other beasts. And to conclude, he is an enemy unto all kinds of beasts, both wilde and tame, as may appear by these verses of Lucan, where he faith.
In the next place I will passe unto the poison and venom of Dragons, omitting all Poetical discussions about the worshipping and transmutation of Dragons from one kind to another, such as are the hairs of Orpheus, or the teeth of the Dragon which Cadmus flew, into armed men, and such like fables, which have no fme nor appearance of truth, but are only the inventions of men, to utter those things in obscure terms, which they were afraid to do in plain speeches.

It is a question whether Dragons have any venom or poison in them; for it is thought that he hurteth more by the wound of his teeth, than by his poison. Yet in Deut. 22. 

Apoet speaketh of them as if they had poison, saying: Their Wine is the poison of Dragons, and the cruel venom of Alps. So also Heliodorus speaketh of certain weapons dipped in the poison of Dragons. For which cause we are to consider, that they wanting poison in themselves, become venomous two manner of ways: First by the place wherein they live, for in the hotter Countries they are more apt to do harm then in the colder and more temperate, which causeth the Poet in his verses to write of them in this manner following;

\[
\begin{align*}
\text{Ven} & \quad \text{que} \quad \text{qui} \quad \text{vult} \quad \text{in} \quad \text{mundo} \quad \text{numina} \quad \text{terr} \quad \\
\text{Serpi} & \quad \text{et} \quad \text{volo} \quad \text{t} \quad \text{ven} \quad \text{dore} \quad \text{Draco} \\
\text{Pfis} & \quad \text{seris} \quad \text{ardent} \quad \text{faem} \quad \text{Africo} \quad \text{lu} \quad \text{t} \\
\text{A} & \quad \text{ea} \quad \text{cum} \quad \text{pennin}, \text{etc.}
\end{align*}
\]

Which may be Englished in this manner;

Let fomine Dragons creeping on the earth,
Which fiery Africk yields with skin like gold,
Test pestilence by hot inflaming breath,
Mounted with wings in the air we do behold.

So that which is spoken of the poison of Dragons infecting the air wherein they live, is to be understood of the Meteor called Dracon-volans: A Fire-drake, which doth many times destroy the fruits of the earth, seeming to be a certain burning fire in the air, sometime on the Sea, & sometime on the land, whereof I have heard this credible story from men of good worth and reputation, happening about some twelve years ago, upon the Western Seas, upon the Coasts of England, which because it is well worthy to be kept in remembrance of all posterity, and contained in a notable work of God, I have thought good to fer it down in this place.

There was an old Fisher-man, which with two hired servants went forth to take fishe, according to his accustomed manner and occupation, and having laid their nets, watched them earnestly to finde the bootie they came for, and so they continued in their labour until midnight or thereabouts, taking nothing. At last there came by them a Fire-drake, at the sight whereof the old man began to be much troubled and afraid, telling his servants, that those foms fledn portended any good, and therefore prayed God to turn away all evil from them, and withall, willed his servants to take up their Nets, lest they did all repent it afterward; for he said he had known much evil follow such apparitions. The young men his servants comforted him, telling him that there was no cause of fear, and that they had already committed themselves into the hands of Almighty God, under whose protection they would tarry until they had taken some fishe: the old man refel contented with their confidence, and rather yeelded unto them, then was pacified by them. A little while after the Fire-drake came again, and compassed round about the Boat, and ran over the Nets, so that new fishe, and more violent passions then before posseffed both the old man and his servants. Wherefore they then resolved to tarry no longer, but hasted to take up their Nets and be gone. And taking up their Nets, at one place they did hang fast, as without breaking they could not pull them out of the water, wherefore they fet their Grab-hooks unto them to loose them; for the day before they remembered that a Ship was cast away in the same place, and therefore they thought that it might be the Nets were hanged upon some of the harkings thereof; and wherein they were not much deceived, for it happened that finding the place whereupon the Net did lie, they pulled and found some difficulty to remove it, but at last they pulled it up, and found it to be a chair of beaten gold. At the sight hereof their spirits were a little revived, because they had attained so rich a bootie, and yet like men burdened with wealth, (especially the old man,) conceived new fears, and wished he were on land, lest some fome should fall, and lay both it and them the second time in the bottom of the Sea.

So great is the impression of fear, and the natural presage of evil, in men that know but little in things to come, that many times they prove true Prophets of their own destruction, although
they have little reason till the moment of peril come upon them: and so it fell out accordingly in this old man; for whilst he feared death by forms and tempests on the Sea, it came upon him, but by another way and means. For behold the Devil entered into the hearts of his two servants, and they confpired together to kill the old man their Master, that so between themselves they might be owners of that great rich chair, the value whereof (as they conceived) might make them Gentlemen, and maintain them in some other Country all the days of their life. For such was the resolution that they conceived upon the present, that it would not be safe for them to return home again after the fact committed, lest they should be apprehended for murder, as they justly deserved, their Master being so made away by them.

The Devil that had put this wicked motion into their minds, gave them likewise present opportunity to put the same in execution, depriving them of all grace, pity, and piety, thrilling them forward to perform the same. So that not giving him any warning of his death, one of them in most savage and cruel manner dashed out his brains, and the other speedily call'd him into the Sea. And thus the fear of this old man, conceived without all reason, except superstition for the flight of a Fiery-drake, came upon him in a more bloody manner than he expected: but life was suspected it felt, and rumors of peril unto guilty consciences, (such as all we mortal men bear) are many times as forcible as the sentence of a Judge to the heart of the condemned prisoner; and therefore it was happy that either we could not fear, except when the causes are certain; or else that we might never perish but upon premonition. And therefore I conclude with the example of this man, that it is not good to hold a superstitious fear, lest God see it, and be angry therewith, bring upon us the evil which we fear. But this is not the end of the story, for that Fiery-drake, (as by the sequel appear'd) proved as evil to the servants as he did to the Müller.

These two sons of the Devil, made thus rich by the death of their Master, forthwith they sailed towards the Coast of France, but first of all they broke the Chair in pieces, and wrapped it up in one of their Nets, making account that it was the best thing that ever was taken in that Net, and so they laid it in one end of their Bark or Fisher-boat. And thus they laboured all that night and the next day, till three or four of the clock, at what time they espied a Port of Britain, whereof they were exceeding glad, by reason that they were weary, hungry, and thirsty with long labour, always rich in their own conceit by the gold which they had gotten, which had drawn their hearts from God, as they could not fear any thought of his judgement; and finally it so blinded their eyes, and stopped their ears, that they did not see the vengeance that followed them, nor hear the cry of their Masters blood. Wherefore, as they were thus rejoicing at the sight of land, behold they suddenly espied a Man of War coming towards them, whereat they were appalled, and began to think with themselves that their rich hopes were now at an end, and they had laboured for other, but yet resolved to die rather than to suffer the booty to be taken away from them. And while they thus thought, the Man of War approached and hailed them, summoning them to come in and shew what they were; they refused, making forward as fast to the Land as they could. Wherefore the Man of War that certain Muskets at them, and not prevailing, sent after them his Long-boat, upon the entrance thereof they fought manfully against the assailants, until one of them was slain, and the other mortally wounded; who seeing his fellow kill'd, and himself not likely to live, yet in envy against his enemy, ran prently to the place where the Chair lay in the Net, and lifting the same up with all his might, cast it from him into the Sea, instantly falling down after that fact, as one not able through weeknese to stand any longer: whereupon he was taken and before his life left him he related the whole tale fully to them that took him, earnestly deeming them to signifie so much into England, which they did accordingly: and as I have heard, the whole story was printed, and so to this second History of the punishment of murder, I have related in this place, by occasion of the Fiery-drake, in the History of the Dragon.

A second caufe why poyson is supposed to be in Dragons, is for that they often feed upon many venomous roots, and therefore their poyson licketh in their teeth, whereupon many times the party bitten by them, feemeth to be poysoned; but this falleth out accidentally, not from the nature of the Dragon, but from the nature of the meat which the Dragon eateth. And this is it which Homer knew and affirmed in his verses, when he described a Dragon making his den neer unto the place where many venomous roots and herbs grew, and by eating whereof he greatly annoyeth mankinde when he biteth them.

Ot de Dragon efi. Xein orserfus andra meme
Bebroos kaka pharmake.
Which may be thus English'd,
And the Dragon which by men remain,
Eatth evil herbs without deadly pain.

Vincenetus Salinus.

And therefore Elianus faith well, that when the Dragon meaneth to do most harm to men, he eateth deadly poysonful herbs, so that if he bite after them, many not knowing the cause of the poyson, and seeing or feeling venom by it, do attribute that to his nature which doth pro-ceed from his meat. Besides his teeth which bite deep; he also killeth with his tail, for he will fo begirt and pinch in the body, that he doth gripe it to death; and also the strokes of it are so strong, that either they kill thereby forthwith, or else wound greatly with the same, fo that
Of the Dragon.

that the strokes of his tail, are more deadly then the biting of his teeth; which caused Nicander to write thus;

\[\textit{Nec tanum illae graves, ut cetera turba, dolors}\]
\[\textit{Si velis, infina cun forse memerevit ore,}\]
\[\textit{Suffixit: exignus non nuxia vulnera puniit}\]

Which may be thus Englished;

Nor yet be when bite angry mouth
Doth bite, such pains and torment bringeth
At other Serpents, if Ancients tell the truth,
When with his teeth and fear be fingeth:

Their mouth is small, and by reason thereof they cannot open it wide to bite deep, so as their biting maketh no great pain; and those kinds of Dragons which do principally fight with Eagles, are defended more with their tails then with their teeth; but yet there are some other kinds of Dragons, whose teeth are like the teeth of Bears, biting deep, and opening their mouth wide, wherewith all they break bones, and make many bruises in the body, and the males of this kind bite deeper then the females, yet there followeth no great pain upon the wound.

The cure hereof is like to the cure for the bites of any other Beast wherein there is no venom, and for this cause there must be nothing applied thereunto which cureth venomous bitings, but rather such things as are ordinary in the cure of every Ulcer.

The feed of graffe, commonly called Hay-duff, is prescribed against the biting of Dragons. The Barbtle being graffed upon the place where a Scorpion of the earth, a Spider, a Sea or Land-dragon biteth, doth perfectly cure the lame. Also the head of a Dog or Dragon which hath bitten any one, being cut off and flayed, and applied to the wound with a little Eupharbium is said to cure the wound speedily.

And if \\

Albathophon be the same that is a Dragon, then according to the opinion of \\

Aetius, the cure of it must be very present, as in the cure of Ulcers. And if \\

Albatros and Hadem be of the kindes of \\

Dragons, then after their biting there follow great coldness and flatulency; and the cure thereof must be the same means which is observed in cold poisons. For which cause the wound or place bitten, must be embrewed or washed with lique-ward Vinegar, and emplaiated with the leaves of Bay, anointed with the Oyl of herb-Marj, and the Oyl of Wilde-pellitory, or such things as are drawn out of thole Oyles, wherein is the virtue of Nettrill, or Sea-onions.

But those things which are given unto the patient to drink, must be the joyce of Bay-leaves in Vinegar, or else equal parts of Myrthe, Pepper, and Rew in Wine, the powder or dust whereof must be the full weight of a golden groat, or as we say a French Crown.

In the next place, for the conclusion of the History of the Dragon, we will take our farewell of him in the recital of his medicinal virtues, which are briefly these that follow.

First, the fat of a Dragon dried in the Sunis good against creeping Ulcers: and the fame mingled with Honey and Oyl, helpeth the dimnesse of the eyes at the beginning. The head of a Dragon keepeth one from looking afoam: and if it be set up at the gates and doors, it hath been thought in ancient time to be very fortunate to the sincere worshippers of GOD. The eyes being kept till they be itale, and afterwards cast into an Oyl with Honey made into Ointment, keep any one that uelth it from the terror of night-visions and apparitions.

The fat of a Hart in the skin of a Roe, bound with the nerves of a Hart unto the shoulder, was thought to have a vertue to foere-thew the judgement of victories to come. The first spindle by bearing of it, procureth an easy passage for the pacification of higher powers. His teeth bound unto the feet of a Roe, with the nerves of a Hart, have the same power. But of all other, there is no folly componement which the Magicians draw out of a Dragon to make one invincible, and that is thus: They take the head and tail of a Dragon, with the hairs out of the fore-head of a Lyon, and the marrow of a Lyon; the pume or white mouth of a conquering Horse, bound up in a Harts skin, together with a claw of a Dog, and fainted with the croffe nerves or fine of a Hart, or of a Roe; they say that this hath as much power to make one invincible, as hath any medicine or remedy whatsoeuer.

The fat of Dragons is of such vertue that it driveth away venomous beastes. It is also reported, that by the tongue or gill of a Dragon sod in Wine, men are delivered from the spirits of the night, called Incubi and Succub, or else Night-mares. But above all other parts, the ufe of their blood is accounted most notable. But whether the Cynnabaru be the same with which is made of the blood of the Dragons and Elephants, collected from the earth when the Dragon and Elephant fall down dead together, according as Pliny delivereth, I will not here dispute, seeing it is already done in the story of the Elephant: neither will I write any more of this matter in this place, but only refer the Reader unto that which he shall finde written thereof in the History of our former Book of Four-footed Beasts.

And if that satisfie him not, let him read Langiim in the first book of his Epillices; and sixty five Epilites, where that learned man doth abundantly satisfie all men concerning this question, that are judicious of the truth, and not prone to contention. And to conclude, Andrea Balzacensis writeth, that the Bloud-stone called the Hematite, is made of the Dragons blood: and thus I will conclude.
The History of Serpents.

include the History of the Dragon, with this story following out of Porphyrus, concerning the good successe which hath been signified unto men and women, either by the dreams or sight of Dragons.

Memnon the Mother of Alexander Severus the Emperor, the night before his birth, dreamed that she brought forth a little Dragon, so also did Olympia the Mother of Alexander the Great, and Pompeia the Mother of Scipio Africanus. The like prodigy gave Augustus hope that he should be Emperor. For when his Mother Aenia came in the night time unto the Temple of Apollo, and had let down her bed or couch in the Temple among other Mictans, suddenly the fell asleep, and in her sleep she dreamed that a Dragon came to her, and clasped about her body, and so departed without doing her any harm. Afterwards the print of a Dragon remained perpetually upon her belly, so as she never durst any more be seen in any bath.

The Emperor Tiberius Cæsar, had a Dragon which he daily fed with his own hands, and nourished like good fortune, as at the last it happened that this Dragon was defaced with the biting of Emmer, and the former beauty of his body much obscured: Wherefore the Emperor grew greatly amazed thereat, and demanding a reason thereof of the Wisemen, hwas by them admonished to beware the intestine of the common people. And thus with these stories representing good and evil by the Dragon, I will take my leave of this good and evil Serpent.

of the DRYNE.

THERE be some that confound this Serpent with the Water-snake, and say it is none other then that which of ancient time was called Hydres, for so long as they live in the water, they are called Hydri, that is, Snakes of the water, but when once they come to the land, they are called Chelydri, and Cherfydrus: but it is certain that the Chelydrius, is different from the Cherfydrus, by the strong smell and favour which it carryeth with it whersoever it goeth, according to these verses made of Umb's the Priest in Virgil.

Viperis generi & graviter spirantibus Hydrias,
Spargere qui somnov cantus; manus solbat.
Which may be Englished thus;
Who could by song and bend bring into deadly slip
All kinds of Vipers, with Snakes smelling strong and deep.

Which being compared with that instruction which he giveth to Shepherds, teaching them how to drive away the strong smelling Serpents from the folds, he calleth them Chelydri, when he writeth in this manner;

Diffe & odoratum stahulis ascendere Cedrus,
Galbanum, et grave momore Chelydros.
That is to say in English thus;
Learn how to drive away strong smelling Cheleyns
From folds, by Galbanum and favour Cedars.

So that it is clear that these Drynes are the same which are called Chelydri, who do slink on the face of the earth, whereby they are oftentimes disclosed although they be not seen: howbeit, some think that this filthy favour doth not proceed from any fume or smoak coming out of their bodies, but rather from their motion, according to the opinion of Maier in the following verses.

Sa tergo scopiant spumantia Virus
Sa terra sumam quattuor habebat arguin
Which may be Englished in this manner;
Whether their fuming backs that smell
Do send abroad such poison pestilent,
Or whether 't earth wherein this Snake full seeth
Doubt slide, yeilds that unwholesome sort.
It is said that these Dryines do live in the bottom or roots of Oaks, where they make their nests, for which cause they are called Querculi, as if they were derived from an Oak, which caused the Countrymen to call it Dendraquile, which signifies the male and female in this kind: being bred only in one part of Africa, and in Hellepos, and there be of them two kindes, one of the length of two cubits, being very fat and round, and very sharp scales over the back; and they are called Dryine of Drus, that signifies an Oak, because they live in bottom of Oaks: and they are also called Chelydra, because of their sharp scales or scales, for it is the manner of the Latines and the Greeks, to call the hard and rough skin of the body of man and beast, by the name of Chelydra: and I make the Serpents Chelydra, to be the same that the Dryines be. Within the scales of this Serpent there are bred certain Flies with yellow wings, as yellow as any Bratfe, the which Flies at length do eat and destroy the Serpent that breedeth them. The colour of their back is blackish, and not white: as some have thought, and the favour or smell coming from them like to the smell of a Horses hide, wet as it cometh out of the pit, to be shaven by the hand of a Tawyer or Glover. And Bellumus writeth, that he never saw any Serpent greater then this Dryine, which he calleth Dendrocatta, nor any that hisseth stronger: for he affirmeth, that one of these, put into a fack, was more then a strong Countryman could carry two miles together without letting it down and reeling. And likewise he faith, that he saw a skin of one of these flufhed with hair, which did equal in quantity the leg of a great man. The head of this Beast is broad and flat: and Olaus Magnus writeth, that many times, and in many places of the North, about the beginning of Summer these Serpents are found in great companies under Oaks, one of them being their head or Captain, who is known by a white crest or comb on the top of his crown, whom all the residue do follow, as the Bees do their King and Captain. And these by the relation of old men are thought to beger a certain stone, by their mutable breathing upon some venomous matter, found in the trees leaves, or earth where they abide: for they abide not only in the roots, but in the hollow bodies of the trees, and sometimes for their meat and food, they leave their habitation, and descend into the Fens and Marishes to hunt Frogs: and if at any time they be assaulted with the Horse-flie, they instantly return back again into their former habitation. When they go upon the earth, they go directly or straight, for if they should winde themselves to run, they would make an offensive noise, or rather yield a more offensive smell: according to those verses of the Poet Lucan;

Natrix & ambigua colorat qui Syrtidos aura
Chersidas, trahit; via famante Chelydra.

In English thus;

The Snake which hath the doubtful Syrtes sandy,
And Chelydra by sliding, flame on land.

Georgius Fabricius writeth, that he saw in the Temple of Bacchus at Rome, a company of drunken men dancing, leading a male Goat for sacrifice, having Snakes in their mouths, which Snakes Prudentius the Christian poet calleth Chelydra, that is, Dryines in these verses following;

--- Baccho caper omnibus aris
Caditur, & visseris disidentur ore Chelydros,
Qui Bromwem placere volunt, quod et ebria jam tum
Anse osulos regis Sytvarum insania ficit.

In English thus;

A Goat to Bacchus on every altar list,
While sacrificers tear Dryines in pieces small;
By force of teeth, and that before the eyes
Of Satyres King, mad drunk they fall.

The nature of this Serpent is very venomous and hot, and therefore it is worthily placed among the first degree or rank of Serpents, for the smell thereof doth so stupefy a man, as it doth near flange him, for nature refuseth to breath, rather then to draw in such a filthy air. And so pestilent is the nature of this Beast, that it maketh the skin of the body of a man hurt by it, loofe, flinking, and rotten, the eyes to be blinde and full of pain, it refraine and keepe the urine, and if it come upon a man sleeping, it caufeth often neezing, and maketh to vomit bloody matter. If a man treads upon it unaware, although it neither flinge nor bite him, yet it caufeth his legs to swell, and his foot to lose the skin thereof: and that which is more strange, it is reported, that when a Physician cured the hand of one bitten by this Serpent, the skin of his hand alfo came off, and whatsoever killeth one of these, if once he smelle the favour of it, whatsoever he smelleth afterwards, he will thinke it smelleth of the Dryine. And therefore most pestilent mult this Serpent needs be, which killeth both touching and smelling.

When it hath wounded or bitten, there followed a black or red swelling about the fore, also a vehement pain over all the body through the speedy dispersing of the poiyn; also Fustules or little wheals, mademe, drinke of the body, and intolerable thirst, trembling and mortification of the members wounded, whereof many die. The cure is like to the cure of Vipers, and besides
besides it is good to take Hart-wort drunk in Wine, or Trifoly, or the roots of Daffadil. Acorns of all kinde of Oaks, are profitable against this poison, being beaten to powder and drunk. And thus much shall suffice for this Serpent.

**Of the Serpents called ELEPHANTS.**

Here be also Serpents called Elephants, because whomsoever they bite, they infect with a kinde of leprosie, and I know not whether the Serpent Elops, Elpis, and Laphiati be the same, but because I finde no matter worthy in them to be spoken of, and they are strangers in our Country, the Reader must be contented with their bare names without further description.

**Of FROGS.**

Frogs are called by the Hebrews, Zab, Zephardas, Undesma, and Undea Azyrui, and Marker; by the Arabians, Hardum, Dif lub, Dipbosa, Diflabo, Alahaul; by the Grecians, Brachatus; whereas cometh the corrupted word Bratetas, and Garacias. Lages and Rembros, signifieth green Frogs; the Italianans and Spaniards call it Rana, by the Latine word; the French, Grenouille, the Germans, Froch; and Froche, and Graßflock, for a green Frog. The Flemings, Urofch, and Urunfch, and Prins; the Ilyrians and Polonians, Zabai, by a word derived from the Hebrew. It is some quefition from whence the word Rana is derived, and because of much controversy whether it hath received name, because it liveth on the land and in the water, or from the crossing voyage which it useth: I will not trouble the English Reader with that discourse, only I am assured, that the word Frog in English, is derived from the German word Froch, as many other English words are derived besides the common name of many Frogs. Homer in his Comedy of the fight betwixt Frogs and Mice called Brachomopomaria, hath devised many proper names for Frogs, such as these are; Limmachius, Graufchott, Plaus, Duff-liver; Hydrodwyfe, Water-hunter; Phinychathos, Nature-cryer; Hyphasis, Loud-cryer: Levabaios, Love-liver; Peloponos, great Libourer; Krambophagos, Brasil-eater; Lynnesos, Pool-keeper; Kalamithos, Mict-eater; Hyrachbairius, Water-childe; Borbookitis, Noise-maker; Philaphagos, Grafs-eater; Plonos, dult-creeper; Pelobates, dull-lesper; Kragues, dought-hater; Pfaffeis, Graffe-green; and such other like, according to the witty invention of the Author, all which I thought good to name in this place, as belonging to this History.

In the next place we are to consider the diversitie and kindes of Frogs, as they are distinguished by the place of their abode: for the greatest difference is drawn from thence; some of them therefore are Water-frogs, and some are Frogs of the land: the Water-frogs live both in the water and on the land, in marshes, flanding pools, running streams, and banks of Rivers, but never in the Sea; and therefore Rana Marina is to be understood of a Fish, and not a Frog, as Maffarius hath learnedly proved against Marcellis. The Frogs of the land are distinguished by their living in Gardens, in Meddows in hollow Rocks, and among fruits: all which several differences shall be afterward expressed, with their pictures in their due places: here only I purpose to talk of the vulgar and common Frog, whose picture with her young one is formerly expressed. Beside, these differ in generation: for some of them are engendered by carnal copulation, and of the slime and rottenness of the earth. Some are of a green colour, and those are eaten in Germany and in Flanders; some again are yellow, and some of an Ash-colour, some spotted, and some black, and in outward form and lathion they resemble a Toad, but yet they are without venom, and the female is always greater then the male: when the Egyptians will signify an impudent man, and yet one that hath a good quick sight, they picture a Frog, because he liveth continually in the mire, and hath no bloud in his body, but above his eyes.

The tongue is proper to this kinde, for the fore-part thereof cleaveth to the mouth, as in a fish, and the hinder part to the throat, by which he feedeth forth his voyces: and this is to be understood, that all Frogs are mute and dumb, except the green Frogs, and the Frogs of the water, for these have voyces. And many times the voyces of Frogs proceedeth from the nature of the Countries wherein they
they live: for once all the Frogs in Macedonia and Cyrenia, were dung, until there were some brought thither out of some other Countries, as at this day the Frogs of Seriphium are all dung, whereupon came the Proverb, *Baractos et Seriphius, A Frog of Seriphium*, because the Frogs of that Country do never croak, although you carry them into any other Country.

This *Seriphium* is one of the Islands of the *Sporades* in Greece, wherein is the lake called *Pieria*, which doth not run in the Summer, but only in the Winter, and all the Frogs which are cast into that lake, are perpetually silent, and never utter their voice; whereof there are signified two causes, one fabulous, and the other true and natural. The first, the *Seriphiam* lay, that when *Perseus* returned with the head of *Medusa*, having gone very far till he was weary, laid him down beside that lake to sleep, but the croaking Frogs made such a noise, as he could take no rest: Whereat *Perseus* was much offended; and therefore prayed *Jupiter* to forbid the Frogs from crying, who instantly heard his prayer, and in joyful perpetual silence to the Frogs in that water: and this is the fabulous reason, being a mere fiction of the Poets.

The second and more true reason is that of *Theophrastus*, who faith, that for the coldness of the water, the Frogs are not able to cry in that place. The voice of Frogs is said by the *Latins* to be *Cacoxare*, and by the *Greeks*, *Oloagen*: peculiar words to set forth this crying: now because their tongue cleaveth to the palate of their mouth, and their voice proceedeth but from their throat to their mouth, and the spirit is hindered by the tongue, so it cannot proceed directly: therefore it hath two bladders upon either side of the mouth, one which it filleth with wind, and from thence proceedeth the voice. Now when it croaketh, it puttheth his head out of the water, holding the other lip even with the water, and the upper lip above the water: and this is the voice of the male provoking the female to carnal copulation.

They have but very small lungs, and those without bloud, full of froth like to all other creatures of the water, which do lay eggs, and for this cause they do never thirst: wherefore also Sea-calves and Frogs are able to live long under the water. They have a double Liver, and a very small Mil, their legs behind are long, which maketh them apt to leap; before they are shorter, having divided claws which are joynd together with a thin broad skin, that maketh them more apt to swim. The molt place of their abode is in fens, or in warm waters, or in fishy-pools: but yellow and ash-coloured Frogs abide in Rivers, Lakes, and Standing Pools, but in the Winter time they all hide themselves in the earth. And therefore it is not true that *Pliny* faith, that in the Winter time they are resolved into lime, and in Summer they resume again their firit bodies, for they are to be seen many times in the Winter; especially in those waters that are neuer frozen, as *Agricola* *Aegina* hath soundly observed, and they have been seen in certain running streams, holding small fishes in their mouths, as it were fucking meat out of them.

Sometimes they enter into their holes in Autumn before Winter, and in the Spring time come out again. When with their croaking voices the male provoketh the female to carnal copulation, which he performeth not by the mouth (as some have thought) but by covering her back: the institution of generation meeting in the hinder parts, and this they perform in the night season, nature teaching them the modesty or shamefulness of this action: And besides in that time they have more security to give themselves to mutual imbraces, because of a general quietness, for men and all other their adversaries are then at sleep and rest. After their copulation in the waters, there appeareth a thick jelly, out of which the young one is found. But the land Frogs are ingendered out of Eggs, of whom we discoursse at this prenten: and therefore they both fuffer copulation, lay their Eggs and bring forth young ones on the land. When the Ege breaketh or is hatched, there cometh forth a little black thing like a piece of flesh, which the *Latin* call *Gyrinid*, from the *Greek* word *Gy-рин*, having no visible part of a living creature upon them, besides their eyes and their tails, and within short space after their feet are formed, and their tail divided into two parts, which tail becometh their hinder-legs: wherefore when the *Egyptians* would defcribe a man that cannot move himself, and afterwards recovereth his motion, they decipher him by a Frog, having his hinder-legs. The heads of these young Gyrinid, which we call in English Horse-nails; because they re semble a Horse-nail in their similitude, whose head is great, and that other part small, for with his tail he swimmeth. After May they grow to have feet, and if before that time they be taken out of the water, they die, when they begin to have four feet.

And first of all they are of a black colour and round, and hereof came the Proverb, *Rana Gyrina *septembris*, witer then a Horse-nail; because through the roundnesse and volubility of his body, it curseth it fell with wonderful celerity, which way forever it pleaseth. These young ones are also called by the *Greeks*, *Miliaria*, *Boattoid*, and *Baracthidae*, but the *Latin* have no name for it, except *Ranunculus*, or *Rana aegripus*. And it is to be remembered, that one Frog layeth an incomparably number of Eggs, which cleave together in the water, in the middle whereof the fef lodgeth. And thus much may suffice for the ordinary procreation of Frogs by generation. To this end the Eggs. In the next place I must also shew how they are likewise engendered out of the duih of the earth, by warm, zlive, and Summer showers, whose life is short, and there is no ute of them.

*Elamius* faith, that, as he travailed out of Italy into Naples, he faw divers Frogs by the way near *Puteoli*, whose fore-part and head did move and creep, but their hinder-part was unformed and like to the limne of the earth, which caused Ovid to write thus;
And of these Frogs it is that Pliny was to be under flood, when he faith, that Frogs in the Winter time are resolved into slime, and in the Summer they recover their life and substance again. It is cer-
tain also, that sometime it raineth Frogs, as may appear by Plinarchus and Lembus, for Lembus writeth thus: Once about Daradania, and Paeonia, it rained Frogs in such plentiful measure, or rather prodi-
gious manner, that all the houfes and high ways were filled with them, and the Inhabitants did flait of all kill them, but afterwards perceiving no benefit thereby, they shut their doores against them, and stopped up all their lights to exclude them out of their houfes, leaving no passage open, so much as a Frog might creep into, and yet notwithstanding all this diligence, their meat feething on the fire, or let on the table, could not be free from them, but continually they found Frogs in it, fo as at lat-
time they were inforced to forfaie that Country. It was likewise reported, that certain Indians and peo-
ple of Arabia, were inforced to forfaie their Countries through the multitude of Frogs.

Cardan feemeth to finde a reason in nature for this raining of Frogs, the which for the better satis-
faction of the Reader, I will here expresse as followeth: 

Plin. hast omia venturam irre, and fo forword in his 16. Book De Subtilitate, that is to say: these prodigious rains of Frogs and Mice, little fishes and flones, and fuch like things is not to be wondered at: for it cometh to paffe by the rage of the windes in the tops of the Mountains, or the uppermoft part of the Seas, which many times taketh up the dust of the earth and congealeth them into flones in the air, which afterwards fall down in rain; fo alfo doth it take up Frogs and Fishes, who being above in the air, must needs fall down again. Sometimes alfo it taketh up the egges of Frogs and Fishes, which being kept aloft in the air, among the whirl-windes, and storms of thowers, do there engender and bring forth young ones, which afterwards fall down upon the earth, there being no pool for them in the air. These and fuch like reasons are approved among the learned for natural caufes of the prodigious raining of Frogs.

But wete read in holy Scripture among the plagues of Egypt, that Frogs were sent by God to annoy them; and therefore whatsoever is the matierial caufe, it is most certain, that the wrath of God and his Almighty hand, is the making or efficient caufe, and for the wortheffe of that divine sto-
ry, how God maketh and take away Frogs, I will expresse it as it is left by the holy Ghoft, in ch.8.

Exod. vers. 5. The Lord said unto Moses, Say thou unto Aaron, stretch thou out thy hand with thy rod upon the streams, upon the rivers, and upon the pondis, and cause Frogs to come upon the land of Egypt. Ver. 6. Then Aaron stretched out his hand upon the waters of Egypt, and the Frogs came up and covered the land of Egypt. Ver. 7. And the Servantes did likewise with their Servantes, and brought Frogs upon the land of Egypt. Ver. 8. Then Pharaoh called for Moses and Aaron, and said; Pray ye unto the Lord, that he may take away the Frogs from me, and from my people, and I will let the people go, that they may do sacrifice to the Lord. Ver. 9. And Moses said unto Pharaoh, concerning me, Command when I shall pray for thee and thy Servantes, and thy people, to destroy the Frogs from thee, and from thy houses, that they may remain in the River only. Ver. 10. Then be it known unto thee and thy Servantes, and thy people, that from the day that I came into Egypt, and till this day, that there was none like the Lord our God. Ver. 11. So the Frogs shall depart from thee, and from thy houses, and from thy people, and from thy Servantes, and they shall remain in the River. Ver. 12. Then Moses and Aaron went out from Pharaoh, and Moses cried unto the Lord concerning the Frogs which he had sent unto Pharaoh. Ver. 13. And he said according to the saying of Moses, so the Frogs died in the houses, and in the Towns, and in the fields. Ver. 14. And they gathered them together by heaps, and the land stank of them, &c.

And this was the second plague of Egypt, wherein the Lord turned all the Fishes into Frogs: as the Book of Wildom faith, and the Frogs assambled in the Kings chamber: and notwithstanding this great judgemen of God for the present, Pharaoh would not let the people go, and afterwards that blinde superflitious Nation became worhippurers of Frogs, (as Plinarchus writeth) thinking by this devotion, or rather wickedneffe in this obsevant manner, to pacifie the wrath of God, choosing their own ways before the word of Almighty God: But vain is that worship which is invented without heavenly warrant, and better it is to be obedient to the will of God, then go about to please him with the cogitations of men, although in their pretended holinesse we spend much time, wealth, and bloud.

There was one Cyphlus, the father of Periander, who by his mother was hid in a Chett called Kyale,
le, to be preferred from the hands of certain murtherers, which were fent to kill him. Wherefore afterwards the said Cyphlus confeocrated a house at Delbros to Apollo, because he heard his crying when he was hid in a chett, and preferred him. In the bottom of that house, was the trunk of a Palm-tree and certain Frogs pictured running out of the fame: but what was meant thereby is not certainly known, for neither Plinarchus which writeth the story, nor Gershom which relateth it, giveth any sig-
nification.
Of the Frog.

nification thereof: but in another place where he enquired the reason why the Oracle of Pythia gave no answer, he conjectured because it was that the accursed thing brought out of the Temple of Apollo from Delphi, into the Gerontian house, had been graven underneath the Brazen Palm, Snakes, and Frogs, or else the prefiguration of the Sun rising.

The meat of Frogs thus brought forth are green herbs and Humble-bees, or Shorn-bugs, which they devour or catch when they come to the water to drink: sometime also they are said to eat earth, but as well Frogs as Toads do eat the dead Moie, for the Moie devoureth them being alive. In Albertus, in the month of August, they never open their mouths, either to take in meat or drink, or to utter any voice, and their chaps are so fast joyne, or closed together, that you can hardly open them with your finger, or with a stick. The young ones of this kind are killed by calling Long-wort, or the leaves of Sea-lettice, as Alcimus and Suidas write: and thus much for the description of their parts, generation, and futurition of these common Frogs.

The widow or disposition of the Egyptian Frogs is much commended, for they save themselves from their enemies with singular dexterity. If they fall at any time upon a Water-snake, which they know is their mortal enemy, they take in their mouths a round Reed, which with an invincible strength they hold fast, never letting go, although the Snake have gotten her into her mouth, for by this means the Snake cannot swallow her, and so she is preserved alive.

There is a pretty fable of a great Bull which came to the water to quench his thirst, and whilst the Beaf came running greedily into the water, he trod in pieces two or three young Frogs; then one of them which escaped with life, went and told his mother the miserable misfortune and chance of his fellows: the asked who it was that had so killed her young ones, to whom he answered: It was a great one, but how great he could not tell; the foolish Mother-Bear desirous to have seen some body in the eyes of her son, began to swell with holding in of her breath, and then asked the young one if the Bear was so big as she? And he answered much greater, at which words she began to swell more, and asked him again if the Bear were so big? To whom the young one answered, Mother leave your swelling, for though you break your self, you will never be so big as he: and I think from this fable came the Proverb, Rana Cyrena lapientem, uterit after the young Frog. This is excellently describ'd by Horace in his third Satyres, as followeth;

Absens rana pulsit vituli pede premit
Dum ubi effugit mater denerrat, ut ingent
Belia cognata elserit, iba rogere,
Quanti aedem? Nam tandem si inflant, sic magna suisset?

Which may be Englished thus;

In old Frogs absence, the young were press to death
By feet of a great Calf, drinking in the water,
To tell the dam, one ran that scap't with life and breath,
How a great beast her young to death did matter.
How great she? so big? and then she did swell.
Greater by half, said she; then she full more, and said
Tell big? but he: cease flowering dam, for I thee tell,
Though breath thy self, like him thou never canst be made.

There is another pretty fable in Esop, tasking discontented persons under the name of Frogs, according to the old verse:

Et vetroenum in limo rana ovimere querelam,
Nam neque fisca placet, neque flagnata palude
Perpetuus, querule semper commita rane.

Which may be Englished in this manner;

The Frogs amidst the earthy slime,
Their old complaints do daily sing:
Not pleas'd with pools, nor land that drinks,
But new displeasures daily bring.

When Ceres went about seeking Proserpina, she came to a certain Fountain in Lydia to quench her thirst, the uncivil Lyceans hindered her from drinking, both by troubling the water with their feet, and also by fending into the water a great company of croaking Frogs; whereas the Goddeſſe being angry, turned all those Country people into Frogs. But Ovid doth ascribe this tranſmutation of the Lyceans, to the prayer of Latones, when she came to drink of the Fountain to increafe the milk in her breasts, at such a time as the nourfed Apollo and Diana, which Metamorphoſis or tranſmutation, is thus excellently described by Ovid;

Ætentum flago (dixit) vitavit in isto.
Æwentium optato deus, quot esfer sub unda,
Et modo nata cava fummargeta membra palude,
Nunc preferea caput, summo modo gurgite natum.

Saepe super ripam flagni consipit, sape
Da gelidos resipire lanceis, sed nunc quoque turpes
Lithus extorem lingua, palato pudore
Quamvis fint sub aqua, sub aqua male diverse tentant.

Q. 99

Von
Vox quaque jam rauca est insitalis, colla tumescunt : 
Ipsa dilatant patulas, convulsit ridicus.
Terga caput turgente, colla intercutita videntur.

In English thus, 

For ever mought you dwell
In this same pond she said: her wits did take off, did with speed,
For underneath the water they delight to be indeed:
Now dive they to the bottom down, now up their heads they pop,
Another while with sprawling legs they swim upon the top,
And oftentimes upon the banks they have a minde to land,
And oftentimes from thence again to leap into the pond:
And there they now do practice still their filthy tongues to fecd,
And shamefully, though underneath the water they do hold
Their former wont of sprawling, still avoid the water cold:
Their voices still are hoarse and harsh, their throats have puffed goaws,
Their chops with sprawling widened are, their hammer headed jawwes,
Are joined to their shoulders just: the neck of them do seem
Cut off: the ridge bone of their back sticks up with colour green.
Their parish which is the greatest part of all their trunk, is gray,
And so they up and down the pond made newly Frogs do play.

Whatsoever the wisdom of Frogs is, according to the understanding of the Poets, this is certain,
that they signify impudent and contentious persons, for this cause there is a pretty fiction in Hell
between the two Poets, Enipides and Aesop: for the ending of which controversy, Bacchus was sent
down to take the worthyeft of them out of Hell into Heaven: and as he went over Clarius Ferry,
he heard nothing but the croaking of Frogs, for such contentious spirits do befit Hell. And thus
much shall suffice to have spoken of the wisdom of Frogs.

Their common enemies are the Weasels, Poul-cats, and Ferrets, for these do gather them together,
and lay of them great heaps within their dens: whereupon they feed in Winter. The Hare
also and Bittern, is a common destroyer of Frogs, and so likewise are some kindes of Kites.
The Night-birds, Gimus and Gimeta, the Water-snake (at whose presence in token of extreme terror)
the Frog betreth up her voyce in lamentable manner. The Moles are also enemies to Frogs, and it is
further said: that if a burning Candle be set by the water side, during the croaking of Frogs,
it will make them hold their peace. Men do also take Frogs, for they were wont to boit a hook
with a little red wooll, or a piece of red cloth, also the gall of a Goat put into a vefell, and let in
the earth, will quickly draw unto it all the Frogs that be near it, as if it were unto them a very
grateful thing: And thus much shall suffice to have spoken of the enemies of Frogs. Now in the
next place we are to consider the several uses, both Natural, Medicinal, and Magical, which men do
make of Frogs.

And first of all the green Frogs, and some of the yellow which live in Flouds, Rivers, Lakes, and
Fifh-pools, are eaten by men; although in ancient time they were not eaten, but only for Phytick,
for the broth wherein they were foul, and the flesh also, was thought to have vertue in it to cure
them which were stricken by any venomous creeping Beasts, especially mixed with Salt and Oyl: but
since that time Aetius discommendeth the eating of Frogs, proving that some of them are venomous,
and that by eating thereof, extream vomites have followed, and they can never be good, except
when they are newly taken, and their skins diligently flayed off, and those also out of pure running
waters and not out of muddy thinking puddles: and therefore adviseeth to for bear in plenty of other
meat, this wanton eating of Frogs, as things perillous to life and health, and those Frogs also which
are most white when the skin is taken off, are most dangerous and fullst of venom, according to the
counsel of Fiera, saying:

Utima, sed nostros non accedenslebetes,
Noliimus, saci ex pluvii & limata maligni.
Nir fallis, putris rana para quam potes.
Datum est & adhuc rauca cum aquae.

In English thus:
We will not deesse a Frog unless the last of all to eat,
Because the voyce thereof is muddy and of vain content,
Except it go on earth, prepared way to rep.
For, asgyt it ever is, and bath hoarse voyce amide the stream.

They which use to eat Frogs, fall to have a colour like lead, and the hotter the Countries are,
the more venomous are the Frogs; in colder Countries, as in Germany they are not so harmful,
especially after the Spring of the year, and their time of copulation pasado. Besides, with the fifh
of Frogs, they were wont in ancient time to bait their hooks, wherewithal they did take purple Fishes,
and they did burn the young Frogs, putting the powder thereof into a Car: whose bowels was taken
out, then rolling the Car, and after she was roasted, they anointed her all over with Honey, then
laid,
Of the Frog.

Laid her by a Wood side, by the odour and favour whereof, all the Wolves and Foxes lodging in the said Wood were allureth to come to it, and then the Hunters lying ready in wait, did take, destroy, and kill them. When Frogs do croak above their usual custom, either more often, or more thrill then they were wont to do, they do forebode rain and tempestuous weather.

Wherefore Tully faith in his first Book of Divination, who is it that can suspect, or once think that the little Frog should know thus much, but there is in them an admirable understanding nature, conflant and open to it self, but more secret and obscure to the knowledge of men; and therefore speaking to the Frogs, he citizen these veris;

Vet quosq. signa videtis aqual dulcis alumnæ,
Cum clamore paratis inuentur sordere voce,
Absurdos non vates & flagna cietis.

In English thus;

And you O Water-birds which dwell in streams so sweet,
Do see the signs whereby the weather is foretold,
Your crying voices whereas with the waters are repeat,
Vain founds, absurdly moving 'oats and Fountains cold.

And thus much for the natural life of Frogs. Now followeth the Magical. It is said that if a man take the tongue of a Water-frog, and lay it upon the head of one that is asleep, he shall speak in his sleep, and reveal the secrets of his heart: but if he will know the secrets of a woman, then must he cut it out of the Frog alive, and turn the Frog away again, making certain characters upon the Frogs tongue, and so lay the same upon the panting of a woman's heart, and let him ask her what questions he will, she shall answer unto him all the truth, and reveal all the secret faults that ever the hath committed. Now if this magical follyere were true, we had more need of Frogs then of Jurites of Peace, or Magistrates in the Common-wealth.

But to proceed a little further, and to detect the vanity of these men; they also say, that the tongue wherewithal a Frog is struck out of a Snakes mouth, laid upon a woman in travail, shall cause an easy delivery: and if a Man cut off a foot of a Frog is he swims in the water, and unde the fame to one that hath the Gout, it will cure him. And this is as true as a shoulder of Mutton worn in ones Hat healeth the Tooth-sach.

Some again do write, that if a woman take a Frog, and spit three times in her mouth, the shall not conceive with child that year. Also if Dogs eat the pottage wherein a Frog hath been sod, it maketh him dum and cannot bark. And if a Man eat a sod Frog at a Dog, which is ready to fault him, it will make him run away, (I think as fast as an old hungry Horee from a bottle of Hay.) These, and such like vanities have the ancient Heathens (ignorant of GOD) firmly believed, till either experience disapproved their inventions, or the sincere knowledge of Religion enlightning their darknesse, made them to forfake their former vain errors, which I would to GOD had come sooner unto them, that so they might never have sinned: or else being now come unto us their children, I pray GOD that it may never be removed, left by trudding in lying vanities, we forsoake our own mercy. And so an end of the Magical Uses. Now we proceed to the Medicinal, in the biting of every venomous creature. Frogs sod or roasted, are profitable, especially the broth, if it be given to the fick peron without his knowledge, mixed with Oyl and Salt, as we have said already. The flesh of Water-frogs is good against the biting of the Sea-hare, the Scorpion, and all kinds of Serpents; against Leprofie and scabs, and rubbed upon the body, it doth cure the same.

The broth taken into the body with roots of Sea-holm, expelleth the Salamander: so also the Eggs of the Frog, and the Eggs of the Tortoise, hath the same operation, being sod with Camomith. The little Frogs are an antidote against the Toads and great Frogs. Albertus also among other remedies, prefecteth a Frog to be given to fick Faulions or Hawks: It is also good for cricks in the neck, or the Cramp. The same sod with Oyl, eateth the pains and hardneffe of the joynts and finews: they are likewise given against an old Cough, and with old Wine and sod Corn drunk out of the Vesell wherein they are sod, they are profitable against the Dropifie, but with the sharpst Vinegar, Oyl, and Ipume of Niter sod together, by rubbing and anointing, cureth all scabs in Hories, and pellent tumors.

There is an Oyl likewise made out of Frogs, which is made in this manner; they take a pound of Frogs, and put them into a veffel or glasse, and upon them they pour a pinte of Oyl, so flopping the mouth of the glasse, they feethe it: as they do the Oyl of Serpents, with this they cure the shrinking of the finews, and the hot Gout, they provoke sleep, and heal the inflammations in Fevers, by anointing the Temples. The effect of this Oyl is thus described by Serenus:

Sape ita per vadit vitis frigiris, ac tenet artus,
Ut vise quosq. medicamine pulsa recedat.
Si ramam ex olae decocietis, abjice carnem,
Membra sove.

Laid her by a Wood side, by the odour and favour whereof, all the Wolfs and Foxes lodging in the said Wood were allureth to come to it, and then the Hunters lying ready in wait, did take, destroy, and kill them. When Frogs do croak above their usual custom, either more often, or more thrill then they were wont to do: they do forebode rain and tempestuous weather.
The History of Serpents.

That is to say;

*often are the sinews held by force invading cold,*

which scarce can be repelled back by medicines tried might,

Then sicken a Frog in purges Oyl, as Ancients have told,

So bathe the members sick therein, Frogs flesh call out of sight.

And again in another place he speaking of the cure of the Fever, writeth thus;

 sensual of oleo partum serpentes Rana,

In trivio, idque artiperducere facis.

In English thus;

But first let Oyl make hot young, Frogs new found.

In ways, therewith bring sinews weak, to well full found.

To conclude, it were infinite and needless to express all that the Physicians have observed about the Medicines rising out of the blood, fat, flesh, eyes, heart, liver, gall, reins, legs, and sperm of Frogs, besides powder, and distillations; therefore I will not weary the Reader, nor give occasion to ignorant men, to be more bold upon my writing of Physick then is reason, left that be said against me which proverbially is said of unnecessary things, *Rana vitium ministrat,* you give Wine to Frogs, which have neither need nor nature to drink it, for they delight much in water. And so I conclude the History of this vulgar Frog.

Of the Green Frog.

This Frog is called Calamites, and Dryophytes, and Menops, and Rana vires. In Arabie blepharicon, and Cucumites, and Cucumones, Etruscan, Rana, Bzeoxanes, of Bres-ein, to rain, and thereof cometh the signified word of Arisiphates, Brekekekox Knox; but I think that our English word Frog is derived from the German word Frofs, so the German Frofs from the Greek word Bres. It is called also Zamia, that is, Domums, lofe, hurt or damage, because they live in trees, and many times harm Men and Cattle underneath the trees; and therefore called Zamia, of the Greek word Zemla. The Italians call it Racola, Ranocchia, Lo Rosono, Ranocchia de rubetto. The French, *Croisette,* and sometimes Graiffet, Verdet; in Savoy, Renpele. In Germany, Lotsfrofs. In Poland, Zaba Trauma. Some of the Latins for difference, to call it Rana Rubetia, because it liveth in trees and bushes: and for the same caufe it is called Calamites, because it liveth among reeds, and Dryophytes, because it fulleth sometimes out of trees.

It is the leaf of all other Frogs, and liveth in trees, or among fruits and trees, especially in the Woods of Hafels, or Vines, for with its short legs it climbeth the highest trees: informeth that some have thought it had wings. It is green all over the body, except the feet and the fingers, which are of duny or reddish colour, and the tops of his nails or claws are blunt and round: In the distillation thereof there was bloud found in every part of the body, and yet but little. The heart of it is white, the liver black, mixed with the gall. It hath also a moist, and in the end of July it layeth eggs.

It is a venomous Beast, for sometimes Cattle as they broufe upon trees, do swallow down one of these upon the leaves not discerning it, because it is of the same colour: but presently after they have eaten it their Bellies begin to swell, which must needs proceed from the poysoned Frog.

A second reason proving it to be venomous, is for that many Authors do affirm, that hereof is made the *Fisitotriterum,* for the drawing out of teeth by the roots, and for this caufe is concluded to be venomous, because this cannot be performed without strong poyson. But for the cure of the poyson of this Frog, we shall expresse it afterward in the history of the Toad, and therefore the Reader must not expect it in this place. Always before rain they climb upon the trees, and there cry after a hoarse manner very much, which caueth the Poet Serenus to call it *Ruco garrula quefia,* at other times it is mute, and hath no voice: wherefore it is more truly called *Menops,* that is, a Prophet or a Diviner, then any other kind of Frog; because other Frogs which are not altogether mute, do cry both for fear, and also for desire of carnal copulation, but this never cryth but before rain.

Some have been of opinion, that this is a dum Frog; and therefore *Vincentius Bellucentis* faith, that it is called a mute Frog from the effect: for there is an opinion, that this put into the mouth of a Dog, maketh him dum, which if it be true; it is an argument of the extreme poyson therein contained, overcoming the nature of the Dog, whose chiefest senses are his taste and his smelling. And thus much shall suffice for the description of this Frog.
The medicinal vertues observed herein are these that follow, 1st, if a man which hath a cough, do spit into the mouth of this Frog, it is thought that it doth deliver him from his cough, and being bound in a Crane's skin unto a man's thigh, procureth venereous desires: but these are but magical devises, and such as have no apparent reason in nature, wherefore I will omit them, and proceed to them that are more reasonable and natural. 2nd, for the Oyl of Frogs, that is the belt which is made out of the green Frogs, as it is observed by Sibthorpe; and if they are held between a man's hands, in the fit of hot burning Ague, do much refresh nature, and eafe the pain. For Fever-hecticks they prepare them thus: they take such Frogs as have white bellies, then cut off their heads and pull out their bowels, afterwards they feethe them in water, until the flesh fall from the bones: then they mingle the said flesh with Barley meal, made into pate, wherewithal they cram and feed Pullen with that pate, upon which the fick man must be fed, and in default of Frogs they do the like with Eels, and other like Fishes. But there is not part of the Frog so medicinable as is the blood, called also the matter or the juice, and the humor of the Frog, although some of them write, that there is no blood but in the eyes of a Frog: First therefore with this they kill hair, for upon the place where the hair was pul'd off, they pour this blood, and then it never groweth more: And this as I have said already, is an argument of the venom of this Frog; and it hath been proved by experience, that a man holding one of these Frogs in his hand, his hands have begun to swell, and to break out into blisters.

Of this vertue Serenus the Poet writeth thus;

Fratera quaeque singulare volat aurea tincta,
Alisque in perpetuum reditiva occidere tela,
Corporibus sublimis sanguine perdurant rane,
Sed que parva sinn el, & rana garrula quies.

That is to say;
Beside's, from whatsoever bodies hair thou wilt
Be clean destroy'd, and never grow again
Oh them, the matterly blood of Frogs, all bread and still,
I mean the little Frog qesiting hoarse voyce amain.

The same also being made into a Verdigras, and drunk the weight of a Crown, stoppeth the continual running of the urine. The humor which cometh out of the Frog, being alive when the skin is scraped off from her back, cleareth the eyes by an Ointment: and the flesh laid upon them, causeth their pains; the flesh and fat pulleth out teeth. The powder made of this Frog being drunk, flayeth bleeding, and also expelleth spots of blood dried in the body. The same being mingled with Pitch, causeth the falling off of the hair. And thus much shall suffice for the demonstration of the nature of this little green Frog.

Of the Padock or Crooked back F R O G.

It is apparent that there be three kindes of Frogs of the earth, the first is the little green Frog: the second is this Padock, having a crook back, called in Latin, Ranae Gibbosa; and the third is the Toad, commonly called Bufo, Bufo. This second kinde is mute and dumb, as there be many kinde of mute Frogs, such as is that which the Germans call Feurkrott, and our late Alchy. mists Purpurbrunnen, that is, a Fire-frog, because it is of the colour of fire: This is found deep in the earth, in the midst of Rocks and stones when they are clest auffer, and amongst metals, whereinto there is no hole or passage, and therefore the wit of man cannot devise how it should enter therein, only there they finde them when they cleave those stones in sunder with their wedges and other instrumens. Such as these are, are found near Tour in France, among a red handy stone, whereof they make the Milkstones, and therefore they break that stone all in pieces before they make the Milkstone up, left while the Padock is included in the middle, and the Milkstone going in the mill, the heat should make the Padock swell, and so the Milkstone breaking, the corn should be poysoned. Afoon as these Padocks come once into the air, out of their close places of generation and habituation, they swell and fo die.

This crook-backed Padock is called by the Germans, Gartenstob, that is, a Frog of the Garden, and Grasfröch, that is, a Frog of the grass. It is not altogether mute, for in time of peril, when they are chased by men, or by Snakes, they have a crying voyce, which I have oftentimes proved by experien-ence, and all Snakes and Serpents do very much hunt and desire to destroy these: also I have seen a
Snake hold one of them by the leg, for because it was great the could not easily devour it, and during that time it made a pitiful lamentation.

These Padocks have as it were two little horns or bunches in the middle of the back, and their colour is between green and yellow, on the sides they have red spots, and the feet are of the same colour, their belly is white, and that part of their back which is directly over their breast, is distinguished with a few black spots. And thus much may serve for the particular description of the Padock, not differing in any other thing that I can read of from the former Frogs, it being venomous as they are, and therefore the cure is to be expected hereafter, in the next History of the Toad.

of the TOAD.

To conclude the story of Frogs, we are now to make description and narration of the Toad, which is the most noble kind of Frog, most venomous and remarkable for courage and strength. This is called in Hebrew by some Cosh; the Grecians call it Phuron; the Arabians, Myllus; the Germans, Krak: the Saxons, Gasp; the Flemings, Padde; the Ilyrians, Zeba; the French, Crapsul; the Italians, Ruspo, Botta, Buffo, Chiatto, Zato, Buffo, Buffa, Buffone, and Ramarzo; the Spaniards, Supo esco, eco, the Latinus, Rubeta, because it liveth among bushes, and Buso, because it swelleth when it is angry.

Now I finde of these Toads two kindes, the one called Rubeta paluisiris, a Toad of the fens, or of the waters; the other Rubeta terresbris, a Toad of the earth: And these in Authors are sometimes confounded, one taken for another. The greatest difference that I can learn, is their fear or place of habitation, for they live both of them in the land and in the water. And of them that be in the water, some of them be smaller then the other, and are therefore called Rubetula, that is, little Toads: and I think they be the same which are called by some Authors Lame Simulaua.

Near unto Zurich there are Toads not half so big as the vulgar Toads, at a place called Kiriburg, being of a durt colour on the back, and sharp boned, the belly white and yellow, or rather betwixt both, the eyes of a gold flaming colour, the buttocks and hinder-legs hairy, and besides that place, these kindes of Toads are no where found. They have a very shrill voice, so as they are heard a great way off, like a small bell or trumpet, and they never utter their voice but in the Spring, and the fore-part of the Summer; for about September they hide themselves in trees, neither do they live among the waters, but on the dry land; when they cry, it is certain that the night following will bring forth no froth.

Like unto this there is a Toad in France called Bufo cornutus, a horned Toad, not because it hath horns, for that is most apparently false, but for that the voice thereof is like to the sound of a Corne, or rather (as I think) like to a Raven called Cornix, and by a kinde of Barbarism called Bufo cornutus. The voice of this Toad is like Saffron on the one part, and like filthy dirt on the other; besides, there are other venomous Toads living in sinks, privies, and under the roots of plants.

There is another kind also, like to the Toad of the water, but in stead of bones it hath only griftles, and it is bigger then the Toad of the fen, living in hot places. There is another also, which although be a Toad of the water, yet hath it been eaten for meat not many years since: the mouth of it is very great, but yet without teeth, which he doth many times put out of the water like a Tortoise to take breath, and in taking of his meat, which are flies Locusts, Caterpillers, Gnats and small creeping things, it imitate the Chamaleon, for it puteth out the tongue, and licketh in his meat by the space of three fingers, in the top whereof there is a soft place, having in it viscous humor, which caueth all things to cleave fall unto it which it toucheth, by vertue whereof it devoureth great flies. And therefore the said tongue is said to have two little bones growing at the root thereof, which by the wonderful work of Nature, doth guide, fortified and strengthen it. And thus much may serve as a sufficient relation unto the Reader for the diversity of Toads.

Now we will proceed to the common description of both kindes together. This Toad is in all outward parts like unto a Frog, the fore-feet being short, and the hinder-feet long, but the body more heavy and swelling, the colour of a blackish colour, the skin rough, viscous, and very hard, so as it is not easy to be broken with the blow of a staff. It hath many deformed spots upon it, especially black on the sides, the belly exceeding all other parts of the body, standing out in such manner, that being smitten with a staffe, it yieldeth a sound as it were from a vault or hollow place. The head is broad and thick, and the colour thereof on the neather part about the neck is white, that is, somewhat pale, the back plain without bunches, and it is said, that there is a little bone growing in their sides, that hath a vertue to drive away Dogs from him that beareth it about him, and is therefore called
called *Apoquin*. The whole aspect of this Toad is ugly and unpleasant. Some Authors affirm that it carryeth the heart in the neck, and therefore it cannot easily be killed, except the throat thereof be cut in the middle. Their liver is very vicious, and causeth the whole body to be of ill temperament: And some say they have two livers. Their milk is very small; and as for their copulation and eggs, they differ nothing from Frogs.

There be many late Writers, which do affirm that there is a precious stone in the head of a Toad, whose opinions (because they attribute much to the vertue of this stone) it is good to examine in this place, that to the Reader may be satisfied whether to hold it as a fable or a true matter, exemplifying the powerful working of Almighty God in nature, for there be many that wear these stones in Rings, being verily persuaded, that they keep them from all manner of gripings and pains of the belly and the small guts. But the Lord (as they term it) is in appearing oft out, for they say it must be taken out of the head alive, before the Toad be dead, with a piece of clothe of the colour of red Scarlet, wherewithal they are much delighted, so that while they stretch out themselves as it were in sport upon that cloth, they call out the stone of their head, but infantly they lift it up again, unleffe it be taken from them through some secret hole in the said cloth, whereby it falleth into a cistern or vessel of water, into which the Toad dureth not enter, by reason of the coldneffe of the water. These things writeth *Maffarins*.

*Braspopulus* faith, that he found such a thing in the head of a Toad, but he rather took it to be a bone then a stone, the colour whereof was brown, inclining to blackneffe. Some say it is double, namely outwardly a hollow bone, and inwardly a stone contained therein, the vertue whereof is said to break, prevent, or cure the stone in the bladder. Now how this stone should be there ingendered, there are divers opinions also; and they say that stones are ingendered in living creatures two manner of ways, either through heat or extreme cold, as in the Snail, Porch, Crab, *Indian Tortoyles* and Toads; so that by extremity of cold this stone should be gotten.

Against this opinion of the vertue of this stone is objected, which is sometimes white, sometimes brown, or blackneffe, having a citrine or blew spot in the middle, sometimes all green, whereupon is naturally engraven the figure of a Toad, and this stone is sometimes called *Burax*, sometimes *Crepusene*, and sometimes *Nife*, or *Nofe*, and *Cleboines*. Others do make two kinds of these two stones, one resembing a great deal of milk mixed with a little blood, so that the white exceedeth the red, and yet both are apparent and visible; the other all black, wherein they say is the picture of a Toad, with her legs spread before and behind. And it is further affirmed, that if both these stones be held in hands in the presence of poiyfon, it will burn him. The probation of this stone is by laying of it to a live Toad, and if the life up her head against it, it is good, but if the run away from it, it is a counterfeit.

*Geor. Agricola* calleth the greater kindes of these stones, *Bronta*, and the lesser and smoother sort of stones, *Ceramiae*, although some contrary this opinion, saying that these stones *Brontia*, and *Ceramiae*, are bred on the earth by thundering and lightning. Whereas it is laid before, that the generation of this stone in the Toad procedeth of cold, that is utterly impossible, for it is described to be so solid and firm, as nothing can be more hard, and therefore I cannot assent unto that opinion; for unto hard and solid things, is required abundance of heat; and again, it is unlikely, that whatsoever this Toad stone be, that there should be any stone of them in the world as are everywhere visible, if they were to be taken out of the Toads alive, and therefore I rather agree with *Sahuddenfis* a *Spaniard*, who thinketh that it is begotten by a certain vicious spume, breeched out upon the head of some Toad, by her fellows in the Spring time.

This stone is that which in ancient time was called *Batraebites*, and they attribute unto it a vertue besides the former, namely, for the breaking of the stone in the Bladder, and against the Falling-fickneffe. And they further write, that it is a discoverer of present poiyfon, for in the presence of poiyfon it will change the colour. And this is the substance of that which is written about this stone. Now for my part I dare not conclude either with it, or against it, for *Pernolau*, *Maffarins*, *Albertus*, *Sylvanus*, and others are directly for this stone ingendered in the brain, or head of the Toad; on the other side, *Cardan* and *Geoffre* confesse such a stone by name and nature, but they make doubt of the generation of it, as others have delivered; and therefore they being in sundry opinions, the hearing whereof might confound the Reader, I will refer him for his satisfaction unto a Toad, which he may easily every day kill: For although when the Toad is dead, the vertue thereof be lost, which consifted in the eye, or blew spot in the middle, yet the subtance remaineth, and if the stone be found there in substance, then is the question at an end, but if it be not, then muft the generation of it be sought for in some other place.

Thus leaving the stone of the Toad, we must proceed to the other parts of the story, and first of all their place of habitation, which for them of the water, is near the water-side, and for them of the earth, in bushes, hedges, rocks, and holes of the earth, never coming abroad while the Sun shinet, for they hate the Sun-shine, and their nature cannot endure it, for which cause they keep close in their holes in the day time, and in the night they come abroad. Yet sometimes in rainy weather, and in solitarie places, they come abroad in the day time. All the Winter time they live under the earth, feeding upon earth, herbs, and worms, and it is said, they eat earth by measure, for they eat so much every day as they can grip in their foot, as it were fixing themselves, left the whoe earth should not serve them till the Spring. Refembling herein great rich covetous men, who ever spare to spend for fear they shall want before they die, and for this cause in ancient time the wise *Painters* of
Germany, did picture a woman sitting upon a Toad, to signify covetousness. They also love to eat Sage, and yet the root of Sage is to them deadly poison; They destroy Bees, without all danger to themselves, for they will creep to the holes of their Hives, and there blow in upon the Bees, by which breath they draw them out of the Hive, and so destroy them as they come out: for this cause also at the Water-sides they lie in wait to catch them. When they come to drink in the day time they see little or nothing, but in the night time they see perfectly, and therefore they come then abroad.

About their generation there are many worthy observations in nature, sometimes they are bred out of the putrefaction and corruption of the earth; it hath also been seen that out of the ashes of a Toad burnt, not only one, but many Toads have been regenerated the year following. In the New World there is a Province called Darie is, the air whereof is wonderful unwholesome, because all the Country handeth upon rotten marshes. It is there observed, that when the flames or fervants water the pavements of the dores, from the drops of water which fall on the right hand, are instantly many Toads ingendered, as in other places such drops of water are turned into Gnats. It hath also been seen, that women conceiving with childe, have likewise conceived at the same times, Frogs, or a Toad, or a Lizard, and therefore Platerius faith, that those things which are medicines to provoke the mensitious course of women, do also bring forth the Secondines. And some have called Bufudem frater Salernitans, & laterum fratrem Lombardorum: that is, a Toad the Brother of the Salernitan, and the Lizard the Brother of the Lombard, for it hath been seen that a woman of Salernum, hath at one time brought forth a Boy, and a Toad, and therefore he calleth the Toad his Brother; so likewise a woman of Lombardy, and therefore he calleth the Lizard the Lombards Brother. And for this cause, the women of those Countries, at such time as their childe beginneth to quicken in their womb, do drink the juice of Parsley and Leeks, to kill such conceptions if any be.

There was a woman newly married, and when in the opinion of all she was with childe, in stead of a childe she brought forth four little living creatures like Frogs, & yet the remained in good health, but a little while after she felt some pain about the rim of her belly, which afterward was eased by applying a few remedies. Also there was another woman, which together with a Man childe, in her Secondines did bring forth such another Beast; and after that a Merchants wife did like the in Anonytum. But what should be the reason of these so strange and unnatural conceptions, I will not take upon me to decide in nature, left the Omnipotent hand of God should be wronged, and his most secret and just counsel presumptuously judged and called into question. This we know, that it was prophesied in the Revelation, that Frogs and Locusts should come out of the Whore of Babylon, and the bottomless pit, and therefore seeing the feast of the Whore of Babylon is in Italy, it may be that God would have manifested the depravation of Christian Religion, beginning among the Italians, and there continued in the conjointed birth of Men and Serpents: for surely, none but Devils incarnate, or men conceived of Serpents brood, would so visibly stand in Roman error as the Italians do, and therefore they seem to be more addicted to the errors of their Fathers, (which they say is the Religion wherein they were born) then unto the truth of Jesus Christ, which doth unanswerably detect the pride and vanity of the Roman faith.

But to leave speaking of the conception of Toads in Women, we will proceed further unto their generation in the flomachs and bellies of men, whereas there may more easily a reason be given then of the former. Now although that in the earth Toads are generated of the putrefied earth and waters, yet such a generation cannot be in the body of man, for although there be much putrefaction in us, yet not so much to induce bones and other organs, such as are in Toads; as for Worms they are all flesh, and may more easily be conceived of the putrefaction in our flomachs. But then you will say, how comes it to passe, that in mens flomachs there are found Frogs and Toads? I answer, that this evil hapneth unto such men as drink water, for by drinking of water, a Toads egge may easily flipp into the stomach, and there being of a vicious nature, cleaveth fast to the rough parts of the ventricle, and it being of a contrary nature to man, can never be digested or avoided, and for that cause the venom that is in it, never goeth out of the Egge either in operation or in sublimate, to poyson the other parts of the body, but there remaineth until the Egge be form'd into a Toad, without doing further harm: and from hence it cometh that Toads are bred in the bodies of men, where they may as well live without air, as they do in the midst of trees and rocks, and yet afterwards, these Toads do kill the bodies they are bred in. For the venom is so temper'd, that at first it worketh when it is come to ripeness, even as we see it is almost an ufnal thing, to take a poyson, whose operation shall not be perceived, till many days, weeks, or months after.

For the caighting out of such a Toad bred in the body, this medicine is prescribed: They take a Serpent and bowell him, then they cut off the head and the tail, the residue of the body they likewise part into small pieces, which they leethe in water, and take off the fat which swimmeth at the top, which the sick perfon drinketh, until by vomiting he avoid all the Toads in his stomach, afterwards he must use reformatio and aromatical medicines. And thus much may suffice for the ordinary and extraordinary generation of Toads.

These Toads do not leap as Frogs do, but because of their swelling bodies and short legs, their pace is a soft creeping pace, yet sometimes in anger they lift up themselves, endeavouring to do harm, for great is their wrath, obstinacy, and desire to be revenged upon their adversaries, especially the red Toad; for look how much her colour inclineth to rubefcency, so much is her wrath and venom more vehement. If she take hold of any thing in her mouth, she will never let it go till
the dye, and many times the fenteth forth poynson out of her buttocks or backer parts, wherewithal the infecteth the air, for revenge of them that do annoy her: and it is well observed that the know-ledge the weakness of her teeth, and therefore for her defence the first of all gathereth abundance of air into her body, wherewithal the greely swelleth, and then by sighing uttereth that infected air as near the person that offendeth her as she can, and thus she worketh her revenge, killing by the poyn-
son of her breath. The colour of this poynson is like milk, of which I will speak afterward par-
icularly by it self.

A Toad is of a moft cold temperament, and bad constitution of nature, and if hath one certain herb wherewithal it preferve the sight, and alfo refileth the poynson of Spydiers, whereof I have heard this credible History related, from the mouth of a true honourable man, and one of the moft charitable Peers of England, namely, the good Earl of Befford, and I was requeried to fet it down for truth, for it may be juftified by many now alive that saw the fame.

It was fortunat as the said Earl travelled in Bedfordshire, neer unto a Market-town called Oxfoord, some of his company eyespied a Toad fighting with a Spyder, under a hedge in a bottom, by the high-way-side, wherewithal they stood still, until the Earl ther Lord and Master came also to behold the same; and there he saw how the Spyder stiil kept her standing, and the Toad divers times went back from the Spyder, and did eat a piece of an herb, which to his judgement was like a Plantain. At the last, the Earl having seen the Toad do it often, and still return to the combate against the Spyder, he com-
manded one of his men to go, and with his dagger to cut off that herb, which he performed and brought it away. Preently after the Toad returned to seek it, and not finding it according to her expectations swelled and broke in pieces: but having received poynson from the Spyder in the com-
 battlefield, nature turneth her that true herb to devour, and thus wanting the herb, the poynson did infinitely work and destroy her. And this (as I am informed) was oftentimes related by the Earl of Bedford himself upon fundry occasions, and therefore I am the bolster to infect it into this story.

I do the more easily believe it, because of another like story related by Erasme in his Book of Friendship, hapning likewise in England, in manner as followeth. There was a Monk who had in his chamber divers bundles of green rufhes, wherewithal he toof to throw his chamber at his pleasure, it hapned on a day after dinner, that he fell asleep upon one of those bundles of rufhes, with his face upward, and while he there slept, a great Toad came and fate upon his lips, ballriding him in such manner as his whole mouth was covered. Now when his fellows saw it, they were at their wits end, for to pull away the Toad was an unavoidable death, but to suffer her to stand still upon his mouth, was a thing more cruel then death: and therefore one of them eyespied a Spiders web in the window, wherein was a great Spyder, he did advise that the Monk should be carryed to that window, and laid with his face upward right underneath the Spiders web, which was preently accomplished. And assoone as the Spyder saw her adversary the Toad, she preently wove her thread, and defended down upon the Toad, at the first meeting whereof the Spyder wounded the Toad, so that it swelled, and at the second meeting it swelled more, but at the third time the Spyder kyd the Toad, and so became grateful to her Host which did nourish her in his Chamber; for at the third time the Toad leaped off from the muns mouth, and swelled to death; but the man was preferred whole and alive. And thus much may suffice for the antipathie of nature betwixt the Toad and the Spyder.

The Mole is also an enemy to the Toad, for as Atherinus writeth, he himself saw a Toad crying above the earth very bitterly, for a Mole did hold her hart by the leg within the earth, labouring to pull her in again, while the other torove to get out of her teeth, and so on the other side, the Toads do eat the Moles when they be dead. They are alsoe at variance with the Lizard, and all kindes of Serpents, and whenever it receiveth any wound by them, it cureth it self by eating of Plantain.

The Cat doth also kill Serpents and Toads, but eateeth them not, and unlesse the pretently drink the dyeth for it. The Buzzard and the Hawk are destroyers of Toads, but the Stork never destroyeth a Toad to eat it, except in extremity of famine, whereby is gathered the venomous nature of the Toad.

- Now to conclude, the premises considered which have been said of the Toad, the uses that are to follow are not many, except those which are already related in the Frog. When the Spaniards were in Bragia, an Island of the New-found-world, they were brought to such extremity of famine, that a sick man amongst them was forced to eat two Toads, which he bought for two pieces of gold-lace, vorth in Spanish money six Ducats. I dare marvel why in ancient time the Kings of France gave in their Arms the three Toads in a yellow field, the which were afterwards changed by Clodoveus into three Flower-de-luces in a field Azure, as Arms sent unto him from Heaven.

When the Trojans dwelt neer Macedon, after the destruction of Troy, they were very much annoyed by the Galleys, wherefore Marcemirus their King, determined to leave that Country, and to seek some where else a more quiet habitation. Being thus minded, he was admonished by an Oracle that he should go and dwell in that Country where the River Rhene falleth into the Sea, and he was also threeth red to take upon him that journey, by a certain Magician-woman, called Anahuna, for this cunning Woman caueth in the nightime a deformed apparition to come unto him having three heads, one of an Eagle, another of a Toad, and the third of a Lyon, and the Eagles head did speake unto him in this manner, Germanuszm & Marcemirus orint me, & concupisit Lemum, & interiect abundam; that is to say, Thy stock or povertie, O Marcemirus, shall oppresse me, it shall tread the Lyon under foot, and kill the Toad: By which words he gathered, that his povertie shoulde rule over the Roman,
signified by the Eagle; and over the Germans, signified by the Lyon; and over the French, signified by the Toad, because the Toad, as we have said, was the ancient Arms of France.

It is an opinion held by some Writers, that the Weasels of the water do engender in copulation with the Toads of the water, for their mouths, and feet of their belly, they do resemble them; Whereupon these veries were made;

    Busfons gigas patrida tellure sepulta,
    Flumores pluvii forte quadro amo Juno,
    Humor is & friget, mens sic vis bunet & diges,
    Cum peper in terra qui primum ignis erat.

Which may be Engli{h}ed thus;

    Buried in rotten earth, forth Toads I bring,
    Perhaps because we both are made of rain,
    That's moist and cold, moist I and ever freezing,
    When in the earth, that force from fire came.

And thus we will defend to discourse of the Toads poiyon, and of the special remedies appointed for the same. First therefore, all manner of Toads, both of the earth and of the water are venemous, although it be held that the Toads of the earth are more poiyonful than the Toads of the water, except those Toads of the water which do receive infection or poiyon from the water, for some waters are venemous. But the Toads of the land, which do descend into the marishes, and so live in both elements, are most venemous, and the hotter the Country is, the more full are they of poiyon.

The Women-witches of ancient time which killed by poiyonning, did much ufe Toads in their confeotions, which caused the Poet in his verses to write as followeth.

Occurrerit Martion potens, qua male Calenum
Porcellurá vitro, millet ficiente subiactam.

Which may be Engli{h}ed thus;

There came a rich Matron, who mixed Calem Wine,
With poiyon of Toads to kill her Spoufe, O deadly crime.

And again in another place,

    Femur promittere patris
    Nec volo nec poiyum ranarum, in victrix nunquam
    Infecri.

In Engli{h} thus;

    I can nor will of Fathers death a promise make,
    For of Toads poiyon I never yet a view did take.

When an Afp hath eaten a Toad, their biting is incurable, and the Bears of Pamphilia and Cylicia, being killed by men after that they have eaten Salamanders or Toads, do poiyon their eaters. We have said already, that a Toad hath two livers, and although both of them are corrupted, yet the one of them is said to be full of poiyon, and the other to refiit poiyon. The biting of a Toad, although it be feldom, yet it is venemous, and caufeth the body to fwell and to break, either by Impeffation, or otherwife, againft which is to be applied common Antidotés, as womens Milk, Triaule, roots of Sea-holm, and fuch other things. The fpitte alfo of Toads is venemous, for if it fall upon a man, it caufeth all his hair to fall off from his head; againft this evil Paracel{sus} prefcribeth a plaifter of earth, mixed with the fpittle of a man.

The common people do call that humor which cometh out of the buttocks of a Toad when the feeleth, the urine of a Toad, and a man moistned with the fame, be-pi{fed} with a Toad; but the beft remedy for this evil, is the milk of a woman, for as it emblemeth the poiyon in colour, fo doth it refiit it in nature. The bodies of Toads dryed, and fo drunk in Wine after they be eaten to powders, are a moft strong poiyon, againft which and all other fuch poiyon of Toads, it is good to take Plantain and black Hellebore, Sea-crabs dryed to powder and drank, the fballs of Dogs-tongue, the powder of the right horn of a Hart, the milt, spleen, and heart of a Toad. Alfo certain fihes called Shel-crabs, the blood of the Sea-tortoife mixed with Wine, Cummin, and the rennet of a Hare. Alfo the bloud of the Tortoife of the land mixed with Barclay-meal, and the quinellefence of Triacle and Oyl of Scorpions, all these things are very preci{ous} against the poiyon of Serpents and Toads.

We have promis{ed} in the history of the Frog, to exprefse in this place fuch remedies, as the learned Phy{itian}s have ob{erved} for the cure of the poiyon of Frogs. First therefore the poiyon of the Frog caufeth swelling in the body, depelleth the colour, bringeth difficulty of breathing, maketh the breath strong, and an involuntary profu{ion} of feed, with a general dullneffe and rellineffe of body: for remedy whereof, let the party be inforced to vomit by drinking sweet Wine, and two draams of the powder of the root of Reeds or Cypr{e}f{e}. Alfo he muft be inforced to walking and running, besides daily wa{the}. But if a Fever follow the poiyon or burning in the extremities, let the vomit be of water and Oyl, or Wine and Pitch; or let him drink the blood of a Sea-tortoife, mixed with Cummine, and the rennet of a Hare, or else sweat in a Furnace or Hot-hou{se} a long time: besides many other fuch like remedies, which every Phy{itian}, both by experience and reading, is able to minifter in cafes of nece{city}, and therefore I will spare my further pains from expressing.
Of the Hemorrhe.

expressing them in this place, and passe on to the medicinal vertues of the Toad, and fo conclude this history.

We have shewed already that the Toad is a cold creature, and therefore the same sod in water, and the body anointed therewith, caufeth hair to fall off from the members fo anointed. There is a medicine much commended against the Gout, which is this: Take fix pound of the roots of Wilde Cucumber, fix pound of sweet Oyl, of the marrow of Harts, Turpentine, and Wax, of either fix ounces, and fix Toads alive; the which Toads muft be bored through the foot, and hanged by a thred in the Oyl until they grow yellow, then take them out of the Oyl by the threds, and put into the said Oyl the liced root of a Cucumber, and there let it seethe until all the vertue be left in the Oyl. Afterwards melt the Wax and Turpentine, and then put them all together in a glaffe, and use them morning and evening against the Gout, Staticca, and pains of the finews, and it hath been feen that they which have yien long fick, have been cured thereof, and grown perfectly well and able to walk. Some have added unto this medicine Oyl of Saffron, Opobalsamum, blood of Tortoifes, Oyl of Sabine, Swines greafe, Quicksilver, and Oyl of Bays.

For the scabs of Horfes, they take a Toad killed in wine and water, and fo sod in a brazen vefsel, and afterwards anoint the Horfe with the liquor thereof. It is also said that Toads dryed in fmoak, or any piece of them carried about one in a linnen cloth, do lay the bleeding at the nofe. And this Frederick the Duke of Saxony, was wont to practice in this manner; he had ever a Toad pierced through with a piece of wood, which Toad was dryed in the fmoak or thwood, this he rowled in a linnen cloth; and when he came to a man bleeding at the nofe, he caufed him to hold it fift in his hand until it waxed hot, and then would the bloud be flayed. Whereof the Physicians could never give any reafon, except horror and fear constrained the bloud to run into his proper place, through fear of a Beafe fo contrary to humane nature. The powder alfo of a Toad is faid to have the fame vertue, according to this verfe;

Betta usus fitrit natura date curnam.

In English thus;

A Toad that is burned to ashes and duff,
Stays bleeding by gift of Nature just.

The skin of a Toad, and shell of a Tortoyfe, either burned or dryed to powder, cureth the Fiufu-fes: Some add hereunto the root of Laurel and Hen-dung, Salt, and Oyl of Mallows. The eyes of the Toad are received in Ointment againft the Worms of the belly. And thus much fhall fuffice to have spoken of the history of the Toad and Frogs.

Of the GREEN SERPENTS.

In Valois there are certain Green-serpents, which of their color are called Grayling, and I take them to be the fame which Helichius called Saurite, and Pliny by a kinde of excellency, Snakes, of whom we fhall speak afterwards, for I have no more to lay of them at this preffent, but that they are very venomous. And it may be that of thefe came the common proverb, Latet anguis sub herba, under the green herb lyeth the Green-snake, for it is a friendly admonifion unto us to beware of a falshood covered with a truth like unto it.

Of the HÆMORRHE.

This Serpent hath fuch a name given unto it, as the effect of his biting worketh in the bodies of men, for it is called in Latine, Hemorrhow, to signifie unto us the male, and Hemorrhoh, to signifie the female; both of them being derived from the Greek word Alima, which fignifieth bloud, and Res, which fignifieth to flow, because whomsoever it biteth, it maketh in a continual bleeding sweat, with extremity of pain until it die. It is also called Affidium, and Asafidum, Sabrina, and Hafurdium, or Alfordum, which are but corrupted barbarous names from the true and firft word Hæmorrhous.

It is doubtful whether this be to be ascribed to the Asps or to the Vipers, for Isidorus faith it is Pliny, a kinde Asp, and Aelianus, a kinde of Viper. They are of a fandy colour, and in length not palf one foot, or three handfulls, whose tail is very sharp or small, their eyes are of a fiery-flaming colour, their
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their head small, but hath upon it the appearance of horns. When they goe, they goe straight and slowly, as it were halting and wearily, whose pace is thus described by Nicander:

- Et infer

In English thus:

The scales of this Serpent are rough and sharp, for which cause they make a noyse when they goe on the earth; the female refteth her self upon her lower part neer her tayl, creeping altogether upon her belly, and never holdeth up her head, but the male when he goeth holdeth up his head; their bodies are all set over with black spots, and themselves are thus paraphrastically described by Nicander:

Unum longa pedem, totoque grex illima tractis,
Ligna quaedoque eff, quaedaque eff candida forma,
Constrilluamque setis collum, et tensissima cauda.
Mina super gelidos ocularis forint corum profert.

Which may be Englisht in this manner following:

On foot in length, and slender all along,
Some time of fiery hue, sometime milk-white it is,
The neck bound in, and tayl most thin and strong,
Wbos fore-head hath two horns above cold eyes:

They keep in rocks, and floney places of the houfes and earth, making their dens winding and hanging, according to thefe Verfes:

Rimfes colit illa Petras, fubique alpere tella,
Et modice pendens facit, inflexumque cubile.

In English thus:

The thongs of Rocks and passages in fome
They dwell, wherein their lodgings bare,
A little hanging mode for every one,
And bending too their fhyry harbours are.

It is faid that Canopus the Governour of Memelae, chanced to fall upon this Serpent, in revenge whereof Helen his charge, the wife of Memelae broke his back-bone, and that ever since that time they creep lamely, and as it were without loyts; which fable is excellently thus described by Nicander:

Quadem animosa Helen, cygni Jovis inclyta proles
Eo vero redimus Traia (afit vana tujas).
Huic inducita eft generi, Pariam ut ad oras
Venit, & aduersi declinans flamina venti,
Fulguravagam futum Nili aitna classem.
Namque ubi Nauclerus Jovis filicem furtit Canopus
Sterneret, et bibulis fulus dormin et arenis:
Leta venenatia Hemonboris impulita illis.

Which may be Englished thus:

Once noble Helen, Jove's child by Swan-like fpace,
Returning back from Troy, destroyed by Grecian war,
(If that our ancients do not with fables us belaph)
This rece was envied by Pharias anger farse,
When to his fores for safety they did come,
Declining rage of blufhing windy seas,
Water-biding-Navy at Nili mouth gan run,
Where Canopus all tyed, taintet for some cafe:
For there this Pife, or Master of the Fleet,
Dilhaff from beato to deep in drear funk,

Where he did feel the teeth of Hemonborc deep,
Wounding his body with pofton, death's own hand,
But when ege-breeding Ledaes wench eyfted
This ban, he pref't the Serpents back with stroke,
Whereby the bands thereof were all united,
Which in juft wrath for juft revenge his broke,
So ever fince out of this Serpents frame
And body they are taken, which is the caufe
That Cerafis and fem Hemonborae are ever lame,
Drawing their parts on earth by nature lowes.

They which are fung with thefe Hemonborae, do suffer very intolerable torments, for out of the wound continually floweth blood, and the excrements also that cometh out of the belly are bloody, or sometimes little rous of blood in head of excrements. The colour of the place bitten is black,
of the Horncd Serpent.

or of a dead bloody colour, out of which nothing floweth at the beginning but a certain watery humour, then followeth pain in the stomack, and difficulty of breathing. Lastly, the powers of the body are broken, and opened, so that out of the mouth, gums, ears, eyes, fingers ends, nails of the feet, and privy parts, continually issue blood, until a cramp alfo come, and then followeth death, as we read in Lucan of one Telum a young noble man, slain by this Serpent, described as followeth;

Impreffit dentes Hemorrhoeis aspera Tubo
Magnanimo juventi, ministratorique Catonis :
Uique folet partis totis ce-fundens siges
Corycis praefura crescit: sic omnia membra
Emifere fimul rutilam pro fanguine vitam.

Sanguis erat lacryma : quemunque foramina visuit
Humor, ab his languis manat cruor, oro redundat,
Est patula naves, fulor rubet, omnia plenit,
Membrana fluent ventus: tota eft pro vulnera corpus.

In English thus:
The Hemorrhoe fierce, in noble Tubus fastened teeth
That valiant youth, great Catetus scholar dear:
And at when Saffron by Corycians whelk
Is prest, and in his colour on them all appear:
So all his parts sent forth a poison red.

The cure of this Serpent, in the opinion of the Ancients, was thought impossible, as writeth Di-
sorides, and thereof they complain very much, using only common remedies, as scarification, ulcions, sharp meats, and such things as are already remembered in the cure of the Diphas. But besides these they use Vine-leaves, first bruised and then sod with Honey: they take also the head of this Serpent and burn it to powder, and so drink it, or else Garlick with Oyl of Flower-de-luce, they give them also to eat Reifsins of the Sun. And besides, they reftift the eruption of the blood, with plaiters laid to the place bitten, made of Vine-leaves and Honey, or the leaves of Purlfane and Barley-meal. But before their urine turn bloody, let them eat much Garlick stamped, and mixed with Oyl to caufe them to vomit, and drink wine delayed with water, then let the wound be washed with cold water, and the bladder continually fomented with hot Spunges. Some do make the cure of it like the cure of the Viper, and they prefer the Serpent to eat hard Egges with Salt fift, and besides, the feed of Radifh, the juice of Poppy, with the roots of Lilly, alfo Daffadil, and Rue, Trefolie, Caflia, Oppononax, and Cinnamon in potion: and to conclude, the flowers and buds of the buft are very profitable againft the biting of the Hemorrhoe, and fo I end the history of this Serpent.

Of the Horncd SERPENT.

His Serpent becaufe of his Horns (although it be a kind of Viper) is called in Greek Ké-
erfer, and from thence cometh the Latine word Cerfs, and the Arabiam Cerf, and Cer-
fras. It is called alfo in Latine, Cerfalia, Cerfalia, Sirtalia, and Trifalia. All which are cor-
rupted words, derived from Cerf, or else from one another, and therefore I think it not fit to stand upon them. The Hebrewes call it Schepibphon, the Italians, Cerfus, the Germans, En geburne schlang; the French, Un Cerfs, un Cerfus Cornu, that is, a horncd Serpent; and therefore I have so called it in English, imitating herein both the French and Germans.

I will not stand about the difference of Authors, whether this Serpent be to be referred to the Afps or to the Vipers, for it is not a point material, and therefore I will proceed to the description of his nature, that by his whole history, the Reader may choofe whether he will account him a subordinate kind unto others, or else a principal of himself. It is an Africau Serpent, bred in the Lybian sandy seas, places not inhabited by men, for the huge Mountains of lands are so often moved by the windes, that it is not only impossible for men to dwell there, but alfo very dange-
rous and perilous to travel through them, for that many times whole troops of men and cat-
tail, are in an infant overwhelmed and buryed in those sands. And this is a wonderful work

R r
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of God, that those places which are least habitable for man, are most of all annoyed with the most dangerous bitting Serpents.

It is also said, that once these Horned Serpents departed out of Libya into Egypt, where they depopulated all the Country. Their habituation is near the high-ways, in the sands, and under Cart-wheels: and when they goe, they make both a loud with their motion, and also a furrow in the earth, according to the saying of Nicander:

Ex in alter ecibis velocibus obsita fenis,
Redescite facibus prolixius tandem deducit,
Sed medio diffusus hic cerastes fo corpore voluit:
Carum errans per terrae, evanescit aera nemus.

Which may be Englished thus:

Of these the Viper with swift bones thee meetes,
Traveling her back, in path direct and strait,
The Cerastes more diffus'd in way thee greetes
With crooked turning, on scales make sounds full great.

The quantity of this horned Serpent is not great, it exceedeth not two cubits in length; the colour of the body is branded like sand, yet mingled with another pale white colour, as is to be seen in a Hares skin. Upon the head there are two horns, and sometimes four, for which occasion it hath received the name Cerastes, and with these horns they deceive Birds; for when they are hungry, they cover their bodies in sand, and only leave their horns uncovered to move above the earth, which when the Birds see, taking them to be Worms, they light upon them, and so are devoured by the Serpent. The teeth of this Serpent are like the teeth of a Viper, and they stand equal, and not crooked: In stead of a back-bone they have a griffle throughout their body, which maketh them more flexible and apt to bend every way: for indeed they are more flexible than any other Serpent. They have certain red brakkes cross their back, like a Crocodile of the earth, and the skins of such as are bred in Egypt are very soft, shriveling like a Cheverell-glove, both in length and breadth, as it did appear by a certain skin taken off from one being dead; for being fluff'd with Hay, it sheweth much greater then it was being alive, but in other Countreys the skins are not so.

I have heard this History of three of these Serpents brought out of Turkey, and given to a Noble man of Venice alive, who preferred them alive in a great Glass (made of purpose) upon sand, in that Glass near the fire: The description as it here followeth, was taken by John Baltoner, an English Travailer, saying They were three in number, whereof one was thrice so big as the other two, and that was a female, and she was said to be their Mother: she had laid at that time in the sands four or five Eggs, about the bignesse of Pigeons Eggs. She was in length three foot, but in breadth or quantity almost so big as a mans Arm: her head was flat, and broad as two fingers, the apple of the eye black, all the other part being white.

Out of her eye-lids grew two horns, but they were short ones, and those were truly Horns, and not fleeth. The neck compared with the body was very long and small, all the upper part of the skin was covered with scales, of ashy colour, and yet mixed with black. The tail is at it was brown when it was shrutched out. And this was the description of the old one: the other two being like to her in all things, except in their horns, for being small, they were not yet grown. Generally, all these horned Serpents have hard dry scales upon their belly, wherewithall they make a noyse when they goe themselves, and it is thus described by Nicander:

Nunc paves elatum, insulatooremag Cerastes
Nofere, viperum veluti genus, bute qua diupar
Non in corpis habit, sed grantus aut duo profert

In English thus:

Now we may know the treacher Cerastes noyse,
A Viper kind, whose bodies much agree,
Yet these four bays and brandy colour, poys,
Where Viper none, but forehead plain we fee.

There is no Serpent except the Viper that can so long indure thirst as this horned Serpent, for they feldome or never drink; and therefore I think they are of a Vipers kinde: for besides this also it is observed, that their young ones do come in and out of their bellies as Vipers doe: They live in hatred with all kinde of Serpents, and especially with Spiders. The Hawes of Egypt also do destroy horned Serpents and Scorpions: but about thebes in Egypt there are certain faced Snakes (as they are termed) which have horns on their head, and these are harmless unto men and beasts, otherwise all these Serpents are virulent and violent against all creatures, especially men: yet there be certain men in Libya called Pfilli, which are in a league, or rather in a natural concord with horned Serpents. For if they be bitten by them at any time, they receive no hurt at all: and besides, if they be brought unto any man that is bitten with one of these Serpents, before the poyson be spread all over his body, they help and cure him, for if they finde him but lightly hurt, they only spit upon the wound, and so mitigate the pain, but if they finde him more deeply hurt, then
then they take much water within their teeth, and first wash their own mouth with it, then spit out the water into a pot, and make the sick man to drink it up. Lastly, if the poison be yet strong, they lay their naked bodies upon the naked poiyoned body, and so break the force of the poison.

And this is thus described by the Poet, saying,

\[\text{Audrei} \text{Lybici} \text{Pfllar, quis atfera Sir is}
\text{Serpentumque ferae partis alit poniatos,}
\text{Non iatu infidiam dire, non facer venenum}
\]

That is to say,

\*[The Lybian Pfeal, which Serpent-breeding Syttes dwell]

\*[As I have heard, no cure poiyon, flings, and bites,]

\*[Nor hurt themselves, but in other quall:]

\*[By no want force, but joining bodies quites.]

When a horned Serpent hath bitten a man or beast, first about the wound there groweth hard-ninfe, and then putiles. Lastly, black, earthy and pale matter: the genital member fandereth out straighth and never falleth, he falleth mad, his eyes grow dim, and his nerves immemorable, and upon the head of the wound groweth a feab like the head of a Nail, and continually pricketh, like the prickings of Needles: And because this Serpent is immediaterely dry, therefore the poiyon is most pernicious for if it be not holpen within nine days, the patient cannot escape death. The cure must be first by cutting away the feffion unto the bone, where the wound is, or else the whole member if it can be, then lay upon the wound Goats dung fod with Vinegar or Garlike, and Vinegar or Barley-meal, or the juice of Cedar, Rue, or Nep, with Salt and Honey, or Pitch and Barley-meal, and fuch-like things outwardly: inwardly Daffadil and Rue in drink, Raddic-ferd, Indian Cammin, with wine and Celofium, and also Calamin, and every thing that procureth vomit. And thus much for the description of the Horned Serpent.

**Of the Hyrena.**

There be some that make question whether there be any such Serpent as this or no, for it is not very like that there is any such, and that this Hyrena is the self same which is described to be a Four-footed Beast, for that which is said of that, is likewise attributed to this: namely, that it changeth sex, being one yeer a male, another yeer a female, and that the couple which seem to be married together, do by continuall entercourse, bring forth their young ones, so that the male this yeer is the female next yeer, and the female this yeer is the male next yeer. And this is all that is said of this Serpent.

**Of the Hydra, supposed to be killed by Hercules.**

The Poets do fain, that near to the Fountain Amyon, there grew a Plantain, under which was bred a Hydra which had seven heads: whereof one of these heads was said to be immortal: with this Hydra Hercules did fight, for there was in that immortall head such a poiyon as was uncurable: wherewithall Hercules mouthened the head of his Darts after he had killed it: and they say, that while Hercules struck off one of these heads, there ever arose two or three more in the room thereof, until the number of fifty, or as some say, fourscore and ten heads were strucken off: and because this was done in the fennce of Larus, therefore there grew a Proverb of Lerna malorum, to fignifie a multitude of unrefillable evils.

And some ignorant men of late days at Venice, did picture this Hydra with wonderfull Art, and let it forth to the people to be feen, as though it had been a true carkafe, with this inscription. In the year of Chrifs incarnation, 550, about the moneth of January, this monstrous Serpent was brought out of Turkey to Venice, and afterwards given to the French King; it was esteemed to be worth 6000 Ducats. These Monsters fignifie the mutation or change of worldly affairs, but (I trust) said the Author of the inscriptions, who seemed to be a German) the whole Christian World is so affifted, that there is no more evil that can happen to the Christian World, except destruction; and therefore I hope that these Monsters do not forebrow any evil to the Christians. Therefore seeing the Turkish Empire is grown to that height, in which elate all other former Kingdomes fell, I may divine and prophesie that the danger threatened hereby, belongeth to the Turk, and not unto us, in whose Government this Monifer was found to be bred: and the hinder part of his head feemeth to reftible a Turkie Cap. Thus far this incribing Diviner. But this fellow ought first of all to have enquired about the truth of this Picture, whether it were sincere or counterfeit, before he had given his judgement upon it: For that there should be such a Serpent with seven heads, I think it unpoiffible, and no more to be beheved and credited, than that Cufier and Pelorus were conceived in an Egg, or that Pluto is the G O D of Hell, or that armed men were created out of Dragons teeth, or that Vulcan made Achilles his Armour, or that Venus was wounded by, Dianes; or that Ulysses was carried in Bottles, so true I think is the shape of this Monifer: For the
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the head, ears, tongue, nose, and face of this Monster, do altogether degenerate from all kinds of Serpents, which is not usual in Monsters, but the fore-parts do at most times resemble the kind to which it belongeth; and therefore if it had not been an unskilfull Painters device, he might have framed it in a better fasion, and more credible to the world. But let it be as it is, how doth he know that this evil doth more belong to the Turks then to the Christians? For shall we be so blinde and flatter our selves so far, as not to acknowledge our sins, but to lay all the tokens of judgement upon our adversaries? But if there appeared in us any repentance or amendment of those sins, for which God hath suffered in his justice, that impious Tyrant and Tyrannicall Government to prevail against Christians, then we might think that GOD would look mercifully upon us, and avert his wrath from us upon our enemies. But with sorrow and grief be it spoken, all the Kings and people of Christendome, do directly go forward without stumbling in those vile courses, and odious crying sins, for which God hath set up the Turks against former ages, and therefore we have no caufe to hope that ever this rod shall be call into the fire, until the chastisement of Gods children have procured their amendment, and if no amendment, then all the powers of heaven (the blefled Trinity excepted) cannot keep Christendome from ruin and destruction, which God of his infinite mercy turn away from us.

To turn again to the story of the Hydra, I have also heard, that in Venice in the Dukes treasury, among the rare Monuments of that City, there is preferred a Serpent with seven heads, which if it be true, it is the more probable that there is a Hydra, and then the Poets were not altogether deceived, that say, Hercules killed such a one. This Hydra which Hercules slew, they say was engendred between Echidna and Tiphaoa, and nourished by Juno in Lerna, in hatred of Hercules: and they say further, that when he came to kill it, there came a Crab or Cancer to help the Hydra against Hercules, who infantly called upon Isaias for help, and so Isaias flew the Crab, and Hercules the Hydra.

Phaedrus makes the story of Hercules by killing the Hydra, to be a mere allegory, saying, that the Hydra was a Castle kept by fifty men, the King whereof was called Lerus, who was afloat by a Noble man (called Cancer) against the assailants of Hercules, and that Hercules by the help of Isaias, King of the Hybsous, overcame that King and Castle. Other say, that Lerna and Hydra signify the two kinds of Envy, distinguished by Invidia, and Insidia, in himself, which arise out of the monstrous filthy fenne of humane corruption, like a monstrous hideous Dragon, with whom he frove, and as he struck off one head or temptation, so two or three other continually arose in the room thereof. And thus much for the Hydra, whether it be true or fabulous.
Of the Lizard.

\textbf{Of innocent SERPENTS.}

I do read of two kinde of innocent Serpents, one called \textit{Lykis}, because they are only in Affric, and never do hurt unto men, and therefore \textit{Nicaner} was deceived, which maketh this kinde of Serpent to be the same with the \textit{Amyste}, whose sting or teeth are very mortall and deadly. There be also other kinde of harmleff Serpents, as that called \textit{Mularus}, \textit{Molusca}, and \textit{Mylocon}, which is said to go upon the tail, and it hath no notable property, except that one thing which giveth it the name, for \textit{Mularus} is derived from \textit{Mol Ouen}, that is hardly making water.

There be also domesticall innocent Serpents, \textit{Mangres}, \textit{Othophis}, and \textit{Spithecus}, which whether they be one kinde or not, I will not stand upon, for they are all termed by the \textit{German}, \textit{Huffjack}, and \textit{Hulsebg}, that is, a House-snake. They live by hunting of Mice, and Weasels, and upon their heads they have two little ears, like to the ears of a Mouse, and because they be as black as coals, the Italians call them \textit{Serce nero}, and \textit{Carbon}, and \textit{Gardenazzo}, and the French-men, \textit{Anguille de Hoy}, that is, a Snake of hedges. There be some that furnish them in Glasses with branne, and when they are at liberty they live in Dung-hills also, wherein they breed sometimes, they have been seen to suck a Cow, for they do bite the tails about the Cowes legs. \textit{Matthiolus} wroteth, that the flesh of this Snake when the head, the tail, intrails, fat, and gall are cut off and cast away, to be a speciall remedy against the French-pox.

There are also other kinde of Innocent Serpents, as that called \textit{Parea}, and in \textit{Italy Baresi}, and \textit{Pargarina}, which are brought out of the East, where these are bred. There be no other harmfull Serpents in that Country. They are of a yellow colour like Gold, and about four fpaus long; upon either side they have two lines or strakes, which begin about a hand breadth from their neck, and end at their tail. They are without poiyon as may appear by the report of Gifner, for he did se a man hold the head alive in his hand. And thus much shall suffice to have spokenn of Innocent Serpents.

\textbf{Of the LIZARD.}

\textit{Althoogh there be many kinds of Lizards, yet in this place I will intrett first of the vulgar Lizard, called in the Hebrew \textit{Lezach}, \textit{Langermiha}, \textit{Lyndia}, \textit{Carbo}, \textit{Peipab}, and \textit{Eglis}; the \textit{Chaldeans}, \textit{Halbeha}, and \textit{Honetta}; the \textit{Arabians}, \textit{Atas}, \textit{Albanaia}, or \textit{Albadaia}, \textit{Haridan}, \textit{Arab}, \textit{Samabra}, \textit{Samhbra}; the \textit{Grecians} in ancient time \textit{Saros}, and \textit{Sura}, and vulgarly at this day \textit{Kallifara}; the \textit{Italians} in some places, \textit{Liguro}, \textit{Legaro}, \textit{Lucerta}, and \textit{Lucretula}; about \textit{Trent}, \textit{Rasani}, and \textit{Ramarri}, and yet \textit{Ramarrois} also used for a \textit{Toad}; the \textit{Spaniards}, \textit{Lagarto}, \textit{Lacerta}, \textit{Lagaris}, and \textit{Lagardtis}; the \textit{French}, \textit{Lizardes}; the \textit{German}, \textit{Adex}, and when they differeth the male from the female, they expressse the male, \textit{Eus Egerbi}, and the female, \textit{Egtes}; in \textit{Hufflia}, \textit{Lydefsch}; in \textit{Flanders} and \textit{Illyria}, \textit{Gjefirka}, and \textit{Giffier}; the \textit{Latines}, \textit{Laocrus}, and \textit{Laetra}, because it hath arms and shoulers like a man, and for this cause also the \textit{Salamanler}, the \textit{Stellion}, the \textit{Crocodile}, and \textit{Scorpions} are also called sometimes \textit{Lacerti}, \textit{Lizards}. And thus much shall suffice for the name.}

The vulgar Lizard is described on this sort; the skin is hard and full of scales, according to the saying of \textit{Virgil};

\begin{quote}
\textit{Absint et pisii squalemia terra Lacerti.}
\end{quote}

\textit{In English thus;}

\textit{Those put away}

\textit{And painted Lizards with their scale back.}

The colour of it is pale, and distinguisht with certain rusty spots, as \textit{Pliny} wroteth, with long strakes or lines to the tail; but generally they are of many colours, but the green with the white belly living in bushes, hedges, and is the most beautifull, and most respected; and of this we shall peculiarly intrett hereafter. There have been some Lizards taken in the beginning of September, whole
Thefe little Lizards do differ from the Stheniions in this, that they have blood in their veins, and they are covered with a hard skin winking with the upper eye-lid. All manner of Lizards have a cloven tongue, and the top thereof is somewhat hairy, or at the leafe divided like the feather and figure of their hair. Their teeth are also as small as hair, being black, and very sharp, and it seemeth also they are very weak, because when they bite, they leave them in the wound. Their lungs are small and dry, yet apt to swell and receive wind by inflammation: their belly is uniform and simple, their intrails long, their Milt round and small, and their tongues cleave inwardly to their loyans; their tail is like the tail of a Serpent; and it is the opinion of Aesop, that the same being cut, growth again. The reason whereof is given by Cardan, because imperfect creatures are full of moistnesse; and therefore the parts cut off do easily grow again. And Pliny reporteth that in his days he saw Lizards with double tails, whereunto Americus Vespucius agreeth, for he faith, that he saw in a certain Illand not far from Lipob, a Lizard with a double tail. They have four feet, two behind and two before, and the former feet bend backward, and the hinder feet forward, like to the knees of a man.

Now concerning the different kinds of Lizards, I must speake as briefly as I can in this place, wherein I shall comprehend both the Countreys wherein they breed, and also the severall sorts, with some other accidents necessary to be known. There is a kind of Lizard called Gallur, or Uel, and Aquaril, with the dung whereof the Persians do cure little pimples and spots in the face, and yet Belwomis maketh a quedinon, whether this be to be referred to the Lizards or not, because Lizards are not found but in the Countrey, out of Cities, and there are found every where.

There is also another kind of Lizard called Lacertum Muralinis, which being salted, with the head and purple Wool, Oyl of Cedar, and the powder of burnt Paper, do put into a llench cloth, and rubbed upon a bald place, do cause the hair that is fallen off to come again. There be other Lizards, called by the Crecianes Amea, and by the Latinnes, Lacertio Fimbriae, which continually abode in green corn; these burned to powder, and the same mixed with the bell wine and honey, do cure blinded eyes by an ointment.

Alcucrum writeth, that a friend of his worthy of credit, did tell him that he had seen in Providence, a part of France, and also in Spain, Lizards as big as a mans fist, thick, but not very long, and these did inhabit hollow places of the earth, and that many times when they perceived a man or beast pass by them, they would suddenly leap up to his face, and at one blow pull off his cheeks. The like also is reported of Persians in France, where there be Lizards as great as little Puppres, and that the people of the Country do seek after their dung, or excrements, for the sweetnesse and other vertues thereof.

In Lybia there are Lizards two cubits long, and in one of the Fortunate Islands called Capetia, there are also exceeding great Lizards.

In the Illand of Difforites, near to Arabja the leffer, there are very great Lizards, the flesh whereof the people eat, and the fat they seethe, and use in stead of Oyl; these are two cubits long, and Rama know not whether they be the same which the Ancientes call Taby, and live in the deferts of Lybia. They drink nothing at all, for water is present death unto them, so that a man would think that this Serpent were made all of fire, because it is so perfectly driued with water. Being killed they contain no blood out of it, neither hath it any poynon but in the head and tail. This the people hunt after to eat, for the tale of the flefe is like the tale of Frogs flefe, and when it win the hole or den, it is very hardly drawn forth, except with spades and mattocks, whereby the passages are opened, and being abroad it is swift of foot.

The Lizards of Indja, especially about the Mountain Nila, are 24 feet in length, their colour variable, for their skin seethe to be flourished with certain pictures, fote and tender to be handled. I have heard that there hangeth a Lizard in the Kings house at Paris, whose body is as thick as a mans body, and his length or stature little leffe; it is said it was taken in a prison or common Gaole, being found sueting the legs of prisoners: and I do the rather belieue this, because I remember such a thing recorded in the Chronicles of France, and also of another somewhat leffer, preferred in the same City, in a Church called Saint Antionies. And to the intent that this may seeme no strange nor incredible thing, it is reported by Velatianus, that when the King of Portugal had conquered certain Illands in Ethiopia, in one of them they flew a Lizard, which had devoured or swallowed down a whole infant, so great and wide was the mouth thereof: it was eight cubits long, and for a rare miracle it was hanged up at the gate Flamentanus in Rome, in the roof, and dedicated to the Virgin Mary. Besides thefe, there are other kinds of Lizards, as that called Lacerta vermicularis, because it lieth upon Worms and Spiders, in the narrow walls of old buildings. Also a silver-colored Lizard, called Lacson, living in dry and fun-thining places. Another kind called Sendrom, and Aletes, and Sennecia. Seen is a red Lizard, as Sibuation writeth, but I rather take it to be the Scink, or Crocodile of the earth, which abound near the red Sea.

There whole colour was like Brass, yet dark and dusky, and their belly partly white, and partly of an earthly colour, but upon either side they had certain little pricks or spots like printed Starees: their length was not pass four fingers, their eyes looked backward and the holes and passages of their ears were round, the fingers of their feet were very small, being five in number, both before and behind, with small nails, and behind that was the longest which flanched in the place of a man fore-finger, and one of them flanched different from the other, as the thumb doth upon a mans hand, but on the forefeet all of them flanked equally, not one behind or before another.

Thefe little Lizards do differ from the Stheniions in this; that they have blood in their veins, and they are covered with a hard skin winking with the upper eye-lid. All manner of Lizards have a cloven tongue, and the top thereof is somewhat hairy, or at the leafe divided like the feather and figure of their hair. Their teeth are also as small as hair, being black, and very sharp, and it seemeth also they are very weak, because when they bite, they leave them in the wound. Their lungs are small and dry, yet apt to swell and receive wind by inflammation: their belly is uniform and simple, their intrails long, their Milt round and small, and their tongues cleave inwardly to their loyans; their tail is like the tail of a Serpent; and it is the opinion of Aesop, that the same being cut, growth again. The reason whereof is given by Cardan, because imperfect creatures are full of moistnesse; and therefore the parts cut off do easily grow again. And Pliny reporteth that in his days he saw Lizards with double tails, whereunto Americus Vespucius agreeth, for he faith, that he saw in a certain Illand not far from Lipob, a Lizard with a double tail. They have four feet, two behind and two before, and the former feet bend backward, and the hinder feet forward, like to the knees of a man.
Of the Lizard.

There is also another kind of Lizard called Lacertus Solaris, a Lizard of the Sun, to whom Epiphanus compreareth certain Hereticks called Sampels, because they perceive their eye-fight to be dim and dull. They turn themselves falling in their Caves to the East, or Sun-rising, whereby they recover their eye-fight again.

The picture of the Lizard with the belly upward.

In Sarmatia, a Country of the Rutens, there is a Province called Samogitia, wherein the Lizards are very thick, black, and great, which the foolish Country people do worship very familiarly, as the Gods of good fortune; for when any good befalleth them, they entertain them with plentiful banquets and liberal cheer: but if any harm or mischief happen unto them, then they withdraw that liberality, and intreat them more courtely, and fo these Lizards people think to make these Lizards by this means, more attentive and vigilant for their welfare and prosperity.

In the Province of Cataia, subject to the Tartars, there are very great Lizards, (or at least wife Serpents like Lizards) bred, containing in length ten yards, with an answerable and correspondent compass and thicknesse.

Some of these want their fore-legs, in place whereof they have claws like the claws of a Lyon, or talons of a Falcon. Their head is great, and their eyes are like two great loaves. Their mouth and the opening thereof is wide, as it may swallow down a whole man armed, with great, long, and sharp teeth, fo as never any man or other creature durt without terror look upon that Serpent. Wherefore they have invented this art or way to take them.

The Serpent useth in the day time to lie in the Caves of the earth, or else in hollow places of Rocks and Mountains. In the night time it cometh forth to feed, ranging up and down seeking what it may devour, neither sparing Lyon, Bear, nor Bull, or smaller beast, but eateth all he meeteth with until he be satisfied, and returneth again to his den. Now for as much as that Country is very soft and miry: the great and heavy Buik of this Serpent maketh as it were a Ditch by his weight in the sand or mire, so as where you fee the trailing of his body, you would think there had been rowled some great vessel full of Wine, because of the round and deep impression it leaveth in the earth.

Now the Hunters which watch to destroy this beast, do in the day time slaine sharp flakes in the earth, in the path and passage of the Serpent especially near to his hole or lodging, and these flakes are pointed with sharp Iron, and are covered in the earth or sand, whereby it cometh to paife, that when in his worsted manner he cometh forth in the night: because (as the ancients say) man is a beast, he unawares fetteth his beasts, or else mortally woundeth his belly upon one of those sharp-pointed flakes. Which thing the Hunters lying in wait observing do presently upon the firft noise with their swords kill him if he be alive, and so take out his gall which they fell for a great price, for therewithal the biting of a mad Dog is cured, and a woman in labor failing but a little of it, is quickly discharged of her burthen. It is good also against the Hemroids and Piles. Furthermore, the flesh of this Serpent is good to be eaten, and these things are reported by Pausanias Venetus, and this story following.

As Americus Vespucius layed in his Journey from the Fortunate Islands, he came unto a Country where he found the people to feed upon foeflike the flesh of a Serpent; & afterwards they found this beast to be in all things like a Serpent without wings, for they few divers of them alive, taken and kept by the people to kill at their own pleasure. The mouths whereof were fast tied with ropes, so as they could not open them to bite either man or beast, and their bodies were tied by the legs. The aspect of these beasts was fearful to his company, and the strangers which did behold it, for they took them to be Serpents, being in quantity as big as Roe-bucks, having long feet and strong claws, a speckled skin, and a face like a Serpent: from the nose to the tip of his tail, all along the back there grew a bristle, as it were the bristle of a Bore, and yet the said Nation feedeath upon them, and because of their similitude with Lizards, I have thought good to infer their relation among the Lizards in this place, leaving it to the further judgement of the Reader, whether they be of this kind or not.

In Carebut there are Serpents also, or rather beasts remaining in the fenny places of the Countrey, whose bodies are all pild without hair like Serpents: also in their mouth, eyes, and tail they resemble them, and in their feet Lizards, being as great as Boars, and although they want poyson, yet are their...
their teeth very hurtful where they fallen them. Like unto these are certain others bred in *Hispaniola*, in an Island called *Hyuana*, having prickles on their back, and a comb on their head, but without voice having four feet, and a tail like Lizards, with very sharp teeth. They are not much greater then Hares or Conies, yet they live indifferently in trees, and on the earth, being very patient, and inducing tamine many days. Their skin smooth and speckled like a Serpent, and they have a crop on the belly from the chin to the breast, like the crop of a Bird.

Beside these, there are also some called *Ba-bati*, about the bignesse of Conies, and of a white aht colour, yet their skin and tail like a Snake, and they resemblé trapped Horres. They have four feet, and with the foremost they dig them holes in the earth, out of which they are drawn again like Conies to be eaten of men, for they have a pleasant tall. To conclude, we do read that in the year 1543 there came many winged serpents and Lizards into Germany, neer Syria, and did bite many mortally: And in the year 1551 there were such bred in the bodies of men and women, as we have heared already in the general discouer of Serpents, first of all recorded in the beginning.

In all the nature of Lizards, there is nothing more admirable then that which is reported of them by *Elius* of his own knowledge. When a certain man had taken a great fat Lizard, he did put out her eyes with an Infrument of Brass, and fo put her into a new earthen pot, which had in it two small holes or passages, big enough to take breath at, but too little to creep out at, and with her moist earth and a certain hearb, the name whereof he doth not express; and furthermore, he took an Iron Ring, wherein was set an *Engagatus* Stone, with the Picture of a Lizard ingraven upon it. And besides, upon the Ring he made nine several marks, whereof he put out every day one until at the last he came at the ninth, and then he opened the pot again, and the Lizard did fee as perfectly as ever he did before they were put out: whereof *Albttus* enquiring the reason, could give none, but having read in *Isidow*, that when the Lizards grow old and their sight dim or thick, they enter into some narrow hole of a Wall, and so fet their heads therein, directly looking towards the East or Sun rising, and so they recover their sight again. Of this *Albttus* giveth good reason, because he faith, the occasion of their blindness cometh from frigidity congeiating the humor in their eyes, which is afterward attenuated and dissolved by the heat and heat of the Sun. The voyage of the Lizard is like the voyage of other Serpents, and if it happen that any man by chance do cut the body of the Lizard alundur, so as one part falleth from another, yet neither part dyeth, but goeth away upon the two legs that are left, and live apart for a little space, and if it happen that they meet again, they are so firmly and naturally conjoynd by the secre Operation of nature, as if they had never been lacerated, only the scar remaneth.

They live in caves of the earth, and in graves, and the green Lizards in the fields and Gardens, but the yellowish or earthy brown Lizard aniong hedges and thorns. They devour any thing that comes to their mouth, especially Bees, Emmets, Palmer-worms, Greathoppers, Locusts, and such like things, and four months of the year they lie in the earth and eat nothing.

In the beginning of the year about *March*, they come out again of their holes, and give them selves to generation, which they perform by joyning their bellies together, wreathing their tails together, and other parts of their bodies; afterwards the female bringeth forth Eggs, which the commuteth to the earth, never sitting upon them, but forgereth in what place they were laid (for the hast of her memory.) The young ones are conceived of themselves by the help of the Sun. Some there be which affirm that the old one devoureth the young ones aflfo as they be hatched, except one which the sufereth to live, and this one is the baftel and moft dullard, having in it least spirit of all the rest: yet notwithstanding, afterwards it devoureth both his parents, which thing is proved faile by *Albttus*, for seeing they want memory to finde out their own Eggs, it is not likely that they have so much understanding as to discern their own young ones, nor yet so unnatural as to destroy the noblest of their brood, but rather they shoule imitate the Crocodile, which killeth the baftel and spareth the rest spirits.

It is affirmed, that they live but half a year or six months, but it is also faile, for they hide themselves the four coldest moneths; and therefore it is likely that they live more then fix, for else what time should they have for generation? Twice a year they change their skin, that is in the Spring and Autumn, like other Serpents that have a soft skin, and not hard like the Tortoises. Their place of conception and emission of their Eggs is like to Birds: and therefore it is a needhee quetition to enquire whether they bring egges forth of their mouth or not, as some have foolishly affirmed, but without all warrant of truth or nature.

They live by couples together, and when one of them is taken, the other waxeth mad, and ragesh upon him that took it, whether it be male or female: In the Old Testament Lizards, Weasels, and Mice are accounted impure beasts, and therefore forbidden to be eaten, not only because they live in Graves and defign incontinency of life, but also thieves and treacherous perons. They are afraid of every noise, they are enemies to Bees, for they live upon them; and therefore in ancient time they mixed Meal and Joyce of Mallows together, and laid the fame before the Hives, to drive away Lizards and Crocodiles. They fight with all kinde of Serpents; also they devour Snails, and contend with Toads and Scorpions. The Night-owls and Spiders do destroy the little Lizards, for the Spider doth so long wind the third about the jaws of the Lizard, that he is not able to open his mouth, and then she fatteneth her flings in her braces. The Toads are also enemies to Lizards, according to this saying of the Poet;
Of the green Lizard.

Serpentes eicona pullus
Nutrit & inventus per deviatur lucetas.

In English thus;
With Lizards young and Serpents breed,
The Stork seeketh her young ones to feed.

Notwithstanding, that by the law of God, men were forbidden to eat the Lizard, yet the Troglodytes, Ethiopians, did eat Serpents and Lizards, and the Amazons did eat Lizards and Tortoises, for indeed those women did use a very thin and flender diet; and therefore Calum doth probably conjecture, that they were called Amazons, because Marathon natura, that is, they wanted all manner of delicate fare. We have also heard already, that the Inhabitants of Dioscurides Illy, do eat the flesh of Lizards, and the fat after it is boiled, they use in Reid of Oyl.

Concerning the venom or poison of Lizards, I have not much to say, because there is not much thereof written: yet they are to be reprehended which deny they have any poison at all, for it is manifest, that the flesh of Lizards eaten, (I mean of such Lizards as are in Italy,) do cause an inflammation and apoplexyation, the heat of the head-ache, and blindness of the eyes. And the Eggs of Lizards do kill speedily, except there come a remedy from Faulkons dunse and pure Wine. Also when the Lizard bite, he leaveth his teeth in the place, which continualy atheth, until the teeth be taken out: the cure of which wound is first to suck the place, then to put into cold water, and afterward to make a plaster of Oyl and Ashes, and apply the same thereunto. And thus much for the natural description of the Lizard.

The medicines arising out of the Lizard, are the same which are in the Crocodile, and the flesh thereof is very hot: wherefore it hath vertue to make fat, for if the fat of a Lizard be mixed with Wheat-white, Halimitre, and Cumin, it maketh Hens very fat, and they that eat them much fatter: for Cardan faith, that their bellies will break with fatness, and the same given unto Hawks, maketh them to change their feathers.

A Lizard dissected, or the head thereof being very well beaten with Salt, draweth out Iron points of nails, and splents out of the flesh or body of man, if it be well applied thereunto, and it is also said, that if it be mingled with Oyl, it caueth hair to grow again upon the head of a man, where an Ulcer made it fall off. Likewise a Lizard cut afunder hot, and so applied, cureth the itching of Scorpions, and taketh away Wens.

In ancient time with a field-lizard dried and cut afunder, and so bruised in pieces, they did draw out teeth without pain; and with one of these sod and stamped, and applied with Meal or Frankencife to the fore-head, did cure the watering of the eyes.

The same burned to powder, and mixed with Cretick Honey by an Ointment, cureth blindness. The Oyl of a Lizard put into the ear, helpeath deafneffe, and driveth out Worms if there be any thereini. If children are anointed with the blood falling, it keepesth them from fwellings in the belly and legs: also the liver and blood lapped up in Wooll, draweth out nails and thorns from the flesh, and cureth all kinde of freckles, according to this verle of Serenm:

Versus componerit sagus curare Lacota.
That is to say;
The blood of Lizards can,
Cure freckles in a man.

The urine (if there be any at all,) helpeath the Rupture in Infants. The bones taken out of the Lizards head in the full Moon, do scarifie the teeth, and the brain is profitable for suffusions: The liver laid to the gums, or to hollow teeth, eache all pain in them. The dung purgeth wounds, and also taketh away the whiteneffe and itching of the eyes, and so sharpeneth the sight, and the same with water, is used for a salve. Arnilium doth much commend the dung of Lizards mixed with Meal, the black thereof being call out, and so dryed in a furnace, and softned again with water of Nitre, and froth of the Sea, afterwards applied to the eyes in a cloth, is very profitable against all the former evils. And thus much shall suffice to have spoken of the first and vulgar kinde of Lizards: for killing of whom Apollo was in ancient time called Sauloius.

of the GREEN LIZARD.

The greater Lizard which is called Lacota Viridis, the green Lizard, by the Grecians, Chlorosaura; by the Italian, Gre, and by the German, Gruner Haylix, is the same which is called Opikomas-cbus, because it fighteth with Serpents in the defence of man. They are of colour green, from whence they are named, and yet sometimes in the Summer they are also found pale. They are twice so big as the former Lizard, and come not neer houses, but keep in Medows and green fields. They only abound in Italy, and it is a beast very loving and friendly unto man, and an enemy to all other Serpents. For if at any time they see a man, they instantly gather about him, and laying their heads at the one side, with great admiration behold his face: and if it chance a man do spitt, they lick up the spittle
The History of Serpents.

Spittle joyfully, and it hath been seen that they have done the like to the urine of children, and they are also handled of children without danger gently licking moisture from their mouths. And if at any time three or four of them be taken, and so let together to fight, it is a wonder to see how eagerly they wound one another, and yet never let upon the man that put them together.

If one walk in the fields by hollow ways, bushes, and green places, he shall hear a noise, and see a motion as if Serpents were about him, but when he looketh earnestly upon them, they are Lizards wagging their heads, and beholding his person: and so if he go forward they follow him, if he stand still they play about him. One day (as Brafimus writeth) there was a Lizard seen to fight with a Serpent in the mouth of his own Cave, and whilst certain men beheld the same, the Lizard received a wound upon her cheek by the Serpent, who of green, made it all red, and had almost torn it all off, and so hid herself again in her den. The poor Lizard came running unto the beholders, and showed her bloody side, as it were desiring help and commiseration, standing still when they stood still, and following when they went forward, so that it acknowledged the sovereignty of man, appealing unto him as the chief Justice, against all his enemies and oppressors.

It is reported by the Iturims, that many times while men fall asleep in the fields, Serpents come creeping unto them, and finding their mouths open, do slide down into their stomachs: Wherefore, when the Lizard feeth a Serpent coming toward a man so sleeping, she waketh him, by gently scratching his hands and face, whereby he escapeth death and deadly poyson.

The use of these green Lizards, is by their skin and gait to keep apples from rotting, and also to drive away Caterpillars, by hanging up the skin on the tops of trees, and by touching the apples with the said gall: also when the head, feet or inwards are taken away, the flesh of the green Lizard is given in meat to one that hath the Sciatica, and thus much for the natural uses of the green Lizard.

The remedies arising out of this Lizard, are briefly these: First it is used to be given to Hawks, and to be eaten in small pieces, provided so as it be not touched with their talons, for it will hurt their feet, and draw their claws together; also they feed it in water, then beat it in a mortar. Lastly, when they have poured warm water upon it, they let the Hawk wash her feet in it, and so causteth her to cast off her old feathers and coat, and bringeth a new in the room thereof. This Lizard eaten with juices to take away the loathing thereof, is good for the Falling-evil: and being sod in three pints of Wine, until it be but one cup full, and thereof taken every day a spoonful, is good for them that have a disease in the lungs. It is also profitable for them that have pain in the loins. And there are many ways to prepare it for the eyes, which I will not here to relate in this place, because they are superfluous, and therefore likely to do more harm then good to the English Reader.

There is an Oyl made of Lizards, which is very precious: and therefore I will describe it as I finde it in Brafiumus. Take seven green Lizards, and strangle them in two pounds of common Oyl, therein let them take three days, and then take them out, and afterwards use this Oyl to anoint your face every day, but one little drop at once, and it shall wonderfully amend the same. The reason hereof is, because it is taken from the operation of the dung or excrements, because that hath vertue to make the face white, and to take away the spots.

If the upper part in the pattern of a Horſe be broken, put thereto this Oyl with a little Vinegar, then rub the hoof about therewith, so shall it increafe and grow again, and all the pain thereof shall passe away. The making of the medicine is this: Take a new earthen pot, put thereto into three pints of Oyl, wherein you must drown your Lizards, and so feethe them till they are burned away, then take out the bones, and put in soft Limes half a pound, liquid Pitch a pint, of Swines grease two pound; then let them be allfod together again afterwars prepared, and used upon the hoof as need shall require: for it shall soften and harden the Horſes hoof, and there is nothing better for this purpose then this Oyl. The ashes of a green Lizard do reduce stars in the body to their own colour.

The bones of a green Lizard are good against the Falling-evil, if they be prepared in this manner following: Put your green Lizard alive into a vessel full of Salt, and there shut it in safe, so in few days it will consume all the flesh and inwards from the bones, and so the bones may be taken and used in this case like the hoof of Elk, which are very precious for this sicknesse, and no lesse precious are these bones. The bleed doth cure the beating, bruises, and thick skins in the feet of men and beasts, being applied in flocks of Wooll.
Of the Cenchrine.

The eye is superstitiously given to be bound to ones arm on a quartane Ague, and the eyes pressed out alive, and to included in golden buttons or bullets, and carried about, do also help the pain of the eyes, and in default hereof the blood taken out of the eyes in a piece of Purple wool, hath the fame operation. The heart of a Lizard is also very good against the exuberations of the King's evil, if it be but carried about in the boosome in some small silver vessel. The gall taketh away the hairs upon the eye-lids that are unequely, if it be dryed in the fame to the thicknesse of Honey, especially in the Dog-days, and mixed with White-wine, then being anointed upon the place, it never suffereth the hairs to grow again. And thus much for the History of the green Lizard.

**of the Millet or Cenchrine.**

This Serpent called by the Grecians Cenchros, Cenchribes, Cenchidion, and Cenchrites; is by the Latines called Cenchris, Cenchrus, and Millesio: because it cometh abroad at the time that Millet-feed flourith, and is ready to ripe, or else because it hath certain little spots upon it like Millet-feed, and is also of the fame colour. It is likewise barbarously called Famuls, Aracis, and Faltisia. The Germans of all others have a name for it, for they call it Funten-februn and Beeg-februn. Other Nations not knowing it cannot have any name for it, and therefore I cannot assign any thereof, except I should lie grossily in the beginning of the History. This Serpent is only bred in Lemno and Samebra, and it is there called a Lyon, either because it is of very great quantity and bignesse, or else because the scales thereof are spotted and speckled like the Lysiion Lyon, or because when it fighteth the tail is turned upward like a Lyon's tail, and as a Lyon doth. But it is agreed at all hands, that Gillius, it is called Millesio, a Millet, because in the spots of his skin and colour it resembleth a Millet-feed, Lucian, which causeth the Poet to write on this manner;

Platibis ille notis variatim tingitur alvum,
Quam parvis tinctum maculis Thebamnse Ophis.

In English thus;

**With many notes and spots, his belly is bedded.**

Like Tethamn her, Ophites sightly tried.

But not only his belly, for his back and whole skin is of the same fashion and colour. The length of this Serpent is about two cubits, and the thick body is attenuated toward the end, being sharp at the tail. The colour is dusky and dark like the Millet, and it is then most ireful and full of wrath or courage, when this herb or seed is at the hight. The pace of this Serpent is not winding or travelling, but upright, and directed without bending to and fro: and therefore faith Lucian: Ex forem reflato lapsum limite Cenchris; that is, And the Millet always standing in a straight and right line, and for this cause when a man flyeth away from it, he must not run directly forward, but winde to and fro, crooking like an Indenture, for by reason thereof this Serpents large body cannot so easilie and with the like speed turn to follow and perfue, as it can directly forward.

It is a very dangerous Serpent to meet withal, and therefore not only the valiantest man, but also the strongest beast, is, and ought judiciously to be afraid thereof, for his treacherous deceit and strength of body, for when it hath gotten the prey or booby, he beclapeth it with his tail, and giveth it fearful blows, in the mean time fallenneth his jaws or claps to the man or beast, and tucketh out all the blood till it be fully satisfied; and like a Lyon lie besteth also his own sides, setting up the spires of his body when he affalthe any adversary, or taketh any repulsing booby. I taketh this to be the same called in Sicilia, Serpa fera, which is sometimes as long as a man, and as great as the arm about the
The History of Serpents.

Of the NEVTE or WATER-LIZARD.

This is a little black Lizard, called Watermell, Wateradder, that is a Lizard of the Water. In French, Taille; and in Italian Marasoldo, which word is derived from Marsa, a Viper, because the poyson hereof is like the poyson of Vipers, and in the Greek it may be termed Eundros Savari. They live in standing waters or pools, as in ditches of Towns and Hedges. The colour as we have said is black, and the length about two fingers, or scarfe so long. Under the belly

it is white, or at least hath some white small spots on the sides and belly: yet sometimes there are of them that are of a dully earthy colour, and towards the tail yellowish. The skin is strong and hard, so as a knife can scarce cut the same, and being cut, there issueth out a kinde of white matterly liqur, like as is in Salamanders.

Being taken, it suffeth the mouth so hard as it cannot be easily opened, neither doth it endure to bite, although it be plucked and provoked. The tongue is very short and broad, and the teeth so short and small, as they are scarcely visible within the lips. Upon the fore-feet it hath four fingers or claws, but upon the hinder-feet it hath five. The tail standeth out betwixt the hinder-legs in the middle, like the figure of a wheel-whirl, or rather so contracted, as if many of them were conjoin'd together, and the void or empty places in the conjonctions were filled. The tail being cut off, liveth longer then the body, as may be seen in every days experience, that is, by motion giveth longer signes and token of life.

This Serpent is bred in fat waters and foils, and sometimes in the ruines of old walls, especially they delight in white muddy waters, hiding themselves under stones in the same water if there be any, and if not, then under the banks side of the earth, for they seldom come to the land. They swim underneath the water, and are rarely seen at the top. Their eggs are not so big as peafe, and they are found hanging together in clutters. One of these being put alive into a glasse of water, did continually hold his head above the water like as Frogs do, so that thereby it may be conjectured it doth often need respiration, and keepeth not under water except in fear, and seeking after meate.

There is nothing in nature that so much offendeth it as Salt, for so soon as it is laid upon Salts, it endeavoureth with all might and main to run away, for it biteth and stingeth the little beasts above measure, so that it dyeth sooner by lying in Salt where it cannot avoid, then it would by suffering many tippes, for being beaten it liveth long, and dyeth very hardly. It doth not like to be without water, for if you try one of them, and keep it out of water but one day, it will be found to be much the worse.

Being moved to anger, it standeth upon the hinder-legs, and looketh diretly in the face of him that hath flirred it, & so continueth til all the body be white, through a kind of white humor or poyson, that it swelleth outward, to harn (if it were possible) the perfon that did provoke it. And by this is their venemous nature observed to be like the Salamander, although their continual abode in the water, maketh their poyson the more weak.

Some say that if in France a Hog do eat one of thefe, he dyeth thereof, and yet doth more safely eat the Salamander. But in England it is otherwise, for I have seen a Hog without all harm carry in his mouth a Newt, and after ward eat it. There be some Apothecaries which do use this Newt in head
Of the Pelias.

Aetius making mention of the Elytra and Pelias, two kinds of Serpents, doth jointly speak of them in this sort, saying that the signes of these Serpents were so common and vulgarly known, that there was no descriptions of them among the ancient Writers. But the Pelias biting caufeth putrefaction about the wound or bitten place, but yet not very dangerous, and it bring-eth obfufcation or dimneffe to the eyes, by reason that as the poyfon is universally diſtributed over all the body, fo it hath most power over the tenderest part, namely the eyes. It is cured by a Pri-fine with Oyl in drink, and a decoction of such Docks as grow in ditches, and other simple medi-cines, such as are applyed to the curing of the Yellow-jaundife. The eyes muft be wafted with the urine of a childe or young man which never knew any woman carnally, and this may be applyed either simply and alone, or elfe by Brine and Pickle, fo alfo muft the head. After that the body is purged, anoint it with Ballamum and Honey, and take an Eye-falve to fharpem again and reco-ver the light, and for this caufe it is very good to weep, for by evacuation of tears, the venom alfo will be expellèd. But if the eyes grow to pain, then let their Eye-falve be made more temperate and gentle, to keep the head and brain from putrefaction. And thus much for the Pelias out of Aetius.

Of the Porphyre.

Here is among the Indias a Serpent about the bignefse of a span or more, which in outward aspect is like to the most beautiful and well coloured Purple, the head hereof is exceeding white, and the Serpent is fought for in the highest Mountains, for out of him they take the Sardius Stone. And although he cannot bite because he wanteth teeth, yet in his rage when he is perfected, he caufeth a certain poyfon by vomit, which caufeth putrefaction where ever it lighteth. But if it be taken alive and be hanged up by the tail, it rendereth a double, one whiles it is alive, the other when it is dead, both of them black in colour, but the firft reftemblèth black Amber. And if a man take but so much of the firft black venom as is the quantity of a Sema-fine seed, it killeth him prefently, making his brains to fall out at his noftrels, but the other worketh neither fo speedily, nor after the fame manner; for it caufeth one into a Conufption, and killeth within the compaffe of a year. But I finde Pelias, Volateran, and Textor to differ from this relation of Ctesias, for they fay, that the firft poyfon is like to the drops of Almond trees, which are conteined into a gum, and the other which cometh from it when he is dead, is like to thin matte-ry water. Unto this Porphyre I may add the Palmer Serpent, which Strabo wrieth doth kill with an unrecoverable poyfon, and it is alfo of a Scarlet colour, to the loyins or hinder-parts.

Of the Prester.

Although there be many Writers which confound together the Prester & the Diplas, and make of them but one kinde, or Serpent of divers names, yet feeing on the contrary there he as many or more which do diſtinguish or divide them, and make them two in nature different, one from another, the Diplas killing by thief, and the Prester by heat, as their very names do signifie, therefore I will alfo trace the feeps of this latter opinion, as of that which is more probable and confor-mant to truth.

The Grecians call it Prester of Prethias, which signifieh to burn or inflame, and Tremellina and Iovius think, that the Serpents called fiery Serpents, which did fhing the Iovius in the Wilde-nergy, were Presters. We finde in Suidas, Prester for the fire of Heaven, or for a cloud of fire carried about with a vehement strong winde, and sometimes lightenings. And it feemeth that this is indeed a fiery kinde of Serpent, for he himself always goeth about with open mouth, panting and brea-thing as the Poet wrieth:

Oraque defiderant amorum fumantia Prester,
Ieficat ut fera tumida membra graet.  
Which may be Englifhed thus;

The greedy Presters wide-open foming mouth  
Ieficat, and swelleth, making the members by heat unweal.

When this Serpent hath truch or wounded, there followeth an immeasurable swelling, diffra- 
ction,conversion of the blood to matter, and corrupt inflammation taking away freedom or catineffe of
The History of Serpents.

of aspiration, likewise dimming the sight, or making the hair to fall off from the head; at last suffocation as it were by fire, which is thus described by Montanus upon the person of one Narfudus, saying as followeth;

Which may be thus Englished;

Lo suddenly a divers fate the joyful current fayed,
Narfidus, which Marsfinius mirror did adore,
By burning finge of fcoroping Preder dead was laid,
For fiery colour his face enfamed, not at before.
The first appearing vifage faid, alt was out-fietcht,
Swelling cover'd all, and bodies groffiffe doubled
Surpassing humane bounds and members all are reache,
Affright venum spreades matter blown in caraffe troubled.
The man lyeth down within fouthe bodies bankes,
No girdle can his monftrous growth contain,
Not fo are waters swain with rage of fandy flanks,
Nor falls bend down to blufpering Corus main.
Now can it not the swelling fines keep in bold,
Deformed globe it is in, and trunk ore-come with weight,
Untouched of flying Fowles, no beaks of young or old.
Do him dare eat, or beaks full wide upon the body bait,
But that they die. No men to bury in earth or fire.
Durst once come nigh, nor fain'd to look upon that bafphes cafe,
For never ceased the beat of corps though dead to fell,
Therefore afraid they ran away with bodey pace.

The cure of the poyfon of this Serpent, is by the Phystians found out to be wilde Pur flain, also the flowers and italk of the busb, the Beavers bone called Cofterum, drunk with Oppoponax and Rew in Wine, and the little Sprat-fish in diet. And thus much of this fire-burning venemous Serpent,

Of the RED SERPENT.

His kinde of Serpent being a Serpent of the Sea, was first of all found out by Pellicarius Bishop of Montpelier, as Randelius writeth, and although some have taken the name for the Myrus or Barrs, of which we have spoken already, yet is it manifest that they are deceived; for in both gills covered with a bony covering, and also fins to swim withal, much greater then those of the Myrus, which we have shewed already to be the male Lamprey. This Serpent therefore for the outward proportion thereof, is like to the Serpents of the land, but of a red or purphflh colour, being full of crooked or oblique lines, depending from the back to the belly, and dividing or breaking that long line of the back, which beginneth at the head, and so fietcheth forth to the tail.

The opening of his mouthe is not very great, his teeth are very sharp and like a saw; his gill like scaly fishes, and upon the ridge of his back, all along to the tail, and underneath upon the rise or brim of his belly are certain Limitis growing, or at the least thin small things like hairs, the tail being cut up in one undivided fine. Of this kind no doubt are those which Bellonius faith he saw by the lake Abydos, which live in the waters, and come not to the land but for sheep, for he affirmed that they are like land Serpents, but in their colour they are red spotted, with some small and dusky spots. Gillius also faith, that among the multitude of Sea Serpents, some are like Congers, and I cannot tell whether that of Virgil be of this kinde or not, spoken of by Lucan the Priest of Neptune.

Solemus taurum ingentem malis at ad avarat.
Ecce autem gemini & Teneo triangulam per alta
(Harrijcoseferent) immensis orbibus angues
Incumbens pelago; paraque, ad littera tendunt.

Peletra quem inter philus arcella, jubaque
Sanguine excuruant undas: pars caetera potum
Pone leges, junq鲭que immensa volumina tergo.

Fis sonans lusammenti solo, Gro.

Which
I will not contrary their opinion which reckon the Salamander among the kindes of Lizards, but leave the assurance as somewhat tolerable: yet they are not to be followed, or to be believed, which would make it a kinde of Worm, for there is not in that opinion either reason or resemblance. What this Beast is called among the Hebrews I cannot learn, and therefore I judge that the Jews (like many other Nations) did not acknowledge that there was any such kinde of creature, for ignorance bringeth infidelity in strange things and propositions.

The Greekes call it Salamandra, which word or term is retained almoft in all languages, especially in the Latine, and therefore Isidore had more boldnesse and wit, then reaion, to derive the Latine Salamandra, quos Poliocondrhum, refiling burning, for being a Greek word, it needeth not a Latine notation. The Arabianes call it Sazambras, and Samebras, which may well be thought to be derived or rather corrupted, from the former word Salamandres, or elle from the Hebrew word Sememit, which signifies a Stellion. Among the Italianes and Rhetians it retaineth the Latine word; and sometimes in Rhetius it is called Rerada. In the Dukedom of Savoy, Pluviana. In France, Saurd, Blaude, Albenne, and Arroisade, according to the divers Provinces in that Kingdom. In Spain it is called Salamandra; in Germany it is called by divers names, as Maal, and Pantier maal, Oim, Moll, and Mosh, because of a kinde of liquor in it like milk, as the Greek word Mophe, from amelgaio to suck milk. Some in the Country of Helenia do call it Quettettub. And in Albertus it is likewise called Rimatrix. And thus much may suffice for the name thereof.

The description of their several parts followeth, which as Avien and other Authors write, is very like a small and vulgar Lizard, except in their quantity, which is greater; their leggs taller, and their tail longer. They are also thicker and fuller then a Lizard, having a pale white belly, and one part of their skin exceeding black, the other yellow like Verdigreese, both of them very splendent and glittering, with a black line going all along their back, having upon it many little spots like eyes: And from hence it cometh to be called a Stellion, or Animalpallitum, a creature full of flars; and the skin is rough and bald, especially upon the back where those spots are, out of which as writeth the Schoelast, infueth a certain liquor or humor, which quencheth the heat of the fire when it is in the flame.

This Salamander is also four-footed like a Lizard, and all the body over it is fet with spots of black and yellow, yet is the flight of it abominable and fearful to man. The head of it is great, and sometimes they have yellowish bellies and tails, and sometimes earthy. It is some question among the learned, whether there have any disposition of sex, as whether there be in this kinde a male and a female. Pline affirmeth that they never engender, and that there is not among them either male or female, no more then there are among Eels. But this thing is jutly crossed, both by Belliumius and Agricola, for they affirm upon their own knowledge, that the Salamander engendereth her young ones in her belly like unto the Viper, but first conceiveth eggs, and the bringeth forth forty and fifty at a time, which are fully perfected in her womb, and are able to run or go loo soon as ever they be littered: and therefore there must be among them both male and female.

The Countries wherein are found Salamanders, are the Region about Trent, and in the Alpes, and sometime also in Germany. They most commonly frequent the coldest and moistest places, as in the shadow of Woods, in hedges neer Fountains and Rivers, and sometimes they are found among Corn and Thorns, and among Rocks. They are seldom seen except in either in the Springtime, or against rain, and for this cause it is called Animalverrata, and Paludiferum, a Spring or rainy creature. And yet there were many of them found together, in a hole neer unto the City Schnberg in Germany, in the month of February, for they love to live in rocks and troops together,
together, and at another time in November, a living Salamander was found in a Fountain. Howbeit, if at any time it be seen foraging out of his den or lodging place, it is held for an affured presage of rain. But if the Spring-time fortune to be cold or frosty, then they keep home, and go not visibly abroad.

Some do affirm that it is as cold as Ice, and that it therefore quencheth heat or fire like a piece of Ice, which if it be true, then is the old Philosophical Maxime utterly false, namely, that all living creatures are hot and moist, being compared to creatures without life and sense, for there is not any dead or fenelefe body that do quencheth fire as Ice doth. But the truth is, that the Salamander is cold, and colder then any Serpent, yet not without his natural heat, which being compared to Armans, may truly be said to be hot, and therefore the venom of the Salamander is reckoned among Septicks, or corroding things.

In naturally leathwet, and therefore some times in the Woods or near hedges, it sucketh a Cow that is laid, but afterwards that Cows udder or flock dryeth up, and never more yeeldeth anymore milk. It also greatly leathwet the Honey-combe, and some Authors have affirmed, that they life to gape after air or breath, like the Chameleon, yet they which have kept Salamanders in glasses, never perceived by them any such thing. They are blow of pace, and void ground very sluggishly, and therefore it is justly termed a heavy and slothful Beast.

But the greatest matter in the Salamander to be enquired after, is whether it can live and be nourished by and in the fire, or whether it can passe through the fire without any harm, or quench and put out the fame. Which opinions in the very relation and first hearing, do croffe one another, for how can that either be nourished or live in the fire, which quencheth the fame being put into it? *Artifalae* that never saw a Salamander himself, but wrote thereof by hear-say, hath given some colour to this opinion, because he writeth, *Nonnulla corpora esse animalium que igne non absamani Ser- mandrae documento eis: que (ut aiunt) ignem inamabilis eum exexituit.* That is to say, the Salamander is an evidence, that the bodies of some creatures are not wafted or consumed in the fire, for (as some say) it walketh in the fire and extinguisheth the fame.

Now whether this beexperimented so great a Philosopher, to write upon hear-say, who took upon him to gather all natural learning into his own Graunge or fore-house, and out of the fame to furnish both the present and all future ages, I leave it to the consideration of every indifferent Reader that shall peruse this story. I for mine own part, rather judge it to be lightneffe in him, to infer a matter of this consequence in the discourse of this Beau, without either Authors, or experience gathered by himself. This one thing I marvail at, why the Egyptians, when they will express or signific a Man burnt, do in their Hieroglyphicks paint a Salamander, except either fire can burn a Salamander, or else contrary to all their custom, they demontrate one contrary by another.

*Nicander* plainly affirmeth, that the Salamander doth without all harm passe through the fire, and the Scholastick addeth, that there are certain passages in the skin, out of which is issueth a kind of liquor that quencheth the fire: And he relateth a story of one *Andreas*, who did dip a piece of cloth in the bloud of a Salamander, and tried afterward whether it would burn or not, but did not finde that it would burn, wherefore he put it upon his hand, and thrust that into the fire, and then also he felt no manner of pain. And therefore the said *Nicander* calleth this creature *Copernum*, because of a certain fat humour which issueth out of it, quenching the fire, but I rather think that this fat humor maketh the skin to glistren, for if it were properly fat, it would rather kindle and increase the fire then quench or extinguish the fame.

*Snuder* followeth the common received opinion, that the Salamander quencheth the fire, (although it be not bred of the fire as Krickets are) like Ice: and when the fire is so quenched, it is in vain to blow or kindle the fame again with any bellows, as they fay have been tryed in the Forges of Smiths. And this also caused *Serenus* to write, *Secu Salamandra potent, nullis obvius flamme* : the potent Salamander is never hurt by flames. *Seneca* confeneth hereunto, and *Zosarmet*: and so great hath been the doatage about this opinion, that none have written that it ascendeth up to the fire near the Moon, far above the reach of the Eagles or wifcril Fowls. Thus fay they that write, and maintain the Salamanders abiding in the fire without harm. Now on the contrary, let us also hear their opinions, which deny this natural operation in the Salamander.

*Pliny* affirmeth, that in his own experience he found that a Salamander was consumed in the fire, and not the fire by it, for he faith he burned one to powder, and used the fame powder in medicines.

*Senec* also denyeth that it quencheth the fire, and unto this opinion agreeeth *Diocles*. *Aetius* writeth, that when it is first put into the fire, it divideth the flame, and passeth through speedily without harm, but if it tarry long therein it is burned and consumed, because the liquor or humidity thereof is wasted. And this also granted by *Galen*, *Theophrastus*, and *Nepetrus*. And *Matthais* affirmeth that he tryed the fame, and found that if burning coals were laid upon it, then it burned like unto any other raw flesh, but being cast into the fire, it burneth not speedily.

*Albertus* writeth, that there were some which brought to him a certain thing which they called Wool, and said that it would not burn, but he found it not *Lana*, Wool, but *Lampe*, that is, a vapoury adherency of a thing which flyeth from the stokes of hammers upon hot burning Iron, and being collected upon cloth, or cleaving to any part of the Forge, it there becometh in fiew like yellow with pale Wool.
The said Author affirmeth, that he took a Spider, and laid the same upon a hot burning Iron, where it continued unburned and unharmed without motion a great while, by reason of his thick skin and coldnefe, and unto another he suffer'd a little candle to be put, which infantly put it out. And for the fame caufes, that is to fay, both the thicknefe of the skin, and cold conftitution, com- pels it to pledge, that a Salamander can live fo long in the fire without burning or confufing to ashes: for indeed the skin thereof is fo hard, that it is cut or pierced with a knife with great difficulty; and fo when the force of the fire hath broken the skin, then alfo it fheweth forth a cold humor, which for a feaon keepeth the heat out. For this Earth is said to be very full of humor, and the certainty thereof may most manifestly appear by his full and groffe body, and alfo by this, that it is seldom feen to issue or come forth of his den, except it be againft rainy weather: and yet as the egges of other Serpents being call'd into a hot burning furnance, do for a feaon rest in the fame unburned, and yet are afterward consumed, fo is it with the Salamander.

There be fome that have found a web out of the hair growing upon Salamanders, which can by no means be fet on fire, but this is very fally, because the Salamander hath no hair upon it at all. And this kind of web rather cometh of a kind of flax that Pliny writeth of, or rather of the Amittus-flax, called the Abifis, which is foun'd in Cyprus, whereof they need to make coverings for the Thea- tres. This being call'd into a fire, seems to be fortheath withall in a flame, but being taken out again, it fhineith the more gloriously.

Some alfo do affirm, that fuch a piece of cloth or web, may be wrought out of the Salamanders skin, but Brofuius denyeth both the vertue of the flone, and of the Salamanders hide or shell, for he faith he tried the flone, and it would not be wrought into wooll or spun into thread, and when he call'd the Salamander's shell or hide into the fire, it burned, and the matterly cold liquor thereof did almoft flie into his face.

But fome then will demand, where had Pope Alexander that coat, which could not be purged but by fire, which made it alway as white as Snow, or that map or net at Rome, whereon (it is faid) the Napkin of our Saviour Christ is preferved, which men faie is not wafhed but in the fire, which thing was fent to a Bishop of Rome for a prefent from the King of Tartar. Unto whom I answer out of Paulus Venetus as followeth. There is a Province in Tartaria called Chinemiana, wherein a Mountain abounding with Mines of Steel and Copper; now in this Mountain there is a kind of earth digged up, which yeeldeth a thred like the thred of Wool. After the digging of it up they dry it in the Sun, and then beat it in a brazen mortar, afterward they spin it and weave it; in the same manner that they spin and weave other woollen cloth. After it is made, they have no means to purge it from spots or from filthinefs, but to call it into the fire for the space of an hour, and then it is taken forth again as white as any snow.

There is alfo an Allum called Alumen Scolae, and it is the fame which among the Ancients is called After fanum, out of which alfo is made cloth that cannot burn, by reaon of a certain Oyl that it containeth or yeeldeth to reflit the fire. So out of the flone Pyritis found in Kifbeha, there cometh out a green liquor prefied with dead coals, and after that, no fire can burn that cloth. There are alfo certain Mantles in Bohemia, (as witnefeth Agricola) which could never be burned. And out of Magnesita a fally flone in Boldercana, they make tables, which cannot be clenfed but by fire. It is alfo recorded, that the fore-named After fanum, and pitch quenched in the juice of Mallows or Mercury, being anointed upon a mans hand, doth keep them from burning, or fene of extraordinary heat. So Albertus writeth of a flone which he calleth Toulus, or Tofus, which I take to be a kind of the Arbifis or Amittus. And this flone is foun'd (as the fame Author writeth) in the farthest parts of Spain, near the Straights and Hercules-pilars.

And this thing femeth the leffe strange, because they which are anointed with Bird-lime, or elfe with Vinegar and the white of an egg, do not fo quickly feel the ftrength of fire and heat, when they thrust their hands into the midit of it. It is alfo found, that the hearts of them that die Zed, of the heart-burning difeafe, or elfe are killed by poyfon, cannot be burned with fire. And therefore when Germanicus Cæsar was dead, it being suspected that he was poyfoned by Pifio, they caft his heart into the fire and it would not burn, which thing was alledged againft him by Vitellius the Orator. And one Arriatius in an Epiffle which he wrote to Oflianus Augustus, faith, that there is a poyfon fo extreme cold, that it keepeth the heart of a man poyfoned therewith from burning, and if it lie long in the fire, it waxeth as hard as a flone, which fo concreted is calld Prodi- lus, from the force of the fire, and from the matter whereof it confifteth it is called an humane flone. He alfo faith, that this is red in colour, mixed with fome white, and is accounted precious, becaufe both it maketh a man that weareth it to be a Conqueror, and alfo preferveth him from all manner of poyfon.

When the Salamander is provoked, it callet forth a white matterly liquor or humer, and it is an audacious and bold creature, ftedling to his adversary, and not flying the fight of a man; and fo much the leffe, if it perceive that a man profeueth and follow it, to harm and kil it. The biting of it is very exeul and deadly, and therefore the French men use this fpice upon the biting of a Sa- lamander;

Si mordu'ta une oreilade, Fresun linteul & la fassade.

That
That is, if a Salamander bite you, then betake you to the coffin and winding sheet. The Ithetians do ordinarily affirm, that when a man is bitten by a Salamander, he hath need of as many Physitians as the Salamander hath spots. And Arnoldus faith, that it hath in it as many venoms and means of hurting, as it hath colours distinguished one from another. For when it once bite and fallenteth teeth, it never letteth go, and being pulled off, it leaveth the teeth behind, and then there never can be any remedy, and therefore it must be suffered to hang upon the wound until it fall off, either willingly or wearied, or else compelled by the medicines that the wounded patient receiveth. For by this means only is the patient kept alive; yet this is a way to be remembered, that the Salamander doth not always bite, although provoked, for Gemenz affirmeth, that he having two of them, could never by beating make them open their mouth, nor that in all his life did he ever hear of any man bitten by them.

And of this thing he not only gathereth the difference of time, wherein their rage floweth it self by biting, and when not, but also the difference of place and region, for that they bite in some Countries, and not in other. When they have bitten, there followeth a vehement pain and seach upon the place, for the cure whereof there must be taken a decoction of Frogs, and the breath must be drunk, and the flesh applied to the fore; or else other common remedies against the poyzon prescribed in the Treatise following.

The poyzon hereof is great, and not inferior to the poyzon of any other Serpent, for some times by creeping upon Apple-trees, it infecteth and poyzoneth all the fruit, so that those which eat the same, die and languish they know not whereof; and if the heel of a man do but touch any small part or portion of the pittle of a Salamander, it maketh all the hair of the body to fall off. The poyzon it self is not cold, as some have thought, but hot, like to the poyzon of Cantharides, and therefore to be cured by the same means, as by vomits, Glysters, Ephemeron, and such like. Only Swine do eat Salamanders without harm or damage, for there is in them a kind of resitance in nature, and yet if Man or Dog do chance to eat of that Swine that hath eaten a Salamander, it hath been observed that they perished by the same. And this poyzon spreadeth it self further the while it is dead, because it is strengthened by putrefaction, and Wine and Water wherein one of these lyeth dead, is empoyzoned and made mortal thereby to others. But in our days Salamanders are not so venomous, if there be any credit in Brafavolu, howbeit I have heard and read, that if at this day a Salamander get into a heap of corn, the so infecteth it, that whatsoever eateth of that corn, dyeth as it were of poyzon, and the King of Helvetia, which are sucked by Salamanders, do ever after remain barren, and without milk, and sometime also die they of that evil.

And as Arnoldus writeth, it causeth forth a certain matter white humor like milk out of the mouth, whereupon if a man of any other living creature do but tread, he is poyzoned thereby, and at the leaf, all the hair of their body falleth off, and in like fort they infect herbs and plants of the earth by their poyzon.

Sometimes it happeneth that beast or men have swallowed Salamanders, and then the tongue is inflamed, and all the body falleth into grievous torment, by cold corruption and putrefaction, part after part, and also pains in the fundament and in the stomach, likewise Dropsties, and Impfungation in the bladder, of the guts, and retention of the urine. For the cure whereof they give sweet water, Calamints, Saint Johns Wort, sod with the flesh of Pine-apples, leaves of Cyprifelle, Galbanus, and Honey or Rozen, Ammoniack, and Strias, New Cow-milk, the meal made of Flax-feed with sweet water, sweet Wine and Oyl to caufe vomits; Scammony, and a decoction of Calamints and Figs, cut Bacon or Hogs-fleth, and also the Eggies of a Tortoise, with the flesh thereof; besides infinite other remedies, ordained by the goodness of Almighty God, as Physitians know by their own studies and daily experiments. And therefore I hold it sufficient for me to have lightly touched them, referring those that are defirous to know more, unto the learned collection of Carromus.

Out of the Salamander it self ariseth also some medicines, for it hath a sepulchre power to ease and corrodce to take away hairs, and the powder thereof cureth cornes and hardnette in the feet. The hear tyed to the writh in a black skin, taketh away a quarten Ague; and also Kirsntides writeth, that being bound unto a womens thigh, it theyeth her monethly flowers, and keepeth her barren: But this is worthily reproved for untruth, and therefore I will not commend it to the Reader. And thus much for the Salamander.

Of the -SCORPION.

Scorpius in Greek is attributed both to the Scorpion of the Land and of the Sea, although sometimess for difference sake, the Scorpion of the earth be called Scorpius cephalius. The derivation is manifold according to some Writers, either of Scorpigen von lion, that is, dispersing his poyzon, or of Serenous erpin, because the motion of it is oblique, inconstant and uncertain, like as the flame of fire beaten with a small winde. The Greeks also use for a Scorpion Blessas, because it causeth poyzon, and O(n)spus from the number of his eight feet. And in Ethiopia there is a kind of Scorpion which the Greeks call Sybra. The Latines doe use indifferently Scorpius, Scorpio nepas, and Cancer allo Vinula and Geptarias, as we finde in Ponzettus. The Arabian have many words, as Harab, Acerb, Acharbe, and Satoracon, Macbarab, Algezart, Algeterat, and Algenat and Alkatarari, for little Scorpions which draw their tails after them.
The Countries which breed Scorpions, are these that follow. In Egypt, near the City Captis, are very many great & pestilent stingings Scorpions, who kill as soon as they omit. Alfo Aethiopia and Numidia abound with Scorpions, especially the latter, wherein (as writeth Led Afric.) are every year found very many that die of their wounds. Tenos one of the Cyclades Islands, is called Ophielis, because it yeilds many Serpents and Scorpions. Alfo in that part of Mauritania which is next the Weft, are Scorpions with


wings and without wings: likewise in Iberia, Caria, and Lydia. And it is also said, that once there were many Scorpions brought into India, into that part of the Country where the Ebitophagi dwell. By the way be it wise in Persia and Media, there were wont to abound Scorpions under every stone and turf, for which cause, when the King of Persia was wont to go into Media, he gave commandment unto his people to scour the way, by using all means to kill them, giving gifts to them that killed the greatest number of Scorpions. There is an ancient Town in Aethiop called Pefcura, whereof the abundance of Scorpions do so much harm, that they drive away the inhabitants all the Summer-time every year untill November following. And in like fort Dinortus declareth of many other places utterly forfaken to avoid the multitude of Scorpions, as namely, one part of Arabia, and the Region of India about Arbatian, or the river Eilamnum, likewise near the Gymnolgi in Ethiopia. There is also a City called Alabanda, standing betwixt two hills or mountains, like as a Chief turned inward, which Apollonius calleth Cilium inverfum Scorpionibus plenus; a Chief turned inward full of Scorpions. In an Island of Canaria also are many Scorpions, and those most pestilent, which the Turks gather as often as they may to make Oyl of Scorpions. In Italy, especially in the Mount Telascim in Rame, are also Scorpions, although not so hurtful as in Africa, and other places, and it is thought that Puffi, whose nature cureth all kindes of venemous Serpents harms, did only for lucres fake bring Serpents and Scorpions into Italy, and there left them, whereby they encreaseth to that number and multitude, which now we fee them have. And thus much may suffice to have spoken of the Countries of Scorpions.

The kindes of Scorpions I finde alfo to be many, but generally they may be referred unto twain, whereof one is called the Scorpion of the earth, and the other the Scorpion of the water or of the Sea, whose discourse or history is to be found among the fishes, for we in this place doe only write of the Scorpion of the earth, which is also called by Aesopus a wilde Scorpion. Of this kind there are many differences. First they differ in sex, for there are males and females, and the female is greater then the male, being alfo fat, having a groffer body, and a greater and sharper sting, but the male is more fierce then the female. Again, some of these have wings, and some are without wings, and some are in quantity greater then a Bean, as in Helotia, near Rapinfull by Zurich. The Scorpions called VinMike, are of a reddish colour, as it were Rose-water and Wine mixed together; and from thence it is probable that they took their name, and from their colour, the Authors have observed seven severall kindes.

The first is white, and the biting of this is not deadly. The second is reddish, like fire flamant, and this when it hath wounded caueth thirst. The third is of a pale colour, and therefore called by the Greces, Zopborides, and these when they have wounded a man, caueth him to live in continuall motion and agitation of his body, so as he cannot stand still, but remaineth distract and without wit, alway laughing, like a fool. The fourth kindes is greenish, and therefore termed Chelos, which having wounded, caueth intolerable trembling, shakings, and quivering, and cold, so that if the patient be laid in the hot sun, yet he thinketh that he freezeeth like hyl, or rather seeleth hyl to fall upon him. The fifth kindes is blackish pale, and it is called Empelios, it hath a great belly and broad, whereof the poyson is great, and caueth after stinging and admirable heaviness, and sorrowfull spirit. This kind is called by Gessian, Ventriculos, because of the large belly, by the Arabians, Algedaras, and by Pomsetas, Geptarias. It eateth herbs, and the bodies of men, and yet remaineth infaitle, it hath a bunch on the back, and a tail longer then other Scorpions. The
The History of Serpents.

The sixth is like a Crab, and this is called by **Helianus** a flamant Scorpion, it is of a great body, and hath togs and takers very solid and strong, like the Gramuel or Crevish, and is therefore thought to take the beginning from that Fifth.

The sixth is called **Melittoborus**, because of the Honey-colour thereof, or rather Waxe-colour, and the wings it hath on the back, are like the wings of a Locust.

Alfo Scorpions do differ among themselves in regard of their outward parts, for some of them have wings, as those in India, which are spoken of by Strabo, Nicander, and others, and therefore many times when they little themselves to flie, they are transported by the winde from one Country to another.

There is also another difference oberved in their tayls, and in their flings, for some of them have six knots on their tayls, and some of them feven, and those which have feven, are more hardy and fierce, but this flieeth not very feldome of the felfe, but the Scorpions have feven knots in their tayl, and therefore much feldomer to have beene, as writeth **Apoloborus**. For if any have feven, then there liueth in them a double fling, for there is also another difference, some of them having a fingle, and fome a double fling, yea, fometime a treble one, and the fling of the male is more thick and strong then the fling of the female.

And to conclude, there is also a difference in motion, for some of them hold up their tayls from the earth, and therefe are not much venemous, others again draw them along upon the earth, a little rowed together, and therefe are moft deadly and poyonfull, fome of them alfo flie from one Regi on to another, as we have feen already.

Again, there is nothing that giveth a man a more lively difference, than the consideration of their poysion, for the Scorpions of Phebro, and that part of the Alpis near Noticum, do never harm any living Creature, and therefore are they fuffered to abound, fo as they live under every fcone.

In like fort in the Iles Symyola, the Scorpions are like unto thofe that are in Caftilla or Span, for there the fling of the Scorpion doth not bring death, yet they caufe a smarting pain, like the pain that cometh by the flinging of a Wafp, differing herein, that the Scorpions flinging is more lafting, and continueth longer then the flinging of a Wafp, it fettit on the face, and by the biting thereof all are not pained alike, for fome more, and fome leffe pain.

Contrary to thofe are the Scorpions of Pefiar in Afrik, who ever with their tails wound mortally.

And thofe in Sybylia, which are great, and hurtful unto man and beafts, killing Swine, who do not much care for any other Serpent, especially the black Swine, who do alfo die the fooner, if they drink immediately after the wound received. The like may be faid of the Scorpions of Egypt. And thus much for the different kinds of Scorpions, wherein nature produceth a notable variety, as may appear by all that hath beene faid. Now it followeth that we likewife make fome relation of their congruity one with another.

They are all little living Creatures, not much differing in proportion from the great Scarabe or Horfe-fly, except in the fashion of their tails. Their back is broad and flat, dillignifhed by certain knots or teams, fuch as may be feen in Sea-Crabs, yet their head differeth, and hath no reffemblance with the Crab, becaufe it is longer, and hangeth farre out from the body, the Countenance whereof is frowning, and Virgin-like, and all the colour a bright brown. But whilf the face, it beareth a thick fling in the tail, which tail is full of knots, wherewithall it priceth and hurteth that which it toucheth. And this fling is fayn affirmeth to be proper to this Infeft, to have a fling in the tail, and to have arms: For by arms he meaneth the two croffes or tongues which come from it on both fides, in the top whereof are little things like pinrons, to detain and hold faft, that which it apprehendeth, whiles it woundeth with the fling in the tail.

It hath eight feet, four on the one fide, and four on the other, from whence, as we have feen already, it is called Olgias. For the feet and arms thereof is very much like unto the Sea-crab, and therefore may not unftily be called either the mother or the daughter thereof. They have alfo tongues, wherewithall they use often to lick and smooth over their own bodies. And feeding of all other things they love freh and clean linen, whereinto they infinuate, and wrap themſelves when they can come unto it, then alfo firft of all they cleanse their whole bodies all over with their tongues, and next to their fleſh put on this clean linen, as a man would put on a shirt.

As we have faid already it hath a tayl, wherein the fling thereof is placed, but what this fling is, divers Authors are of divers opinions concerning the fame, fome affirming it to be hollow, others denying it, finding in it no passage at all to contain or convey poysion. **Helianus** again faith, that there must needs be in it a passage or cavity, although it be fo small as by no means it can be perceived with the eyes of any mortall man, and in that fling is the poysion leffe visible, which when it flriketh, difperfeith it feftantly into the wound. But what should this poysion be? whether a fubftance or spiritual humour; furely a fubftance, which although it be mole minima, yet fubtiler maxima, that is, of great power, although of fmall quantity. And therefore another Author (namely **Gerardus**) writeth hereof after this manner; *Scorpius cetero quadam effer crudatiam emittit humorem venefcum*: That is to fay, The Scorpion out of a hollow center, fennent forth a venemous humour. And of this venem we will afterwards difcours more at large. Thus much in this place may ferve to make known the feweral parts and members of this Serpent.

Now then it followeth that we inquire about the manner of their breed or generation, which I find to be double, as divers Authors have obserued, one way is by putrefaction, and the other by laying of eggs, and both these ways are confonant to nature; for Latinus writeth, that fome creatures are
are generated only by propagation of feed, such are men, Vipers, Whales, and the Palm-tree, some again only by putrefaction, as the louie, fly, gaffe, and such like imperfect things, and some both ways, as Misc. Scorpions, Emmes, Spiders, Purflam, which first of all were produced by putrefaction: and since their generation are conserved by the feed and eggs of their own kind. Now therefore we will first of all speak of the generation of Scorpions by putrefaction, and afterward by propagation.

Pliny faith, that when Sea-crabs dye, and their bodies are dried upon the earth, when the Sun enthrall into Cancer and Scorpion, out of the putrefaction thereof ariseth a Scorpion; and so out of the putrefied body of the Crofthburned, arife Scorpions, which caused Ovid thus to write;

Congno littero, si demas brachis cancro,
Cetera supponi terre, de parts sepulta
Scorpius exquis, caudaque minutitum unca.

And again;

Obstitus exemplis Cancer tellure lucetinis,
Scorpius exiguo tempore fadus erit.

In English thus;

If that the arth you take from Sea-crab-sifts,
And put the rest in earth till all consumed be,
Out of the buried part a Scorpion will arise;
With hooked tayl doth threaten to hurt thee.

And therefore it is reported by Aristoteles, that about Eflamnu in India, there are abundance of Scorpions generated, only by corrupt rain-water standing in that place. Alto out of the Batilisk beaten into pieces and so putrefied, are Scorpions engendered. And when as one had planted the herb Baffilis on a wall, in the room or place thereof he found two Scorpions. And some say that if a man chew in his mouth falting this herb Baffil before he wath, and afterward lay the same abroad uncovered where no fun cometh at it for the space of seven nights, taking it all the day time, he shall at length finde it transmuted into a Scorpion, with a tayl of seven knots.

Hollerius, to take away all scruple of this thing, writeth that in India in his dayes, there was a man thare had a Scorpion bred in his brain, by continuall smelting to this herb Baffil, and Gifier by relation of an Apothecary in France, writeth likewise a story of a young maid, who by smelting to Baffil, fell into an exceeding head-ache, whereof the dyed without cure, and after her death being opened, there were found little Scorpions in her brain.

Aristotele remembreth an herb which he calleth Siflimbris, out of which putrefied Scorpions are engendered, as he writeth. And we have shewed already in the history of the Crocodile, that out of the Crocodiles egges do many times come Scorpions, which at their first egression do kill their Dam that hatched them, which causef Archelam which wrote Epigrams of wonders unto Epimenius, to sing of Scorpions in this manner;

In vas diffiluit morte, et redigit Crocodilum
Natura extinctum, Scorpi omnipotens.

Which may be Englithed thus;

To you by Scorpions death the omnipotent
Ruins the Crocodil in natures life extinct.

And thus much for the generation of Scorpions out of putrefaction. Now we will proceed to the second manner of their generation, which is by propagation of feed: for although Ponzettus make some question about their copulation, yet he himselfe inclineth to that opinion, as neerer unto truth, which attributeth carnall copulation unto them, and therefore he alledged the example of flies, which admit copulation although they engender not thereby. Wherefore we will take it for granted, that Scorpions lay egges after copulation, which happeneth both in the Spring and Autumne.

And these are for the most part in number eleven, upon which they sit and hatch their young ones, and when once they are perfected within, those egges (which are in fight like the little worms out of which Spyders are engendred) then do they break their egges, and drive the young out. For as Ifiborus writeth, otherwise the old should be destroyed of the young, even as are the Pliny Crocodiles. Some again say, that the old Scorpions do devour their young ones.

Being thus produced by generation, they live upon the earth, and those which are bred of the Sea-crab, do feed upon the foam of the Sea-water, and a continuall white mould or chalk near the Sea. But the Scorpions of Ethiopia do eat all kinde of worms, flies, and small Serpents. Ye all those Serpents whove very dung being troden upon by man, bringeth exaceruations. And a trystall that Scorpions eat flies, was made by Wolphius at Montever, for having a young one in a boxe, for one whole moneth together it lived upon flies, and grew by the devouring of them bigger, being put into the Glafe unto him.

They live among tiles and bricks very willingly, and for this cause they abound in Rome in the hill called Toflacum. They are also in Bononia found in the walls of old houses, by twisting the
flones and the mortar. They love also clean clothes, as we have said already, and yet they abhor all places where the Sun shineth. And it seems that the Sun is utterly against their nature, for the same Scorpion which Wolphius had at Mangelien, lived in the Gruze until one day he set it in the Sun, and then prettily after it dyed.

To conclude, they love hollow places of the earth near gutters, and sometimes they creep into men's beds, where unawares they do much harm: and for this cause the Lylian, who among other Nations be most of all troubled with Scorpions, do use to set their beds far from any wall, and very high also from the floor, to keep the Scorpions from ascending up into them. And yet leaning all devices should be too little to secure them against this evil, they also set the feet of their beds in vessels of water, that so the Scorpion may not attempt so much as to climb up into them for fear of drowning. And also for their further safeguard, they were socks and hose in their beds to clutch as the Scorpion cannot easily fling through them.

And if the bed be so placed that they cannot get any hold thereof beneath, then they climb up to the sieing, or cover of the house, and if there they finde any hold for their pinching legs to apprehend and fallen upon, then in their hatred to man-kinde, they use this policy to come unto him. First one of them (as I have said) taketh hold upon that place in the house or sieing over the bed wherein they finde the man asleep, and so hangeth thereby, putting out and freshing his fling to hurt him, but finding it too short, and not being able to reach him, he suffereth another of his fellows to come and hang as fast by him as he doth upon his hold, and so that second giveth the wound: and if that second be not able likewise, because of the distance, to come to the man, then they both admit a third to hang upon them, and so a fourth upon the third, and a fifth upon the fourth, until they have made themselves like a chain, to defend from the top to the floor, wherein the man sleepeth, and the last striketh him: after which stroke he first of all runneth away by the back of his fellow; and every one again in order, till all of them have withdrawn themselves.

By this may be collected the crafty disposition of this Scorpion, and the great subtily and malice that is enuied withall in nature, and feeing they can thus accord together in harming a man, it argueth their great mutuall love and concord one with another, wherefore I cannot but marvell at them who have written that the old ones destroy the young, all but one, which they set upon their owne buttocks, that so the Dam may be secured from the fling and bitings of her fon. For seeing they can thus hang upon one another, without harm, favouring their own kinde, I see no cause but that nature hath granted much more love betwixt the old and the young ones, fo as neither the old do first destroy the young, nor afterward, that young one preferred, in revenge of his fellows quarrell, killett his Parentes.

It is reported by Aristole, that there is a hill in Caria, wherein the Scorpions do never fling any strangers that lodge there, but only the natural born people of that Countrie: And hereunto Pliny and Ælius seem to subscribe, when they write that Serpentes ab omnibus liberiores mordit, that is, Scorpions bite strangers but gently. And hereby it may be collected, that they are alike by nature very fagacious: and can discern betwixt nature and nature; yea the particular differences in one and the same nature. To conclude, Scorpions have no power to hurt where there is no blood.

The natural amity and enmity they observe with other creatures commeth now to be handled, and I finde that it wanteth not adversaries, nor it again hath no defect of poysyn or malice to make resistance and opposition, and to take vengeance on such as it meeteth withall. The principal of all other subjects of their hatred, are Virgins and Women, whom they do not only desire to harm, but also when they have harmed, are never perfectly recovered. And this is at all times of the day, but unto men they are most dangerous in the morning fasting, before they have vseth their poysyn, and this is to be observed, that their tayls are never unprovided of fings, and sufficient store of venom to hurt upon all occasions.

The Lyon is by the Scorpion put to flight wherefoever he feel thet, for he fereth it as the enemy of his life, and therefore writeth S. Ambrose, Venio Scorpion aculo exequatur Leo, the Lion is much moved at the small sting of a Scorpion. Scorpions do also destroy other Serpents, and are likewise destroyed by them. There was one Celerinus a Physitian in Pudues, who put together into one Viall, a Viper and a Scorpion, where they continually fought together, untill they had killed one another. The Swine ofrebias, which do safely eat all other kindes of Serpents and venomous beasts, without all harm, yet are destroyed by eating of Scorpions, and so great is the poysyn of the Siberit Scorpion, that the dungh thereof being trode upon breedeth ulceres.

And in this manner we see the virulence, and naturally evil of Scorpions against other living creatures, so now we are to consider the terrors of the Scorpion, for God in nature hath likewise ordained some bodies, whereby the Scorpion should be, and is driven away, feared and destroyed.

First of all these men, which are the chief, and head of all living Creatures, do by natural instinct, kill and destroy Scorpions, and therefore Gaian writeth thus. Let us (faith he) kill Scorpions, Spiders, and Vipers, not because they are evil in themselves, but because it is ingrafted in us by nature, to love that which is good unto us, but to hate and avert from that which is evil unto us, Non conferemus genitum ne ita fit an fem, not considering whether it were so bred or not. As we have shewed their generation out of putrefaction to be by heat, so also is their destruction by heat: for they are not able to abide the heat of the Sun, and therefore, although they cannot live in cold Northern Countries, but in the hotter, yet in the hotter they choose shadows, holes of the earth, coverture of houes, and such like vile and obscure places, to succour and secure themselves in.
Of the Scorpion.

It is also reported, that if Scorpions do at any time behold a Stellion, they stand amazed and wonderfully aloofish. The Viper also having killed a Scorpion, becometh more venemous, and the His of Egypt destroyeth Scorpions. There are a little kind of Emmets, called by the Arabians, Geratans, which are eaters of Scorpions. The quick-fighted Hawks also, from whose piercing eye no Serpent can be hid, when he seeth a Scorpion, he neither seeth nor fighteth with it. It is also thought the Hares are never molested by Scorpions, because if a man or beast be anointed with the rennet of a Hare, there is no Scorpion or Spider that will hurt him. Wilde Goats are also said to live without fear of Scorpions, even at the Africanni of whom we have often spoken.

Now this vertue against Scorpions is not only in living things, but also in the Plants of the earth, and therefore Seftin writeth, that the seed of Nofe-wort burned or scourced doth drive away Serpents, and refhit Scorpions and doth the root of the Mant-tree, and the seed of Violets, and the same vertue is ascribed to the herb Libris, which is Englished Calves-foot, and also to the seed of wilde Parsnip.

The smell of Garlick and wilde Mints set on fire, or stirred on the ground, and Dittany have the same operation: and above all other, one of these Scorpions burned, driveth away all his fellows which are within the smell thereof, and therefore this is a most ufuall thing in Aias and Africk, to perfume their houses with Scorpions burned, and in read thereof they make as it were little pills of Galbanum sandaraka, with butter, and the fat of Goats, and thereof altogether make their perfumes: also Betony, and wilde Pellitory with Bromeone. They use also to cover pans with certain things called by them Altiron and Aias, and with these they compasse the place wherein the Scorpion lodgeth, and then it is found that they can never any more from that place. And some in read thereof, powr Oyl into their holes after them for the same effect. And the Husband-men of Marfania doe vs and fallen to their bedhide, sprigs of white thorn, and Hellebore, wherevithail by a seeret antipathy in nature, they drive away and keep themselves safe in their beds from the annoyance of Scorpions.

By touching of Henbane they die dead and overcome, but if one touch them again with white Ellebore, they revive, and are releazed from their former stupesfaction. It is also said that the leaves of water-mallows do also affoamish Scorpions, and so affo doth the Radish-root. The Sea-crab with Basil in their mouth destroyeth the Scorpion, and do thoth Tunique and Myrhum of trees.

To conclude, the spittle of a man is death unto Scorpions: and therefore when a certain fellow took upon him to be a cunning Charmer, and by incantation to kill a Scorpion, he added to the words of his Charm a treble prizing in the mouth of the Serpent, and so it dyed: whereupon Wephus which was preserf, and saw this Charmer, did afterward by himself alone at home, make trall of spittle without a Charm, and so found that it alone killeth Scorpions, especially the spittle of a man falling, or very stringy. Moreover, there be certain Lands wherein no Scorpions will live, as that about Cyprus in Africk, and the duct of the Island Gaulus near Cecina, being sprinkled upon a Scorpion, doth incontinently kill it. And so much also writeth Hermolaus, of the Region Galata.

These and such like things are observed by our painful and industrious Ancelors about the nature of Scorpions, as well that which is hurful unto them, and they are afraid of, as those to which they are enemies in nature, and wound mortall when they light upon them. It is remembred by textor that Orion was slain by a Scorpion, whereupon the Poets have made many tales. They say, that when he was grown to be a man he was a great hunter, and a continuall companion of Diana, who glorifying much in his strong, boasted that he was able to overcome any Serpent or other wild beast, whereas the God beong angry, for revenge, and taking down the pride of this young man, causeth the earth to bring forth a Scorpion, who killed Orion. Whereat Diana was very sorry, and therefore in lamentation of her champion, and for the good deeds he had done unto her, tranflated him into heaven, close by the constellation of the Bull. Lævæ on the other side faith, that Diana sent this Scorpion to kill him, envying his famous face in hunting, and that afterward the Goddes taking pity on him, translated him into heaven. Others write again, that he had his eyes put out by Oemepion, and that he came blind into the Island Lemnos, where he received a horse of Panoptut, on which he rode to the Sun-rising, in which journey, he recovered again his eye-light, and so returning, he first determined to take revenge upon Oemepion for his former crueltie. Wherefore he came into Oret, and seeking Oemepion, could not finde him; but being he was hid in the earth by his Citizens, but at last coming to him, there came a Scorpion and killed him for his malice, refusing Oemepion. These and such like fables are there about the death of Orion, but all of themjoyntly agree in this, that Orion was slain by a Scorpion: And so faith Anthologus was one Panoptut a Hunter.

There is a common adage, Conic Scopium, a Raven to a Scorpion, and it is used against them that perish by their own inventions: when they set upon others, they meet with their matches, as a Raven did: when it preyed upon a Scorpion; thus described by Alcimus, under his title Jusa videt, just revenge, saying as followeth.

| Raptorem in sfigas compellit ulter aquas. |
| O risis dignas alio qui sita parabas. |
| Vide perit, propius jucundique dolet. |
| Which may be Englished thus; |
| Scowen in the Stygian Lake did die. | (did kill, O'forfull game! that he would other for bellies sake |
| By his own death should fall into deaths will. |

There
The History of Serpents.

There be some learned Writers, who have compared a Scorpion to an Epigram, or rather an Epigram to a Scorpion, because as the stings of the Scorpion lyeth in the tail, so the force and virtue of an Epigram is in the conclusion, for vere accitter et falsa mordat, vel juvente & dulcius deleat, that is, either let it bite sharply at the end, or else delight pleasingly. There be many ways of bringing Scorpions out of their holes, and so to destroy and take them, as we have already touched in part, unto which I may add these that follow: A perfume made of Oxe-dung, also Storax, and Arsenic: And Piny writeth, that ten Water-crabs beaten with Bifil is an excellent perfume for this purpose, and so is the ashes of Scorpions. And in Pindus they use this art, with small sticks or straw they touch and make a noyle upon the fones and morter wherein they have their nests, and then they thinking them to be some flies for their meat, instantly leap out, and so the man that deluded them is ready with a pair of tongs or other instrument to lay hold upon them and take them, by which means they take many, and of them they make, Oyl of Scorpions. And Con-

stantius writeth, that if a mans hand be well annoyed with juice of Radish, he may take them without danger in his bare hand.

In the next place we are to proceed to the venom and poyfon of Scorpions, the instrument or sting whereof, lyeth not only in the tail, but also in the feet, for as Ponzatius writeth, Lactis scor-

pionis venus et illu, the Scorpion harmeth both with teeth and tail, that is, although the greatest harm do come by the sting in the tail, yet is there also some that cometh by their biting. This poyfon of Scorpions, (as Piny out of Apollodorus writeth) is white, and in the heat of the day is very fer-

vent and plentiful, so as at that time they are inattractible and unquenchably thirsty, for not only the wide wood Scorpion, but also all other are of a hot nature, and the symptoms of their bitings are such as follow the effects of hot poysons: and therefore faith Rafis, all their remedies are of a cold quality. Yet Gelen thinketh otherwise, and that the poyson is cold, and the effects thereof are also cold. For which cause Bondeletus prefcribeth Oyl of Scorpions to expell the fone, and also the cure of the poyfon is by strong Garlick and the blet Wine, which are hot things. And therefore I conclude, that although Scorpions be most hot, yet is their poyson of a cold nature.

In the next place, I think it is needful to express the symtomes following the stinging or stinging of these venemous Scorpions, and they are (as Actium writeth) the very same which follow the biting or poyson of that kind of great Pbalina Spider, called also Taraxanum, and that is, they are in such fache as those perfons be which are smitten with the Falling sickness.

He which is stung by a Scorpion, thinketh that he is presse with the fall of great and cold hayl, being so cold, as if he were continually in a cold sweat, and so in short space the poyson disperseth itself within the skin, and runneth all over the body, never ceasing untill it come to perforfe some predominant or principally vital part, and then followeth death. For as the skin is small and thin, so the sting pierceth to the bottom thereof, and so into the flesh, where it woundeth and corrupteth either some vein, or arterie or sinew, and the more harmed tweltheth immediately into an exceeding great bulk and quantity and aking, with unsufferable torment. But yet (as we have already laid) there is a difference of the pain, according to the difference of the Scorpion that stings. If a man be stung in the lower part of his body, instantely followeth the extenfion of his vitile member, and the swelling thereof: but if in the upper part, then is the person affected with cold, and also the place smitten is as if it were burned, his countenance or face distorteth: I gleweth spots about the eyes, and the tears vifious and flimy, hardneffe of the articles, falling down of the fundament, and a continual desire to egeftion, foaming at the mouth, coughing, convulsions of the brain, and drawing the face backward, the hair standes upright, paleness goeth over all the body, and a continual prickling like the pricking of needles.

Also, Cardanus writeth, that if the prick fall upon an artery, there followeth swelling, but if on a nerve, there speedily followeth putrefaction and rottenneffe. And those Scorpions which have wings, make wounds with a compasse like a bow, whose succeeding symtomes are both heat and cold, and if they hurt about the canicular days, their wounds are very feldom recovered.

The Indian Scorpions caufe death three moneths after their wounds. But moft wonderfull is that which Strabo relateth of the Albenian Scorpions and Spiders, whereof he faith are two kindes, and one kinde killeth by laughing, the other by weeping. And if any Scorpion hurt a vein in the head, it caueth death by madneffe, as writeth Paracelus. When an Oxe or other beast is stricken with a Scorpion, his knees are drawn together, and he haliteth, refusing meat; out of his nose floweth a green humour, and when he is laid, he careth not for riling again.

These and such like are the symtomes that follow the bitings and stings of Scorpions, for the cure whereof I will remit the Reader to that excellent discourse written by Wolfpinus, wherein are largely and learnedly expresse, whatsoever Art could collect out of nature. And seeing we in our Country are free from Scorpions, and therefore shall have no need to fear their poyson, it shall not I truft offend my Reader, if I cut off the relation of Scorpions cures, as a thing which cannot benefit either the English Reader, or else much adorn this History, and fo I will proceed to the medicines drawn out of Scorpions.

The application or use of Scorpions in medicine, is either by powder or by Oyl, or by applying them bruised to their own wounds, wherefore every one of these are to be handled particularly: and first of all for the powder, it is made by uflon or burning in this manner. They take ten Scorpions and put them alive into a new earthen pot, whose mouth is to be dammed up with loam or such like fluffe, then must it be set upon a fire of Vine-tree-shreds, and therein must the pot stand
flend day and night until all within it be confumed to powder, and you shall know by their white colour when they be enough; otherwise, if they be brown or burned, they must be continued longer, and the use of this powder is to expel the stone.

Again, they use to make this powder another way, they take twenty Scorpions, and put them in a little earthen pot with a narrow mouth, which mouth must be stopped, and then the pot put into a Furnace by the space of six hours, which Furnace must also be kept close within, and with a gentle fire; then after six hours take off the pot, and bruise the Scorpions into powder, and keep that powder for the use aforesaid. There are other ways also to prepare this powder, but in all preparations the attendant and assistant must take heed of the flame or smock that cometh from it, for that is very venemous and contagious.

But besides, there are many things to be observed herein, as first, that the Scorpions be alive, and that they be killed in Oyl, then, that they be put in whole, with every member, without mutilation, and that the Scorpions appointed for this confection, be of the strongest poison, and the time of their collection to be when the Sun is in Leo, and not in Scorpion, as some without reason have imagined.

The Oyl so made, is distinguished into two kindes, one simple, and the other compound. The simple is made of a convenient number of Scorpions, (as it were twenty if they be great, and more if they be little) and they being put into a glasse vessel, Oyl of bitter-Almonds must be powdered upon them, and so the vessel stopped close and set in the Sun by the space of thirty days, and then shivered and used. Yet the women of Ferrara use Oyl-olive in stead of Oyl of bitter Almonds, and also observe no quantity of Oyl, but fill the pot full, and likewise no order in the number of the Scorpions, putting one day to another and to morrow, and so more the next week or month, as they can finde them.

The compound-Oyl is thus made, they take round Aistrologe, Cypreffe, and Gentian, the roots of Capsars, and upon these they pour Oyl of bitter Almonds, and soak the roots in the Oyl in the hot sun for the space of twenty days, then take they a complete number of Scorpions, from betwixt fifteen to sixteen, these they put again to the Oyl, and so itop up the mouth again, and set it the second time in the sun thirty days, and afterward strain it and use it. This compound-Oyl is not so much approved by Brasavolus, as the former simple, because the fire hath more Scorpions, and the second is huffed or leavened with spices.

The green Scorpion which is bred of Bafil, having seven knots in the tayl, being beaten and pounded with the herb Scorpion, and so made into pills, then dried and put into a glasse, are very profitable to him that hath the Falling-fickneffe, if he take of them three every morning falling in temperate Wine, but these being given to a found man put them clean out of his wits. If a man take a vulgar Scorpion and draw the same in a porringer of Oyl in the wave of the Moon, and therewithall afterward anoint the back from the shoulders to the hips, and also the head and forehead, with the tips of the fingers and toes of one that is a demonick or a lunaticke person, it is reported, that he shall eafe and cure him in short time. And the like is reported of the Scorpions being joyned with the top of Basil wherein is feed, and with the heart of a Swallow, all included in a piece of Harts skin.

The Oyl of Scorpions made of common Oyl-olive, is good for the pain in the ears infuffed by distillation; also it cureth a Pleurisie in this manner. They take meal out of a Windmill, and make thereof with water, pate, or little cakes, in quantity like a French Crown, these must be sod in a frying-pan in Oyl of Scorpions, and so applied as hot as can be to the place where the pricking is, and be kept to the same very hot, and when it beginneth to be cold, let new be applied till, nine times together, succesively one time after another. Scorpions bruised in new sweet Wine, do cure the Kings-evil. The ashes of a Scorpion infused by the yard into the bladder, breaketh and dispereth both the stone of the bladder and the reynes. And the like operation hath a vulgar Scorpion eaten with vinegar and Rose-cakes applied to the gowy members, it many times easeth the inflaming pains thereof.

The Oyl of Scorpions is very available in the time of Plague, both by Oyntment and also in potion: wherewithall one did affirm to Wohblius that he gained a great spinne of money, which he prepared in this manner. He took a hundred Scorpions, and sod them in the oldesl Oyl-olive he could get, until such time as the Scorpions were confumed, then did he strain them through a linen cloth, adding unto it an ounce of Rubarb, and so shutting it close in a glasse bottle, he let it forty days together in the sun, and afterward he gave of it to be used in time of infection, advising those that had it to apply it in oyntment to the pule, heart, hinder part of the head, neck and noetris. And if a man began to be sick, within twelve hours after the first scene of his pain, he was annoyed herewith about the tumour, and then was it launced. This oyntment is also commended against all manner of poiyon, not onely of other Serpents and venemous beasts, but also of the Scorpion it fell. And thus much for the history of the Scorpion.
of the S C Y T A L E.

This Serpent called by the Grecians Scytale, is likewise termed by the Latiinis, Scytalis, and by some Scytalis, Picalis, Scifetaliis, and Scyfetaliis, and by Albertus, Situla, which we have already interpreted a Diplas, but all of them are most manifestly corrupted from Scytale, the first Grecian word. And therefore I will not stand to confute them that call it also Caecilla, a blinde worm, because (after the manner of other Serpents) it eateth no Fennell, but this Cecilia or blinde Worm, we shall afterward demonstrate to be our English Slow-worm. This Scytalis is very full of marks or spots upon the back, so variable and delectable, that it possesseth the beholders with admiration, and almost bringeth them asleep looking thereon: for it is also slow, and moveth softly, wherefore it cannot pursue where it would do harm; in head therefore of celerity, these natural spots doe hold them that it doth desire to harm, like as they were ituped and atones. And in this brightnesse of the scales, first of all it mult lay aside the winter-skin, or else there appeareth not any splendour at all. And it is also said to be so hot and fervide, that it calleth skin in the Winter, according to this saying of Lycus?

Et Scytale parctis etiam nunc sola pruinis
Excuse posturis subus:
That is in English thus;
None but the Scytall while Winter-frofts abide,
Out of his spotted skin and Scares doth glide.

The outward form or visible proportion of this Serpent, is like that which we have already called a Double-head, and the Latines, Amphibione, except that the tayl hereof is flatter and thicker. The length of this Serpent is like the longest Worms of the earth, and the thicknesse like the helve or handle of a fpaide. And the greatest difference betwixt this and the Double-head, is that this goeth but one way, and the Double-head goeth as well one way as another: and the colour hereof is like the colour of the other. The generall description of this Serpent is thus expressed by Nicander;

Bifronti similem reperis Scytalam Amphibione
Fingueri eft temen, & cauda, que multa fere exit,
Crassa ut quantum fortit eft comprehenderi lignum,
Curae mensis Tiritium quaeties tenei fuf lignum.
Tum proficx, vagans pluox quam repiti cycle,
Quod facunda grum fucit digni vifera tellus,
Nec pofficxam juvenis venitenti tempore veris,
Magni Deum quando pretftri ferpentina mater.

Liquetis obfcuram confueta cubilia potram,
Et nitidos tepido fub sole cruturum artus,
Pandentes fo faniellati tenebris exedit cornam,
Sed per opaca moram ini declivis montis
Se tenei, & multo graviter later abrupta sone,
Eque altera fua conquirit fibi palabur terra
Ne fletet id magnum curpia, fitandique labor
Arsentef situm potis ejf depelleire fauce.

Which may be Englished thus;
The Scytall like the Double-head thou shalt in feature fain
Yet it is fatter, and tayl that hath no end much thicker is,
As big as crooked hand is wonted for to winde
The hiefs and below of digging fpade the earth that ruifts
As long as that thin crawling worm which heaven's rain
Begins on fruitfull earth, when beawes warmly moftened are,
And when the Mother-goddess great fends forth her creeping train,
Which is Lees-youth, frefh-time of Spring, both calm and faire.
Then leaveth it off his wonted bed in rock obscure,
And in what fub be stretcheth out his limbs and finewes all,
Eating the new sprung blades of Fenell-herbs, fo putting teeth in ure,
In holes of the declining hills so keepeth both great and small,
Where time in deepfe fleece of buried nature it doth paff,
And being hungry, the earth in top of hole it eat,
Quenching the thirst by force of dryes chapper or graffe,
Though without pain, desearele it seeks these drinks and meat.

The biting of this Serpent is like the biting of the Double-head, and therefore the cure is in the same manner, wherefore I shall not need to repeat the signs thereof, or the cure in this place. And so I will conclude the story of this Serpent.

Of
Of the Sea-Serpents.

Among the manifold kinds of Sea-serpents, as well known as unknown, (whereof some are like the Lamprey, some like the Myrus, and many other like the Serpents of the earth, except in their head, as Aristotle writeth, for that is more like the head of a Conger then a Serpent) it peculiarly hath one kinde, in colour and form not unlike an Eel, in length about three cubits, in the gills and finnes resembing a Conger, but it hath a longer front or beak, which is also forrowed inwardly with very many small sharp teeth, the eyes not so great, a smooth or pfeld skin and hanging over at the back, having no scales, so as it may easilie be fleyed. The belly of it is bewixt red and white, and all the body over is fet with spires, so as being alive it is not handled without danger. And this is by Pliny called the Dragon of the Sea, which cometh out of the Sea into the lands, and therein with an admirable celerity and dexterity maketh his lodging place. For the snout thereof is sharper then the Serpents of the earth, therefore therewith it diggeth and hideth itself in the hole or hollow place which it hath made. This is also called by Pliny Opbis taballatar, a Sea-serpent, the colour whereof is blacker or dimmer then the Conger.

There be also Vipers of the Sea, which are in fewe little fishes, about a cubit long, having a little horn in their forehead, the biting or sting whereof is very deadly, and therefore when the Fisher-men have taken any of these, they instantly cut off the head and bury it in the sand, but the body they eat for good meat: yet these Serpents are thought to be none other then the fish called Aranei, or Spider-fishes, savoring that they are said to have a sharp sting in their head, & this a horn, for all Water or Sea-serpents have harder and lefs heads then the Serpents of the land.

In the Germane Ocean there is found a Serpent about the bignesse of a man's leg, which in the tayl carryeth a fting as hard as any horn, this haunteth only the deepst part of the Sea, yet is it sometime taken by the Fisher-men, and then they cut off the tayl, and eat the residue of the body. Yet I will not professely whether this may be called a Sea-Serpent, or a Serpentine: it may be it is the fame that is a Fork-fish, or Ray, which by reason of the tayl thereof, it might give occasion to Alberthus to call it a Serpent of the Sea.

There be also Snakes or Hydres in the Sea, for although all Water-serpents, as well of the frefh, salt, and sweet waters may be called Hyders, or Snakes, yet there be some peculiar Snakes, such are the of the Indies Sea, where they have broad tayls, and they harm more by biting with the sharpnffe of their teeth, then by any venom that is contained in them; and therefore in this they somewhat resemble the Snakes of the earth. And Pliny writeth, that once before Perseus, upon the coasts of certain Islands, there were seen of these Sea-hyders very many, of the length of twenty cubits, wherewithall a whole Navy or fleet of ships were mightily affrighted. And the like is reported of three other Islands, lying betwixt the promontory of Carmania and Arabia; and such were those also in the African Sea, who are said by Pliny not to be afraid of a Gally, but will set upon the men therein, and over-turn it. And he himselfe saw many bones of great wilde Oxen, who had been destroyed by these kinde of Sea-snakes or Hyders.

The greatest River that falleth into the red Sea, is called Singibum, the fall whereof afar off seemeth to the beholders to be like winding Snakes, as though they were coming against the passengers, to lay them from entrance into that Land; and there is not only a sight or resembance of Serpents there, but also the very truth of it, for all the Sea-men know when they are upon these coasts, by the multitude of Serpents that meet them. And so do the Serpents called Grae about Persia. And the Coast of Baracia hath the fame noyforme premonition, by occurrence of many odious, black, and very great Sea-serpents. But about Baryaza they are leffe, and of yellow earthly colour; their eyes bloody, or fiery red, and their heads like Dragons. Keramides writeth of a Sea-Dragon, in this manner, saying: The Dragon of the Sea is a fith without scales, and when this is grown to a great and large proportion, whereby it doth great harm to other creatures, the winds or clouds take him up suddeynly into the air, and there by violent agitation, shake his body to pieces: the parcels whereof so mangled & torn alonder, have been often found in the tops of the Mountains. And if this be true (as it may well be) I cannot tell whether there be in the world a more noble part of Divine providence, and sign of the love of God to his creatures, who armeth the clouds of heaven to venture the perills of their destroyers. The tongue of this Sea-Dragon (as he is) is like a Horfes tayl, two foot in length, the which tongue preferred in Oyl, and carried about by a man, safeguardeth him from lungiuiling in firlnties, and the fat thereof, with the herb Dragon annointed on the head or fiek parts, eureth the head-ache, and driveth away the Leprotie, and all kinde of scabs in the skin.

Here is also the picture of another Sea-serpent, very like to the Serpent of the earth, being three or four cubits long, having a rounder belly then an Eel, but a head like a Conger, and the upper chap is longer, and standeth our further then the nether chap; the teeth grow therein as they do in Lampreys, but they are not so thick, and it hath two small finnes neer the gills like an Eel. The colour of it is yellow, but the back and belly is of Ash-colour, the eyes yellow, and in all the inward parts it doth not differ from a Lampreys, and there is no man of any understandeing, (as writeth Bontelettum) but at the very first sight, will judge the same to be a Serpent although the fith thereof.
Of the Seps or Sepedon.

be no more harmful than the Conger or Lamprey; yet for similitude with other Serpents, I could not chuse but express the same in this place.

There be also in the Swedish Ocean or Balbick sea, Serpents of thirty or forty foot in length, whose picture is thus described, as it was taken by Olav Magnus, and he further writeth, that these do never harm any man until they be provoked.

The same Author also expresseth likewise the figure of another Serpent, of a hundred and twenty foot long, appearing now and then upon the coasts of Norway, very dangerous and hurtful to the Sea-men in calms and still weather, for they lift up themselves above the hatches, and suddenly catch a man in their mouths, and to draw him into the sea out of the Ship; and many times they overthrow in the waters a laden Vessel of great quantity, with all the wares therein contained. And sometimes also they set up such a spire above the water, that a Boat or little Bark without sail may passe through the same. And thus much for the Sea-Serpents.

Of the SEPS or SEPEDON.

A lthough I am not ignorant that there be some which make two kinds of those Serpents, because of the two names rehearsed in the title, yet when they have laboured to describe them severally, they can bring nothing or very little wherein their story doth not agree, so as to make twain of them, or to handle them at random, were but to take occasion to tautologize, or to speak one thing twice. Wherefore Gericke wisely pondering both parts, and after him Carranus, deliver their opinions, that both these names doth but one Serpent, yet according to their manner, they express them as if they were two. For all their writings do but minister occasion to the Readers to collect the truth out of their labours, wherefore I will follow their opinion, and not their example. Sepedon and Seps cometh of Sepen, because it roteth the body that it biteth; in colour it nearly resembleth the Haemorrhe, yet it usually goeth by spires and half-hoops, for which cause as it goeth, the quantity cannot be well discerned, the pace of it being much swifter than the Haemorrhe. The wound that it giveth is smarting, entering deep and bringing putrefaction, for by an inexplicable celerity, the poison passeth over all the body, the hair roteth and falleth from all parts, darkness and dimness is in the eyes, and spots upon the body, like as if a man had been burned in the Sun. And this Serpent is thus described unto us by Nicander.
The History of Serpents.

Jam que Sepedon est species in, qualque corpus
Excitans, interims quis speandis & ipsi venenum,
Scio fato marcentes tabes depicitur artus,
Indirect fuscum refolubat pele capitum.
Sanguis, & voluitis venustus papus achante,
Pratece fadum turpis vitiligine corpus,
Et volatari arenit muscos a fe tenebroso.

Which may be Englished thus;
Sepedon shape now take, and what his form of body is,
I doth not go at Hemorrh ob, but traileth diversly.
His poulled head of Hemorrhps born full happily doth misse,
And colours are as manifold as works of Tapestry:
Great is his head, but running seems the tail but small,
Which windings, it in greater path draws after to and fro,
But where it wounds, by pains and torments great it dist appall,
Killing the wounded, infusing poyson in,
Whereby consumed are the lean and slender sinews,
And dryed skin lets hair fall off space,
Like as the windes drive white from top of tithe Cordus,
B jites the body fitth, as with Sun parched, losteth grace.

Thus doth Nicander describe the Sepedon: now also we will likewise relate that which another Poet faith of the Septs, that both compared together, may appear but one, therefore thus writeth Lucan, upon occasion of one Sabellus wounded by this Serpent.

Miserere in crure Sabelli

Vincula mororum, & laterum textura, carunculae
Pellis, & astrignum fibras vitalibus omane,
Sciucund hunc est, operis pestis: mater praefana
Morte parte: manum humeri, fertife, lacerti:
Cola equitis; flamunt, calidae non opus Aftro
Nix refoluta cadit, nec sol cera sequatur.

Parus haptor, corpus siemus filiisse periculum:
Hic & fiamma poyto, fed qua ruris abhisuit offa,
Hic quoque defendens, propef, fecta medullis,
Nella manere famus rapidis vestige fati,
Cyniphs inter pestes tubus palpae necundi est:
Eripiens omnes animam, tu sola cadaver.

Mole brevis sept, pese ingens, nec vifera solum,
Sed fimul efferat tabicibus Sept.

Which is to be Englished thus;

On wretched Sabellus leg a little Septs bang fast,
With which his band from hold of teeth beplucked away
From wounded place, and on a pite the Serpent all agast
He staked in bands, to him O woful wretched day,
To kill this Serpent is but small, yet none more power bath,
For after wound falls off the skin, and bones appear full bare,
As in an open boeme, the heart whole body gnaweth,
Then all his members swarm in filth: corruption did prepare
To make his shanks fall off, uncovered were knee-bone,
And every muscle of his thigh refolved, no more did bold,
His secrets black, to look upon, distilld all Conjunctions,
The rim of belly brake out fierce, which bowels did inflould,
Out fell his guts on earth, and all that corpus contain,
The raging venem full heating members all,
So doth it contradir all by little poyns main,
Unloosing, nerves, and making sides on ground to fall:
This plague the hollow breath and every vital part
Abstruited, where the fibres keep the life in ure,
Did ope, unto death: The life, the lungs, the heart,
O death profane, and enemy unto nature.
Out flow the shoulders great, and arm-blades strong,
Both neck and head gulfed in matter, all about run,
No snow doth melt so soon the Southern heat among,
Nor wax so fast dissolve by heat of shining Sun.
These things which now I speak, I do account but small,
That corps should run with filthy core, may coudful be by flame!?
Thus you hear that more largely expressed by Lucan of the Sephs, which was more briefly touched by Nicander of the Sepedon, and all come to one end, that both kill by putrefaction. The length of this Serpent is about two cubits, being thick toward the head, but thin and slender toward the tail. The head thereof is broad, and the mouth sharp, it is of many colours, so as some have thought that it could change colour like a Chameleon. The four under teeth are hollow, and in them lyeth the poylon, which are covered over with a little skin.

Pausanias affirmeth that he himself saw one of them, and that Egyptus the son of Elatus, a King of Arcadia was slain by one of these. They live in Rocks in hollow places of the Valleys, and under Stones, and they fear no Winter, according to this verie of Viriur.

Hec byhemis calidus frigora nulla timent.
Which may be Englished thus;

Of Winter's cold it bath no fear,
For warm it is throughout the year.

First of all after the wound appeareth some blood, but that symptom lasteth not long, for by and by followeth matter smelldg very strong, swelling tumor, and languishing pain, and all the parts of the body affected herewith become white, and when the hair falleth off, the patient seldom liveth above three or four days. The cure hereof is by the same means that the poylon of the Viper, the Ammodyte and Horned-ferpent is cured withal. And particularly Aetius prescribeth a sponge wet in warm Vinegar to be applied to the wound, or else to lay the ashes of chaffe with the earth upon which they are burned, to the place, and to anoint it with Butter and Honey, or else lay unto it Millet and Honey, likewise Bay Sprigs, Oxymel, Parflain, and in their dyet felt fish.

Arifile woreteth of a little Serpent, which by some are called a facred and holy Serpent, and he faith that all other Serpents do avoid it, and flee from it, because whatsoever is bitten by it, presently roteth. It is in length as he faith) a cubit, and it is rough all over, and therefore I take this Serpent to be a kind of Sepedon. Als° Ariflexenus faith, that he knew a man by touching this Serpent to die, and afterward that the garment which he wore at the time of the touching of the Serpent, did likewise rot away. And thus much for the Sephs and Sepedon.

**Of the SLOW-WORM.**

His Serpent was called in ancient time among the Grecians Typhlop and Typhlyes, and Copia, because of the dimnesse of the fight thereof, and the deafness of the ears and hearing, and vulgarly at this day it is called in Grecce, Tephlot, Teftis, and Tephlin, and from hence the Latines have taken their word, Cecilia, que coccus Serpens, a blinde Serpent, and it is also called Cerula, Cacula, and Coriella, as witnecsseth Alberius, because the eyes thereof are none at all, or very small. The Indians call it Bifa orbala; and the Florentines, Lucignola; the Germans, Byndersfleber; the Helveticus, En viens, al annoiles, and the people of Narbon, Naules.

It being most evident that it receiveth name from the blindnesse and deafnesse thereof, for I have often proved, that it neither heareth nor seeth here in England, or at the most it seeth no better then a Mole. The teeth are fastned in the mouth, like the teeth of a Chameleon, the skin is very thick, and therefore when the skin is broken by a hard blow, the whole body doth also break and part alunder. The colour is a pale blew, or sky-colour, with some blackish spots, intermixed at the sides. There is some question whether it hath one or two rims on the belly, for seeing they conceive their young ones in their womb, they have such a belly by nature, as may be diffendled and stretched out accordingly as the young ones grow in their womb. It hath a smooth skin without all scales. The neither eye-lid covereth all the eye it hath, which is very small: about the head they are more light coloured, then about the other parts of the body: The tongue is cloven, and the top thereof very black. They are in length about a span, and as thick as a mans finger, except toward the tail which
which is more flender, and the female is more black than the male. The passage or place of excres-
ments or conception is transverse. If they be killed with the young in their belly, the little ones will
instantly creep out at their dams mouth, and sometimes (as witnesseth Bellonius) in this little Ser-
pent are found forty little young ones. They are in Greece and England, and come not abroad till
July, and they go into the earth in April, and do abide abroad all harvet, and they love to hide
themselves in Corn-fields under the ripe corn when it is cut down. It is harmless except being pro-
voked, yet many times when an Ox or a Cow lyeth down in the pasture, if it chance to lie upon
one of these Slow-worms, it biteth the Beast, and if remedy be not had, there followeth mortality
or death, for the poyson thereof is very strong. If it sweat, it is good to prick the place with a
brazen bodkin, and then apply unto it Fullers-earth and Vinegar. There is a Triacle made of the
Slow-worm, which filmelleth like Aqua-vita; with this some men are cured of the Plague. And thus
much of this little Serpent.

Of the SNAKE.

Here is no reasonable learned man that maketh question, that Anguis in Latin is a general word
for all kind of Snakes and Serpents, and therefore when Virgil writeth of the fury Alecto, how she
cast a Snake into the bosome of Aranea, be first of all calleth it Anguis, a Snake, and presently
after Coluber & Vipera, a Serpent, as appeareth by these verses following. "Eneid. 7.

Haie dea caruile unum de crinibus angue
Conjicis, ing; suma precordia ad intima fabrit:
Vipeream insinans animam, fit tortile collo
Arsuin ingens Coluber.——

Which may be Englished thus;

To her the Goddess a Snake made of the Gorgons hairs,
Which to the bottom of her breast and entrails made to slide,
Insinuing to her a Vipers soul though she were fair,
For chain of gold an Adder but her neck did glide.

And this is the leffe to be admired or doubted, seeing the very word Anguis seemeth to be derived
of Angularis, winding or turning, for every kind of Serpent may be folded or winded up together
almoft in every fashion. Yet sometimes, as the Grecians use Opis for one kind, as Hernostis or Eter,
for Afp, so also is the word Anguis used for one kind, which we call a Snake, that is, a little Serpent
living both in the water and on the earth. Howbeit, as we shall fiew afterward, when it is in the wa-
ter it is called Epydra and Naeris, and when it is on the land, it is called Chrysus.

Among the ancient Pagans, Snakes were accounted the gods of the Woods, and this caused Fer-
fas to write these verse following;

Pungite duas angus, pueri, facer st locus.

That is, O ye children, draw the figure of two Snakes, for this place, (meaning the grove of Wood)
is a holy place, and facred to the Gods. And in like fort, the Snake in ancient time was fac-
cred to Asculapius, becaufe it was thought to be without venom, and to contain in it many excellent
medicines or remedies against other evils, and also a kind of divine power or help to drive away ca-
lamities, whereof I remember that I have read this story in Valerius Maximus.

Rome (faith he) our City was for three years together continually vexed with Peltilene, so as
neither the mercy of God could be obtained for the release of this evil, nor all wit, power, or in-
dustry of man put an end unto it. At laft by the care and travell of the Priests, it was found in the
writing and Books of Sibyl, that unless they could obtain of the Epidaurus the holy Snake of Ascu-
apius, there should be no end of that peltilene.

For which cause there were Ambassadors sent to the City of Epidaurus to entreat at the hands of
the Citizens and Priests, that holy Beall or Snake (as was prophaneily supposeth) and they attained
the end of their journey, for the Epidaurians did kindely entreat them, and sent the Snake of Ascu-
apius, and then (faith he) "Jam promptum Epidauriorum indulgentiam nomen Ipsius Dei sanctum,
verba mortalium cœleste oblivia comprevit: That is, The very grace and power of God seconed that
favourable indulgence of the Epidaurians, and with an heavenly obelquouinefhe allowed and per-
formed the words and writings of mortall creatures, (meaning the Sibyl writings aforesaid.) For
that Snake (which the Epidaurians never fee but they worship, with as great reverence as they would
Asculapius himself; for it never appeareth but for their exceeding good and commodity) be-
"gan to glide about the broadel streets and nobel part of the City, gently looking upon every body,
and licking the earth, and fo continued three days, to the religious admiration of all the beholders,
bearing an undoubt MSD fpect and alacrity, for the obtaining and affiring a more beautiful habi-
tation: so at laft it came to the Ille neer Rome, called Trevis, whereinto in the fight of all the Mar-
ners it did ascend and enter, and lodged it felf round in that place, where flaneth the houfe of Quin-
tus Opulonis: which story is thus molt excellently followed by Ovid in his Metamorphose.

The
The folk of Rome came hither all by beasts, both men and women,
And eke the Nuns that keep the fire of Vesta as their lives
To meet the God, and welcome him with joyful noise: and as
The gallery rowed up the stream, great store of incense was
On altars burnt on both the banks, so that on either side,
The flaming of the Frankincense, the very air did hide,
And also stain in Sacrifice full many cattled died.

Anon he come to Rome, the head of all the world: and there
The Serpent lifting up himself began his head to bear
Right up along the mast, upon the top whereof on bite,
He looked round about a meet abiding place to spie:
The Tyber doth divide it self in twain, and doth embrace
A little Sfe Triremis, for so the people term the place.
From either side whereof, the banks are distant equal space:
Apollo's Snake descending from the mast, conveyed him thither,
And taking off his brazenly shape, as one repairing hither,
To bring our City beautyfulness, did end our sorrow quite.

Thus faith Ovid: But the truth is, that the Poet did butaigne this thing for the excitement and stirring up of the minds of men to Religion and religious worship of the Heathen Gods; and therefore this Snake of Epidaurus was but a fiction, and therefore in the beginning of the History he makest it to be 
Aesculapius: a wise and skilful of a Snake, for in a vision he reweth how that Aesculapius appeared to the Roman Ambassador, and told him that he would appear in that form, saying;

Pare metus, veniam, simulacraq; nostra vestigium,
Hunc modo Serpentem, baculumque, nesibus ambit,
Preverse & uiji; nota, quidam ut cognoscere possit;
Virtue in hunc, sed major evo, tantumq; videtbor,
In quantum veste vestia corpora possint.

Which may be Englished thus;
Fear not, for I will come and leave my sire.
This Serpent which doth wreathe with knots about this staffe of mine,
Mark well, and take good heed thereof, for into it transformed will I be,
But big too I will be, for I will seem of such a size,
As wherein may celestial bodies turn suffice.

But all Poets are so addicted to faigning, that I myself may also seem while I imitate them, to set down fables for truth: and if ever there were such a Snake as this, it was Diabolical, and therefore in nature nothing to be concluded from it, and in that place of Rome called Biremis and Triremis, was Aesculapius worshipped. And at this day in the Gardens called S. Bartholomew's Gardens, there is a Marbleship, on the side whereof is the figure of a creeping Snake, for the memory of this fact, as writeth Gryalus.

But in the Emblems and documents of the ancient Heathen, it is certain that Aesculapius, and the Snake and the Dragon, did signifie health, and from hence it came to have the name of the Holy-snake, and also to be accounted full of medicine. The true occasion in nature, was for that about the Countries of Bonna and Rudes, they have a Snake which they call Biffe, and Biffe-anque sancta, and about Rudes, Antea, which they say is harmlesse. And as well children as men, do often take up the fame into their hands, with no more fear and dread then they would do a Coney, or any other tame and meek creature.

By the relation of Pallinus, it is in length five spans and five fingers, the head also compared with the body, is long, and in the neck thereof are two blanches, and betwixt them a hollow place, the back part whereof is attenuated into a thin and sharp tail, and upon either chap they have many teeth, which are sharp, and without poysion; for when they bite, they do no more harm then fetch blood only, and these men for ostentation, fake wear about their necks; and women are much terrified by them in the hands of wanton young boys. The back of this Snake, (as writeth Ersafium) is blackish, and the other parts green, like unto Leeks, yet mixed with some whiteneesse, for by reason it feedeth upon herb, it beareth that colour. They are also carried in mens bosomes, and with them they will make knots. For the fame Ersafium affirmeth, that he saw a Fryer knit one of them up together like a garter, but when he pulled it harder then the Snake could bear, it turned the head about and bit him by the hand, so as the blood followed, yet there came no more harm, for it was cured without any medicine, and therefore is not venemous.

In the Mountain of Mountains called Ziel, the Snakes are so familiar with men, that they wait up Leo Asiatic on them at dinner time like Cats and little Dogs, and they never offer any harm to any living thing, except they be first of all provoked. Among the Bigeromi inhabiting the Pyrenees, there be Snakes four foot long, and as thick as a mans arm, which likewise live continually in the houses, and not only come peaceably to their table, but also sleep in their beds without any harm, in the night-time.
time they hisse, but seldom in the day time, and pick up the crumbs which fall from their tables.

Among the Northern people they have household Snakes, as it were household Gods, and they suffer them both to eat and to play with their Infants, lodging them in the Cradles with them, as if they were faithful Keepers about them, and if they harm any body at any time, they account it Pium pisculum, a very divine and happy mishance. But after they had received the Christian faith, they put away all these superstitions, and did no more bother the Serpents brood, in detestation of the Devil, who beguiled our first Parents in the similitude of a Serpent. Yet if it happen at any time that a houfe be burned, all the Snakes hide themselves in their holes in the earth, and there in short space they so encreafe, that when the people come to re-ediﬁe, they can very hardly displant their number. Plautus in his Amphitryon, maketh mention of two named Snakes, which descended from the clouds in a shower; but this opinion grew from the fiction of the Epidaurean Snake, which only by the Poets is described with a mane and a comb, and therefore I will not express the Snakes to have a mane.

There is no cause why we should think all Snakes to be without potion; for the Poet hath not warned us in vain, where he faith;

Friedum, & pueri fugite hinc, latet Anguis sub herba:
Which may be Englished thus;
Fly hence you boys as far as feet can bear,
Under this herb a Snake shall coldly leer.

For this cause we will leave the discourse of the harmefle Snake, and come to those which are no way inferior to any other Serpent, their quantity and spirit being considered; wherefore we are to consider, that of Snakes which are venomous and hurtful, there are two kinds, one called the Water-snake, the other the Land-snake. The Water-snake is called in Greek, Hydra, Hydros, Hydrela, Karatus, and Enhydris, in Latin, Natric, and Lutra. Münfler calleth it in Hebrew, Zephad, and Aviem relateth certain barbarous names of it, as Händrius, Andria, and Abidet, and Kedafuderus, Echydra, and Aspisichum. The Germans call it Natr, Waßer-nat, and Waßer-schlang: and they de-)

For this cause we will leave the discourse of the harmfeful Snake, and come to those which are no way inferior to any other Serpent, their quantity and spirit being considered; wherefore we are to consider, that of Snakes which are venomous and hurtful, there are two kinds, one called the Water-snake, the other the Land-snake. The Water-snake is called in Greek, Hydra, Hydros, Hydrela, Karatus, and Enhydris, in Latin, Natric, and Lutra. Münfler calleth it in Hebrew, Zephad, and Aviem relateth certain barbarous names of it, as Händrius, Andria, and Abidet, and Kedafuderus, Echydra, and Aspisichum. The Germans call it Natr, Waßer-nat, and Waßer-schlang: and they describe it in the manner as it is found in their Country, which doth not very far differ from them of our Countrie here in England. It is (as they say) in thicknesse like the arm of a man or child, the belly thereof yellow, and of a golden colour, and the back blackish-green, and the very breath of it is so venomous, that if a man hold to it a rod newly cut off from the tree, it will so infect it, that upon it shall appear certain little bags of gall or poyson. And the like effect it worketh upon a bright naked sword, if it do but touch it with the tongue; for the poyson runneth from one end to the other, as if it were quick, and leaveth behind a line or scorched path, as if it had been burned in the fire.

And if this Serpent fortunate to bite a man in the foot, then is the poyson presently difpersed all over the body, for it hath a ﬁery quality, and therefore it continually ascendeth, but when once it cometh to the heart, the man falleth down & dyeth. And therefore the meetest cure is to hang the party so wounded up by the heels, or else speedily to cut off the member that is bitten. And that which is here said of the Water-snake, doth also as properly belong the Land-snake, seeing there is no difference betwixt thefe, but that at certain times of the year they forake the water when it draweth or falleth low, and so betake themselves to the land.

They live in the water and in the earth, (but they lay their egges on the land in hedges or in dung-hills) and especially in those waters which are most corrupt, as in pools where there is store of Frogs, Leaches, and Newts, and but few ﬁshes, as in the Lakes about Patoilio, and Naples, and in England all over the Fens, as Brome, Holand, Lyb, and other such like places, and when they swim they bear their breath above the water. They abound also in Coreya, and about Tartaria in India, and in the Lake Dylæs, and especially in Galabria, as the Poet writeth:

Effetiam ille malum Calabris in salibus Anguis, Squammosa convolvem sulata pediore terga,
Atque notis longam maculeum granumibus abolum,
Qui dunn ameturi uti tumidus fronsibus, et dunn
Veres mandu soto terra ac pluviulis australis.

Stagnus colit, ripisque habitans his picaulibus stræm
Impropus ingluviem, vanilique lucubus explet.
Pifquam exhausta palus terrella ardeo dehiscuit,
Exilis in fossam & flammatia lumina torquet
Savit agris, aequesque sitis, atque externiis aequo.

Which may be thus Englished:

That evil Snake in the Calabrian coasts abides,
Rowling his scaly back by holding up the breaf,
And with great spots upon large belly glides,
When its Rivers streams in Fountains all are cast.
For whiles the mild-temper'd Spring with rain from South wind falls,
It haunts the Pools, and in the water all black it feeds,
In ravening wife both Fish and Frogs do still his gall,
For why, when Summers drought enforce, then must it needs
Fly to dry land, rowling its flaming eye,
Rage in the fields to quench his thirst full dry.

There
There be some Writers that affirm, that there is a certain stone in a Water-Snakes head, which it saileth or vomiteth up when the skin thereof is flayed from the body, and after it is so cast up, it must be received into a piece of silk, the vertue whereof is to be proved after this manner; fill a brause Caldron or Kettle full of water, and about the same veasel lo filled, binde this stone fast, as it were to the handle or baul thereof, and you shall finde that every day this stone so remaineth bound to the Kettle, that the water will decrease eighteen ounces. And this Kirandier affirmeth that he bound to a woman that had the Dropifie, and she was thereby delivered from her disfe; for every day he found that her belly did fall the quantity of four fingers, until it came to the natural bignesse, and then he took it off, for he faith, that if he had not then taken it off, it would also have dryed up the native humidity.

In like fort, the vertue of this stone is appliied against the rheume in the legs, or any flux of the eyes, ears or head, but the use of it must not exceed the quantity of three hours at a time. It also drieth out of the body all venomous Worms, and is a special remedy against their biting and ringing. This stone is also called Serpentium and Droscontes, but it is questionable whether it be generated in the head of the Snake, or by their vaporous breath, concurring together in the Spring or Winter feason. Some of these stones are found to be of a blew with green colour, and the form thereof pyramidal: Albertus faith, he hath seen one of them that was black, and not lightsome, only about the edges of it there was some paleisse apparent, and in the superficies or upper part thereof, there was (as he writeth) a beautiful picture of a Snakes proportion, and the vertue thereof did put to flight venomous Beasts, and also cure their harmful poynons.

Such is this, things we have already shewed to be in the stone which the Toad is said to have, but this stone is more likely to be the Ophtes, for in the Caille of Tangere, once the seat or habitation of Charles the fourth, there is a Chappel wherein are many precious stones, wrought in the walls and doors, and among divers other these Ophtes. But whereas there is a pyramidal form attributed to these stones, I take it therefore that it is the fame which Pliny calleth Goggapetra, for in fowre it remembreth the tongue of a Snake, and the tongue of a Snake being great or broad at the root, and smaller toward the end or thereof, is rightly said to be of a pyramidal form: and among the Germans it is called by a peculiar word Natterzungen, that is, Snakes-tongue.

And such a kind of stone as this Snakes-tongue, (as Agricola and some other Authors write) is found in a certain earth near Linburgh in Saxony. And Conradus Gys fairmeth, that there is a certain Town in Germany called Antipon, where there is one of these stones half a cubit long, and therefore it feemeth that they are not all generated in Serpents or Snakes heads. Among the French-men this stone is called Suge, because there be Serpents seen in it twyning their tails together, or folding them one within another.

There was wont to be a superflitious way to extract or exprese this stone from out of the Snake, which was done in this manner; First, when they had taken the Snake alive, they did prefently hang her up by the tail, then jult underneath her they did make a suffumigation of Laurel, and so did conjure the Snake, saying; Per Dominum qui te creavit, lapidem tuum quem in capite tenes te infantar ejusre jubes: This kind of enchanting charm, I hold not worthy to be tranlated, and yet let me not be blamed for the relation of it, seeing it is pertinent to this story to know all the good and evil about these Serpents. And therefore, not to expresse the fame at all, might argue in me, either ignorance, or folly precisione: and again on the other side, to make it vulgar, might bring me into unfition of some approbation: therefore let the Reader know it from me, but understand it from some other.

And for mine own opinion, I account no better of these Snake-stones then I do of the Toad-stones, concerning which I have already given my opinion in another place. And therefore what here is related of this stone, let it be examined, and then be either received or refuted.

Many, and almost infinite are the Epithers which are given to Snakes, whereby their nature is expressed, as Aliger aquis, the winged Snake, black, fierce, bely, greedy, wide, cold, Gorgonean, wreathen, flinding, deadly, lightsome spotted, martial, threatening, purple, wholesome, curly, terrible, winding, grim, swelling, fearful, venomous, green, inflamed or implicit, horrible, hissing, Maritan, Murian, petilent, retorted, and such other like, as it hath pleased the several Authors writing hereof to ascribe and attribute unto them. Which will not profecute with any explication, but only leave them to the Readers pleasure, being only content to nominate them.

There is great account or reckoning made of their egges, which they lay in the Summer time, for first of all they are so glewed and conjouyned together, partly with the spettle and moistneffe which proceedeth from their mouths, and partly with the spume and froath of their own body, that a man feeing their heaps, would judge them to be coupled together by some artificial device. These egges thus knotted together in bunches, the Latines call Anguines. The Druides or ancient Wifers of England and Scotland, have delivered, that if the Snake hisse, these will of their own accord fly up into the air, and then if some wife man take them by prevention, before they touch the ground again, the Snakes will follow him as fast as any Horfe, until he come to some River, into the which they dare not enter.

And the folly of these also proceeded so far, that they were not ashamed to report, that if one of these Anguines or bunches of egges, were tied to a piece of gold, it would swim in a River against the stream. Thre they commended unto Princes and Great men to carry about with them in the time of wars and other contentions, and that therefore when a Roman Knight of Volunti, was
The History of Serpents.

was found by Claudius to carry one of these about him, he was by the Emperors commandment put to death.

But to leave vanities, we will proseute the true and natural description of their eggs in this manner: They are round and soft, in colour white, cleaving (as we have already said) together in great bunches forty, or fifty, or a hundred in a cluster, without, they are covered with a skin or crust, much harder and whiter then the substance contained within it, which is like matter, or the rotten Eggs of a Hen or Duck, in quantity as big as Bullies, Plums, and seldom bigger, being most commonly very round and orbicular. Yet Gesner reporteth, that he had one sent him of the proportion of a Lentil, and as great as the fill of a Man, and within every egg appear certain small things, like the tails of Serpents, or Leaches, being in number ten, five greater and five smaller, one folded or lapp'd within another. And these have also little pulpfules upon the skin or crusts, whereby one doth not touch the other.

Out of these Eggs come the young ones, but I cannot affirm what great affection the old ones bear unto them, or that when many Snakes lay their eggs together, every one in that multitude hath skill to discern her own Eggs from the other. For I have been with other my Colleagues or School-fellows when I was young, at the destruction of many thousands of them, and never perceived that the old Snake did with any extraordinary affection fight for their eggs, but rather forsook them, and suffered us to do with them what we pleased: which sometimes we brake, sometimes scattered abroad upon the dunghill out of which we digg'd them, and sometimes we cast them into the next River we came at, but never saw any of them recollected again to their former place by the Snakes, although the place were very full of them, and therefore I conclude for mine own experience, that Snakes cannot be perceived to bear any exceeding love in nature to their eggs or young ones.

Their ordinary food for the most part, is earth, Frogs, Worms, Toads, and especially Paddocks, or crook-backed Frogs, News, and small fishes. The Foxes and Snakes which are about the River Nilus are at continual variance, and besides, the Harts are by nature common enemies to all Serpents.

They are not in venom inferior to other Serpents, for they infect the waters neer to houses and are many times the causes of diseases and death, whereof the Phylians cannot discern. When they bite or sting, there followeth extreme pain, inflammation, greenness or blackness of the wound, dizziness in the head, and death within three days. Whereof dyed Phyllester, General of the Fleet of Greece, in Lemsus, Dadeius and Manilipmus.

The cure of this evil must be by Origan stamped and laid to the fore with Lie and Oyl, or ashes of the root of an Oak with Pitch, or Barley-meal mixed with Honey and Water, and sod at the fire. And in drink take wilder Nofworts, Daffald flowers, and Fennel-feed in Wine. And it is also said, that a man carrying about him the Liver of a Snake, shall never be bitten by any of that kind. And this Liver is also prescribed against the Stone in the Bladder, being drunk in strong drink. And thus much for this Serpent.

Of Spiders and their several sorts.

And first of those that are commonly called PHAOLANGIES.

Doctor Fournier discourse of Spiders.

This kind of venomous creature, of the Latins is called Araneus, or Aranea, and of Cicer in his Books De natura Deorum, Araneida, and Araneida. Of the Greeks, Aranea and Arachne. Hesiodus termeth it Stry; the Hebrews name it Acalipa, Acal, Acabith, and Semathan; the Arabian, Sibib, and Pubib; in the German tongue Spin, and Bander; in English, Aracop, Spider, and Spinner; of the Grækiders, Spine; in France, Aragne; in Italy, Ragme, and Ragane; in Spain, Arane or Taranoe; of the Tyrians it is called Sparwane; of the Polians, Pejak, and Passejce; of the Hungarians, Pej; of the Barbarians, Bute, and Kerseen. That in his twelfth Book faith, that the Spider is termed Araneus, because the is both bred and fed in the air; but herein he hath fallen into a double error. For if they lived only in the air, and by the air, as he would seem to enforce, I marvel to what end and purpose they should so fully make and pitch their nets for the ensnaring of flies? And if they receive their first being and breeding in the air, I cannot fee to what purpose they do either lay eggs, or exclude small little Worms after their coupling together.

But we will easilie pardon this presumptuous Etymologist, and diver deep into Interpretations, with others also of the fame humor, whose ordinary cultum thus to to daily and play with words, is with them esteemed as good as Statute-law, for the moft part. There are many forts of Spiders, and all of them have three joynts a piece in their legs.

Efei; caput minimum toto quos; corpus parvum est,
In latere exiles digitii pro crutibus lactent,
Lata verter habet, de quo tamen illa remittet
Stamina.
Of the Spider.

Which may be Englished thus;

Little is their head, likewise the body small,
All over is, and fingers thin upon the sides,
In head of legs, out of the belly flank do fall:
Let out of which she makes her web to slide.

All Spiders are venomous, but yet some more, and some leffes. Of Spiders that neither do nor can do much harm, some of them are tame, familiar, and domestical, and these be commonly the greatest among the whole pack of them. Others again be more wilde, living without the house abroad in the open air, which by reason of their ravenous gut, and greedy devouring, have purchased to themselves the names of Wolves, and hunting Spiders. The least fort of these weave no webs at all, but the greater beginneth to make a small and harth web about hedges nigh unto the earth, spreading and setting the same abroad in the very entry, and in void places near their lurking holes, their deceitful nets, observing very diligently the thriring of their deceitful webs, and perceiving them moving, though never so lightly, the makest no stay, but with all speed possible hatheneth her self to the place, and whatsoever she there findeth, the feizeth upon as her lawful prize.

The most dangerous and hurtful Spiders are called Phalangius, if they bite any one, (for they never strike) their poyson is by experience found to be so perillous, as that there will a notable great swelling immediately follow thereupon. These kinde of venomous Spiders, are of two lundry sorts, for some of them be leffer, and some greater. The leffer fort are very unlike one to another, and of changeable colours, violent, libidinous, hot, thriring, sharp-toped, holding on their pace and way, as it were in jumping manner or leaping-wife: and these I finde to be called by Aristotile in his 11. Book De Animal, Phalus, or Pulico, and Pitheoi or Simili. Of some they are called Oribater, because they are usually found among Trees that grow upon Mountains. They are also called Hypodromi, because they live under the leaves.

The Phalangium or Phalax Spider, is unknown in Italy (as Pliny faith) and there are found many sorts of them. One sort of them is very like unto a great Pismire, but much bigger, having also a red head, but all other parts are black, speckled, and garnished with many white spots running all along their bodies. This formicarian or Pismire-like Phalax, of Aristoi is described to have a body most resembling foot in colour, his neck sith-coloured, and his back glittering, as it were with many stars on it. Nicander calleth it Argojet, and Actius, Lucas. The Latines term it Venusat, that is, the Hunter. This thinteth but weakly, without any pain at all, but yet it is somewhat venomous, though not very much. This kinde of Phalax is often found among Spiders webs, where (after the fashion of some Hunters) they beguile and intrap Flies, Grats, and Bees, Gad-flies and Wasps. And (if Lonicerus write no more then may be warranted for truth,) thofe great Horse-flies or Ox-flies and Bremfles, that in Summer seafon vex Cattie, and whatsoever they lay their clawthes on, that they hold fast and destroy; and thus live they by taking of booties and preys.

There is no man (I think) so ill advised, that will confesse this to be the same creature which Aristotile calleth Pulax, for the body of that by his description is broad, rowling, round, and the parts about the neck have certain lines or cuts; and besides, about the mouth there appear and teem to bud forth three eminencies or standings out.

There is another sort of Phalanguem, called by Nicander, Bux, of Actius, Region, of Elianus, Bux (because it is so like to the kernel or stone that is found in Grapes,) and this kinde of Spider is of a round figure, black in colour, the body glittering, and round as a ball with very short plumbed feet, yet nevertheless of a very swift pace. They have teeth, and their mouth is nigh their belly, and when they stir, they gather up their feet very round. In the description of this Spider, Actius, Elianus and Pliny do wholly consent and agree in opinion, and yet Elianus was a little beffes the way, when he set down poda macruse, for micrure, long feet for short feet; and that this kinde of Spider was only found in Libya, and not elsewhere.

That kinde of Spider termed of Pliny, Aferion, feemeth to be all one with the former, saying that this is more known by his little white spots made star-wise, and the glittering irizes or rays where-with his body feemeth to be over-sprinkled. Pliny only mentioneth this, as if Aristotile, Actius, Celen and Avcien, had never heard of it.

The most venomous and hurtful of all these, is that which Nicander calleth Pedoros, of colour azure, or bright blew, which hath long, high, and lofty feet on both sides of the body. The Scholast addeth Dafu and Meteorus, that is, lanigerius and sublime, soft like cotton or Wool, and lofty or high, and not sublume lanigerius, as Lonicerus translacteth it. Pliny faith, that this Spider hath a black moflinefe or foot down, although it will rune sink into my head, that any Spider that is of an azure or blew colour, hath any foot hair, or woolly substance of a black colour.

There is another kinde of Phalangium Spider called of Nicander, Dyferi, which name is neither to be found in Aristotile, Pliny, nor Actius, nor yet in any other ancient Author that ever I could read, which some others call, and that very properly, Sphexion, quasi vepirmeus, because it is so like a red Wasp, saving that it lacketh wings, and this Wasp-like Spider is of a pailing deep red colour, and counted far worser then the blw Spider, although the azure or blew Spider only by
touching doth infect with poyson, and will break any Crystral glasse, if it run over it though never so speedily, or do but touch it in glancing wise, as Scaliger beareth witness.

There are two forts of Phalangie Spiders called Tetragaitha and the worser is that which hath half of his head divided with one white line, and another white line running croftwise. There is another of these not so hurtful as the former, and this is of an ash-colour, and very white in the hinder-parts. There is also a Spider coloured as this, that maketh her web by walls sides for the taking of Flies, which as some affirm, hath little or no venom in it at all. Actin faith, that the Tetragaitha is a kind of balangium, having a broad and whitish body, rough footed, with two swelling or luscious bunches hanging out in the head, the one somewhat broad, the other standing right forth. That at the first, one would imagine that it had two mouths, and four jaws.

Actin in his xvii. Book, chap. 40. faith, that there is great store of these to be found in India about the River Arbrata, where their multitude is so dangerous and mischiefous, as that they bring death and destruction to the Citizens and people bordering nigh those places. And Strabo the Geographer, in his xv. Book telleth us, that beyond the Lybiens and on the Western side of Africa, there is a Country left delitute of Inhabitants, having goodly large fields and pastures, being unhabitable by reason of the multitude of Scorpions there bred, and of the Spiders called Tetragaithoi.

There is to be found in Harveit-time amongst Pea, Beans, and other forts of pulse, (when they are gathered and reaped by the hand,) certain small Spiders called Kunhariides Eikela, in which like unto Cantharides or Spanish-flies, of a very red and fiery colour, such as we Englishmen call Twinges, by eating or licking up of which, both Oxen and other Beasts do many times die. There is another kind of Phalangit that breedeth altogether in the pulse, called Erunion, which is like unto Tares, and likewise in the Peach tree, which Acinander and Actin teemr Grunec laps, and Dioscorides nameth it Kaphalbroughi because it is so preumpituous bold as to strike at the hands of travellers by the High-ways, when as either it pafteth down in gliding manner by her fine thread, or that the tumblith down without any flay of thread or other support. It is a small creature to see to, keeping on the nose very fearfully, and when it staggereth, being great and heavy in the belly, somewhat long of body, and of a greenish colour. It carryth a fling in the top of her neck, and firking at any, the commonly aimeth at those parts which are about the head. And as Actin faith, En toro phalangis per sechus trepethis, kai ta echei homos aia ta etai kai xulon phaloi: That is, they are nourished in Peach-tree leaves, and they have wings like unto Butter-fies that are found amongst Birley.

Whereupon the Scholastia feemeth to insinuate to us, that this kind of Spider is winged, which no man (as I judge) hath hitherto observed. Pselezimus and ArgyImus do take the Cramnec laps to be a Tarantula, but herein they are both mistaken, as was Rabbi Meijer before them. The Spider called Scleophalangia, in form differeth but little from the former. It hath a head as hard as a stone, and the lineaments and proportion of the body do much resemble those small creatures which are seen about Lamps lights, or candles in the night time.

There cometh in the last place to be described, the Phalangie Spider of Aquilia, commonly known by the name of Tarantula, taking his denomination from the Country of Tarentum, where there are found great store and plenty of them. Ferdinandus Ponzetius imagineth, that it hath but only six feet, and ArgyImus is of the same judgement, and further faigneth, that it hath a stretched out tail. Kafis calleth a Tarantula, by the name of Spits, Albuscias, Allari, Rabbi Meijer, Agonyphs, Avi- con, Sebgi, Doctor Gilbert, Taranta, therein following ArgyImus, which maketh two forts of Tarantules, the one of a brown, the other of a yellow colour and clear shining, such as are to be found in Egypt. Pley (as you read a little before) said that the Phalangium was not known in Italy, but in these days they are found throughout all the Southern parts of that Country, especially nigh the Sea-shore, as both Harveit-men and Hunters can well tellifie by their own woull experience.

Ponzetius was much deceived, when in his third Book and xv. chapter entreating of the Scorpion, he expressly affirmeth the Phalangia to be such a venemous flye. It is a credible and cruel creature (as Alexander ab Alexandria faith) and to be touched, horrible, venemous and peliuent: and most epeeialy their biting is exceeding venemous in the parching heat of the Summer, but at other feasons of the yeare not so great. There be many forts of Spiders found in very cold Countries, but no Pha- langies at all; or if there be any, yet have they very little poyson in them, and nothing comparable to them of hotter Climates.

All the forts of Phalangies do lay their Eggs in a net or web, (which for the purpose they make very strong and thick:) and fit upon them in very great number, and when their brood is increased to some growth, they kill their dam by their hard embracements, and flinge her clean away; and further, calling off all fatherly affection, they very many times serve the male with the same sauce, if they can come hand to hand by him, for he is a helper to the female in fitting of them and their eggs. They hatch at one time three hundred, and been seen by the testimony of Bellenius, in his Book Singul, observat. chap 68. The Tarantules lie commonly lurking in holes, chinks, and chaps of the earth, and with their teeth they bite and wound at unawares, incircumscript Mowers, and harveit-folkes, and rash Huntsmen, who think of no such matter: and therefore they that are acquainted with their fleights, do wear Boots and Gloves on their hands and legs, for their further defence, so often as they go forth either to hawking, hunting, or to reaping and mowing, or any such like labour in the common fields.

All
Of the Spider.

All these Spiders are venomous even naturally, for that is so settled and deeply fastened in them, as it can by no means be eradicated or taken away. Neither suck they this venom and poisonous quality from plants or herbs, as many men think, which in very truth they never so much as taft of, neither do they purchase this venomous complexion and nature from any noxious, hurtful, and malignant quality that is in their meat, by reason their chief food and sustenance is Flies, Gnats, and Bees: and without question they can suck and draw no such cacochymical juice from their bodies. If the Formicarian (which I call the Pifmire-like) Philange do bite any man, there will presently follow most fearful accidents; for it bringeth an exceeding great tumor upon the wounded place, the knees are loose and feble, trembling of the heart; and decay of strength do succeed, and sometimes it induceth death it self.

Nicerander faith, that they are bitten of this kind of Spider, do fall into such a profound sleep, as that they will never be awakened, for they have and fuffer that which Hittorpe report of Cleopatra Queen of Egypt, who to escape the fingers of Augustus, because she would not be brought to Rome in triumph, caused two Serpents called Aips, to be set to her breaths, which did fling her to death, whose nature is to give a heaviness and sleep, without any shrinking or mark in the skin, only putting forth a gentle sweat out of the face, as if one were in a trance and hard to be awakened.

The Spider called _Agrolis_, maketh but a small wound with her biting, and in a manner without any pain at all, and no ways deadly, unlesse it be but slightly regarded, or that no care be had for the cure in the beginning. The _Philange_ that is called _Dulferus_, which is fashioned like a Wasp, if he hurt any one by his biting, it cauffeth the fame accidents that the azure or blew-coloured Spider doth, but yet not altogether so terrible and vehement. And besides, the Dufder spider with her poyfon, bringeth a wailing and pinning away of the whole body by degrees, without any great fene.

If a man be poyfoned with that kind of Spider which is found among pulfe, and is (as I said before) like unto Spanish Flies, there will presently arise certain pultules, rifings or swellings, much like unto blisters, as if one were scalded with hot water, in which swellings there will commonly be much yellowish matter; besides, the patient is much disquieted, vexed, and too much out of order; the eyes seem to be writhed, deformed, looking a squint on the one side, the tongue faltereth and flammeth, not being able to found their words, or to pronounce directly: their talk is idie, they wander and rove up and down in great perplexity; their heart being tormented, toffed and turmoilled with an extraordinary kind of furious passion.

The Spider that is found in the pulfe, called _Erasam_, which is very like to Tares or Vetches, produced by his venom the same evil effects that the former doth: and if Hornets or other beasts do by chance devour any of them, their bodies are so inflamed by means of their unquenchable thirft, the poyfon cauffeth, that many times they burst and sunder in the midst. If the _Cranocalitis_ wound any man (as _Flis_ affirreth us) it is not long before death it self do succeed. And yet Nicerander and Aetius hold the contrary, and would make us believe that his hurt is soon remedied, without any great ado: yet herein they do confent, that if any be hurt with any Spider of this kind, there will follow a great pain of the head, coldneffe, swimming and giddineffe of the brain, much disquietedness of the whole body, and prickings pains of the stomac; but notwithstanding all this (faith Nicerander) the patient is soon remedied, and all these above rehearsed passions quickly appeased and brought to an end.

The _Sclerechepalus_, as it much remembereth the _Cranocalitis_ Spider in form and proportion, so in his force, effect and violence they are much alike, caufing the fame symptomes, accidents and passions as the former. The wound that the Spider called _Rajin_ incfeteth, is very small, so that a man can hardly discern it with his eyes; but yet if one be hurt therewith, the lower part of the eyes, and the eye-lids wax very red. Besides, the patient feeth a shivering cold or chineffe in his loins, with weakneffe and feeblenesse in the knees, yea the whole body is taken with a great quaking cold, and the fweats by means of the violence and ranckneffe of the poyfon, fuffer a Convulsion. The parts serving to generation, are made fo impotent and weak, as that they are not able to retain the seed, nor yet to contain their urine, which they void forth much like in colour to a Spider's web, and they feel the like pain as they do which are flung with Scorpions.

Of the the wounding of the Star-spider feeblenesse and weakneffe followeth, so that one cannot stand upright, the knees buckle, sleep and flaeking droufineffe feizeth upon the hurt parts: and yet the word of all is the blewifh Spider, for this bringeth dinnere of the eye-fight, and vomiting, much like unto Spiders and cobwebes in colour, fainting and fouldring, weakneffe of the knees, heavy fleeps, and death it self.

If a man be wounded of the _Tetragmathian_ Spider, the place waxeth whithe, with an intolerable, very violent and contrary pain in it, and the member it self withereth and pineth away even to the very joints. Finally, the whole body by receiving any wholesome sustenance, is nothing at all relieved thereby, yea and after a man hath recovered his health, yet is he,nvertheleffe disquieted by much watching for a long time after, (as Aetius writeth,) Nicerander in expressse words confefeth, that the Ah-coloured _Tetragmath_, doth not by his biting infine any venom or like hurt.

If the speckled _Philange_ of _Apliea_, which is usuallly known by the name of _Tetaules_, do bite any one, there will follow divers and contrary accidents and symptomes, according to the various constitution, different complexion, and disposition of the party wounded. For after they are hurt.
by the Tarantula, you shall see some of them laugh, others contrariwise to weep, some will clatter out of measure, so that you shall never get them to hold their tongues, and otherfome again you shall obferve to be as mute as fishes: this man sleepeth continually, and another cannot be brought to any reft at all, but runneth up and down, raging and raving like a mad man.

They be fome that imagine themselves to be fome great Lords or Kings, and that their authority, Empire and signory, extended it felf far and wide; and for that caufe they will feem to charge others by vertue of their absolute and Kingly authority, and as they tender their favours, and will avoid their difpleafure, to fee this or that bufinesfe dispatched; and with others again the contrary conceit, so much prevaleth, as by a strong imagination they cannot be otherwise diffuaded but that they are taken prifoners, that they lie in fome deep dungeon or prifon, with bolts and fhales about their feet, fo many as their legs can bear, or that their neck and feet lie continually in the flocks. You fhall fee fome of them to be cheerful, quick of spirit, and lively, with dancing, swinging and faking themfelves. With others again you fhall have nothing but fadnefe, and heavynefe of minde, brown-flydes, unaptnefe to do any thing, as if one were allonyed, fo that nothing but numnefe, and dulnefe of moving and feeling, feemeath to pinch them, being to fee to very fenefeffe.

In conclusion, as drunkennefe to fundry perfons is not all one, but much different, according to the diverfity of complexions, and natural constitution of the brain: fo neither is the madnefe or frenzy fits of these perfons all one that be infected with a Tarantulae poiyon: but fome of them are fearful, silent, ever trembling and quaking; and others again are more fool-hardy, rath, pre-fumptuous clamorous, full of noife, doing nothing elfe but call and cry out; and fome few feem to be very grave, conftant and fefead, that will not alter their purpofes for a world of wealth. But let them be affected either with this or that paffion, yet this is common to them all, as well to one as to another, that they are generally delighted with musical Infruments; and at their found or noife will fo trip it on the toes dancer-like, applying both their minde and bodies to dancing and frisking up and down, that during the time of any musicalharmony, they will never leave moving their members and limbs, like a Jackanapes that cannot fland flill. And which is more iftrange, they will use thefe motions and gullures when they are ready to depart this life, through the lingering flay and vehement cruelty of the poiyons operation: and yet for all this, though they be fo neer unto death, yet if they hear any muffick, they come again to theirfelves, newly gathering their spirits and strength, and with a greater alacrity, promptnefe of minde and cheer, they foot it as frolickly as ever they had done aforehand.

And thus doing and dancing both day and night, without any notorious intermiffion, and by their continued sweating, the poiyon being difperfed into the pores of the skin, and evaporated by infe{lable tranpiration or breathing out, are at length by this means recovered to their former health and flate of body. And if the Pipers and Fidlers ceafe playing with their muffick, though never fo little a while, before the matter of the poiyon bein some part exhausted, then will they make a recivation and returning to their former paffions and griefs, with which they were at firft tormented and difquieted. But yet this is the moft iftrange, deferving the graetefl admiration of all, that all thofe perfons which are bitten or wounded by any Tarantula, they will dance so well, with fuch good grafit and meafe, and fing so sweetly, and withall defant it fo finely and tunably, as though they had fpent all their life time in fome dancing and finging-school.

Yet; notwithstanding, Cardan, contrary to all authority and experience, calleth in doubt and quellion this point, and at laft conclufeth that they cannot be reftored to health again by muffick. Wherein he doth marvelously repugn and contrary, both Falci, Paterus, Theodorus, Zwingrus, Andreas, Matthiolius, Bellumewifus, Fontenetus, Paracelius, and many other famous learned men. Truly, a bare contradiction againft fo great authorities, is far unworthy and unbecoming a man any thing (though never fo little) fere or exercized in Philosophy: much more fo great a Philofopher and Physitian as Cardan was. Yet fure I am of the opinion, that Cardan did not erre in Philofophy through ignorance, but having a defire to appear more learned, he did ever bend him- felf to impugn that, which he knew the founded and fett part of men did hold and maintain. But this little which I have here fpoken, fhall ferue sufficiently for the difcufling of Cardan's opinion.

And furely, if the harmonical sound and melody of warlike drums and trumpets, hath cured furious, mad, and enraged Horbies, and mitigated the pain of their legs and hips, as Meflepides hath written, I fee nothing to the contrary, but that it may help thofe perfons that are wounded of any Tarantula. The Pope with his Piff-horn generation, have meffured divers of the Saints together, and have alligned and appointed to each his fundry charge and feverall office apt, for the cure of fundry difeafe. As for example, S. Anthony can heal the burning; S. Roeb the Pellenfe, notwithstanding that S. Scobfian hath some fkill in it alfo. Saint Cofmus and Damian are good for all bile and fwellings and difeafe. S. Thob for the pocks. S. Apollin for the tooth-ach. S. Petronuha can drive away all manner of Agues. And S. Vitius or Vitalius (we may well call him S. Calf) that in times past excelled in the musical Art, doth direct all Dancers, or fuch as will leap or vault: So that if this Saint be invocated and pacified with muffical harmony and melodious and found Infruments, he will be an excellent Apothecary and Doctor for the cureati of any that are wounded with a Tarantula. Superfitious people fondly imputing that to the Patron and Proctor sometimes of Musick, which ought rather to be attributed to Musick it felf, and motion of the body.
Of the Spider.

Dioscorides concerning the common bitings of hurtful Spiders or Psalanges, writeth thus: The accidents (faith he) that do accompany the bitings of Spiders, are these that follow: The wounded place waxeth red, yet doth it not swell nor grow very hot, but it is somewhat moist. If the body become cold, there will follow trembling and shaking, the groin and hams do much froth out, and are exceeding distended; there is great provocation to make water, and striving to exonerate nature, they sweat with much difficulty, labour and pain. Besides, the hurt perssons are all of a cold sweat, and tears distill from their eyes that they grow dim-fighted therewith. Actius further addeth, that they can take no rest or sleep, sometimes they have erection of the yard, and the head itcheth, other whites the eyes and calfs of the legs grow hollow and lank, the belly is stretched by out means of windes, the whole body is puffed up, but in especial the face, they make a maffeling with their mouth, and flammer, so that they cannot distinctly be understood.

Sometimes they can hardly void urine, they have great pain in the lower parts; the urine that they make is waterish, and as it were full of Spiders webs, the part affected hath a great pricking and swelling, which Dioscorides (as you read a little before) will by no means yeeld to, and it is a little red. Thus far Actius from whom Paulus Aegineta, Aeluaris, Arigynus and some others differ but a little. In Zucyndus an ill in the Ionian Sea, on the West of Peloponnesus, if any there be hurt of a Phalangium, they are otherwise and more grievously tormented then in any other place, for there the body grows white and bennummed; besides, it is very weak, trembling and exceeding cold. They suffer also vomiting with a span or cramp, and inflamation of the virge, besides an intolerable pain in the ears and foals of their feet. The people there doe cure themselves by bathes, into which if any found man after that do enter to wash himself, or be drawn into the fame by any guile or deceitful means, he will forth-with fall into the same griefs and passions, that the other sick patient endured before he received remedy. And the like to this writeth Dioscorides, in his Chapter of Trifodium apothecies, in these words following: The decoction (faith he) of the whole plant being used by was of fomentation, bathing or foking the body, caueth all those pains which are cau’d by the biting or flinging of any venomous Serpent: and with the fame bathing or fomenting whatsoever ulcerous persons shall use or wash himself withall he will be affected and have the same accidents, as he that hath been bitten of a Serpent.

Galen in his Book De terroribus ad Pisanum, ascribeth this to miracle, accounting it a thing exceeding common reason and nature: but I stand in doubt that that Book was never Galens, but rather fathered upon him by some other man. And yet Elitamus writeth more miraculously, when he affirmeth that this hapneth to some healthy persons, and such as be in good plight and state of body, never so much as making any mention of ulcer or sore. Thus much of the symptomes, accidents, paines, or effects which tick and wait upon those that are hurt by Spiders. And now I come the cure.

The general cure, according to the opinion of Dioscorides, is, that first there must be scarification made upon the wounded place, and that often, and cupping glasses must be applied and fastened with very much flame to the part affected. Abfutus counsel is to make a fumigation with Egg-shell first steeped in water, and then being call on the coals with Harts-horn or Galbanum, to perfume the venomed part therewith. After that to use Scarifications, to let bloud, or to fuck the place; or to draw out the venom with Cupping-glases: or (which is the safest courfe of them all) to apply an actual Cautery, except the place affected be full of sinews. Lastly, to provoke sweat well, either in bed, covering the patient well with cloathes, or it is better by long and easie walking to procure sweating. In some to attain to the perfect cureation, you must work both with inward and outward means, such as here shall be prescribed and let before your eyes: whereof the most choice and approved I have left down for the benefit of the Reader; and first I will begin with Dioscorides.

Inward Medicines out of Dioscorides.

Take of the seeds of Southern-wood, Anife, Dill, the wilde Cicer, of the fruit of the Cedar tree, Plantain and Triply, of each a like quantity; beat them to powder by themselves, before you do mix them: The dose is two dramis to be taken in Wine. Likewise one dram of the seeds of Tamarisk drunk in Wine, is very effectual. Some use decoction of Chamomilla, and the green Nuts of the Cypress tree in Wine. There be some which praine the tree of Gray-fishes, to be taken with ashes, milk, and Smallege seed; and this medicine experience hath approved and confirmed, for the ceasing of all pains. Lye made of Fig-leaves is drunk with good successe against all bitings of Spiders.

It is good also to take the fruit of the Turpentine tree, Bay-berries, leaves of the balm, and the seeds of all forts of Carrots: or to drink the juice of Mistle-berries, of the Berries of Iry, or Mulberries, the juice of Colewort leaves, and of Clives or Goose-grease with Wine or Vinegar. A dram of the leaves of Been-triploly drunk in Wine, the decoction of a Spargus, juice of Sen-green, or any opening juices is good for the same. Some use with very good successe, the leaves of the herb called Balm with Nitre, and Mallows, boyled both leaf and root, and so taken often in a potion. The leaves of the herb called Phelangium, with his flowers and seeds. The seeds of Nigella also serve to the same end.
The History of Serpents.

Medicines out of Galen.

Take of Aristolechis, of Opium, of either alike much, four drams, of the roots of Pellitory of Spain three drams. Make thereof Trochifces, to the quantity of a Bean. The dose is two Trochifces, with three ounces of pure Wine. The ashes of a Rams hoof tempered with Honey, and drunk with Wine. Remedies of Diophantes against the bitings of Vblangiers. Take of Altrologe or Hartwort four drams, of Pellitory of Spain as much, Pepper two drams, Opium one dram, make thereof Trochifces to the quantity of a Bean, and take two of them in a good draught of pure Wine. Another more excellent: Take of the seeds of wild Rue, Rocket-feed, Styrrax, Sulphur vitum, of either alike much six drams, of Castorium two drams, commix them to make Trochifces, as before, with the blood of a Crevis. The Dose is one scruple and a half in Wine. Another: Take of Myrrhe, Castreum and Styrrax, of either one dram, Opium two drams, of Galbanum three drams, Smallage-feeds and Anife-feeds, of either alike two ounces and a half, Pepper thirty grains; make them up with Wine so much as is sufficient. Another: Take of Myrrhe five ounces, of Spikenard six drams, of the flower of Junius rotundus two drams and a half, Coffa four drams, Cinamon three drams, white Pepper one dram and a half, Frankincence one dram and half a scruple, Celium one dram, make them up with Attick Honey: The dose is the quantity of a Hafel nut, to be taken either in Male or water.

Remedies out of Apollodorus.

Take of Wilde Cummin two ounces and a half, the blood of a Sea Tortoise four drams, the rennet of a Fawn or Hare three drams, the blood of a Kid four drams; make them up with the best Wine, and reserve it to your use: The dose is the quantity of an Olive, in a draught of the best and purest Wine. Another: Take of the seeds of Trifolium Bituminosem, of round Altrologe, the seeds of wild Rue, the seeds of Erum dryed in the Sun, of each alike six drams; work them with Wine and make Trochifces thereof, every one of them weighing four drams: The dose is one Trochifice. Read more in Galen, in his second Book De Antid. where any man may find many for the same purpoze, which he had gathered and selected from divers Authors.

Out of Actius, and Paulus Aegineta.

Take of Sulphur Vivum, and of Galbanum, of either four drams, of bitter Almonds excorticated one dram, of the Gum called Benzoin four drams, temper them in Wine, and after their maceration, work them up with some Honey to be taken inwardly. Being thus prepared, it may likewise be applied outwardly. Another: Take of Amos two drams, roots of Flowre-de-luce one dram, or else of Saint Johns-wort, or Trifolium Bituminosem, drink them out of Wine. Or take of Anife-feeds, wild Carrets, Cummin, Nigella Romana, Pepper and Agarick, of either one dram, and drink them. Or take the leaves of the Cypress tree, or the Nuts beaten in Wine, and three quarters of a pinte of the best Oyl, and give it to drink. And to this end they do preferibe Bay-berries, Scorpion-grasse, Wilde Thyme, Calamint, Chamepitys, either to be taken by themselves alone, or with Rew and Pepper. Afterneade used thefe that follow: Take of the seeds of Angelica and Calamint, of either alike much, and powdered together, to be taken in six ounces of Wine oftentimes in a day. Another: Take of Benzoin, the seeds of the wild Carret, of dry Mints and Spikenard a little quantity, temper them up with Vinegar: The dose is one dram, with pure water and Vinegar mixed together about five or six ounces. Another more excellent: Take Garlick and eat it, and a bath made of the fame with Wine, and likewise all those medicines which do heal the bitings of Vipers, are notable in those cafes. Paulus Aegineta commendeth all thefe very highly, and doth he the seeds of Aegum Coffin, or the leaves of the white Popler.

Out of Nicander.

Take of the purest Turpentine that diftillet out of the Pine-tree, and eat or drink it: for this is a very effectual medicine, which, as Bellonius reporteth, he hath found to be true by experience.

Out of Avicenna.

The fruit of the Myrtle tree, D Loroncum, Mallick, Afla Fatid, Dedder, With-winde and his root, the Nut of India, and white Beulium drunk with Wine. Take of the roots of Aristolochy, roots of Flowre-de-luce, of Spike, Pellitory of Spain, the seeds of wild Carrot, black Hellebore, Cummin, the roots of the true Daffadil, of the fruit of the Carob-tree, the leaves of Dates, tops of Pomgranates, Cinamon, of the jayce of Rue, Cray-fifhes, Styrrax, Opium, and Carphalafa-mum, of either alike, one ounce, all these being powdered, make thereof Trochifces the weight of one dram or four Scruples, which is their dose: Take also in Wine the decoction of the
Of the Spider.

The seeds of Trifolium Bituminosum, Cypresse-nuts, and the seeds of Smallage. Besides let him drink the grains or fruit of the Pine-tree, Cumin of Anthobia, the leaves and rinde of the Palme-tree, the seeds of Silur Montanum, black and white Citers, the seeds of Nigella, Southern-wood and Dill, Althrolege or Hartwort, the fruit of the Tamarisk-tree: for all these are very effectual to cure the hurts that come by biting of any venomous Spider.

The juice also of wilde Lettice and Houle-leek is excellent. The decoction of Cypresse-nuts being boiled, especially with Cynamon, the broth of Cray-fishes, and of Goole-flesh, and likewise the decoction of the roots of Abjascum in wine and water. Another. Take of Althrolege and Cumin of each three drams to be drunk in warm water: an excellent and approved Antidote. Take of the seeds of Gir or Nigella ten drams, Cumin-feed, Duscaret-feed (or wilde Carret) of either five drams, Spikenard, Bay-berries, round Aristolochie, Carpholismum, Cynamon, roots of Gentian, seeds of the Mountain-Siler, and Smallage, of every one alike two drams, make a Confection with Honey. The dose is the quantity of a Nut with old Wine. A confecion of Afa. Take of Afa Satia, Myrrhe, and leaves of Rue, of every one alike quantity, temper them together with Honey. The common dose is one dram, or two at the most in Wine.

Certain other selected Medicines out of Abytirus, Albucasus, Lullus, Rhazes and Ponzettus.

Take of white Pepper thirty grains, drink it often in a draught of old Wine. Give also the herb Thyme in Wine. Abfrusus. Let him drink after it a spoonfull of Wine distilled with Balm. Lutus. Take of drye Rue, of Celus, Horsement, Pellitory of Spain, Cardamomum, of each alike, of Afa Satia a fourth part, Honey so much as is sufficient, commixe them. The dose is the quantity of a Hafel-nut in drink. Albusgar. The brain of a Hen drunk with a little Pepper out of Sweet Wine or Vinegar and water mixed together.

A notable Tarelee or Anitdote against the bitings of Phalangiers or venomous Spiders. Take of Tartariam six drams, of yellow Sulphur eight drams, Rue-feeds three drams, Catusveum and Rocket-feed, of either two drams, with the bloud of a Sea-tortoife, make an Opiate. The dose is two drams to be taken in Wine. Another. Take of Pellitory of Spain, and the root of the round Aristolochie of each one part, of white Pepper half a part, Horehound four parts, temper them up with Honey, the dose that is to be given is one dram. Another. Take of the roots of Capers, the roots of long Aristolochie or Hartwort, Bay-berries, roots of Gentian, of each a like quantity to be taken in Wine, or let him drink Diafla with sweet strong Wine, Cumin, and the seeds of Agamus Catus. Another. Take of the seeds of Nigella ten drams, of Duscaret and Cumin-feeds, of each alike five drams, seeds of wilde Rue, and Cypresse-nuts, of either three drams, Spikenard, Bay-berries, round Althrolege, Carpholismum, Cynamon, the root of Gentian, seeds of Trisfotium Bituminosum, and of Smallage-feed, of either two drams, make a Confection with Honey so much as is sufficient. Give the quantity of a Nut with old Wine. Rheses.

Out of Pliny, Celus, and Scaliger.

"It is good to give five Pimicre to them that are bitten of any Phalangium, or the seeds of Nigella Romanus one dram, or Mulberries with Hypocillus and Honey. There is a secret vertue and hidden quality in the root of Parsley, and of wilde Rue, peculiarly against those hurts that Spiders infect by their venom. The bloud of a Land-tortoife, the juice of Orangeum, the root of Bohem Album, Verwain, Cinquefoil, all the sorts of Sengreen, Cypresse-roots, the Ivy, of Ivy-roots being taken with some sweet Wine, or water and Vinegar mixed and boiled together, are very Speciell in this grief. Likewise two drams of Catusveum to provoke vomiting being relented in some mufle, Apollodorus one of the Diiciples of Democritus, faith, there is an herb called Crocides, which if any Phalangium or other poysonous Spider do but touch, prefently they fall down dead, and their poyson is so dulle and weakened as it can do no hurt. The leaves of the Bul-ruth or Mat-ruth which are next to the root being eaten, are found to give much help. Pliny. Take of Myrrhe, of Una Tami-ness, which is the berry of the herb called Ampeles Agria, being a kinde of Bryony, which windeth it self about trees and hedges like a vine, of some called our Ladies feal, of either alike, and drink them in three quarters of a pint of fowd Wine. Item, the roots of Radifh or of Daarrell taken in Wine is very effectual. Catus. But the excellentef Antidote of all other is that which Scaliger de
dicibeth, whom for his singular learning and deep conceit, I may teame Noflri arbi et feculi ornamen
tum : The form whereof in this place I will prefigure you. Take of the true and round Aristolochia, and of the bett Michriate, tof either one ounce, Terra Sigillata half an ounce, of thofe Flues which are found to live in the flower of the herb called Nepelus, in number eighteen, juice of Citrons to much as is sufficient, mix them all together. For againft this mischief of Spiders, or against any other threed turns, grievances, or bitings of any Serpents whatsoever Art, as yet never found out to effectuall a remedy, or to notable an Alexipharmacall. Thus far Scaliger. The juice of Apples being drunk, and Endive, are the proper Bezoez against the venom of a Phalanges Petrus de Alhans. Thus much of inward : Now will I proceed to generall outward medicaments and applications. Five Spiders putrefied in common Oyl, and applied outwardly to the affected place, are very good. Athes made of the dung of draught beafles tempered with Vinegar, and used as an oyntment; or in head of Vinegar, water and Vinegar boiled together, and applied as before, are proved to be fingo-
singular. Take of Vinegar three pints and a half, Succus vinaris two ounces, mix them, and form it, bath, or foake the wounded part with a Spunge dipped in the liquor, or if the pain be a little allayed with the ointment, then wash the place with a good quantity of Sea-water.

Some hold opinion that Achatias (which is a precious stone, wherein are represented divers forms, whereof some have the nine tails, some of Venus, &c. will heal all bitings of Phalanges, and for this cause being brought out of India is held at a very dear rate in this Country. Pliny. Aches made of fig-tree-leaves, adding to them some salt and wine. The roots of the wilden Panax being beaten to powder, Aristolochie, and Barley-meal kneaded together and wrought up with Vinegar. Water with Honey and salt applied outwardly for a Fomentation. The decoction of the hearth Balm, or the leaves of it being brought to the form of a Pulte, and applied: but we must not forget to use warm baths, and sometimes to the place agrieved. Pliny. Cut the veins that appear under the tongue, rubbing and chasing the swelled places with salt and good store of Vinegar: then cause the patient to sweat carefully and warmly for fear of cold. Végétus. Theophrastus, that practitioners do highly commend the root of Panax Chironis, Moyten the wound with Oyl, Garlic bruised, Knot-graffe or Barley-meal, and Bay-leaves with Wine, or with the dregs or Lees of wine, or wilde Rue applied in manner of a Cataplasm to the wounded place. Note. Take of Salbeius Vium, Galbanum, of each alike, four drams and a half of Eufur小微企业 a dram, Hafel-nuts excoriated two drams, disolve them, and with wine make towards the curation. Flies beaten to powder and applied upon the place affected. The fish called a Barbie cureth the bitings of any venemous Spider, if being raw it be flit asunder in the middlet, and so applied (as Galen faith) Anoint the whole body with a liquid Cerote, and foment the place affected with Oyl wherein Tefulion Btuturnifom hath been infused, or bathe it often with Sponges foked in warm Vinegar: then prepare and make ready Cataplasmes of these Ingredients following: that is, of Knot-graffe, Salvia Calis, called Salomonis feal, Leeks. Cheeffill or Bran decocted in Vinegar, Barley-meal and Bay-berrys, and the leaves boyled in Wine and Honey. Some do also make Cataplasmes of Rye or herbage, and Goats-dung tempered with Wine, Cypres, Marjoram and wilde Rue with Vinegar. An emplater of Acidulades. Take of the seeds of wilde Rye, and Rocket-seeds, Stavesakre, Rolemary seeds, Aquos Gajus, Apples and Nuts, or in Read of these two, of the leaves of the Cypres-tree, of each alike, beat and temper them all together with Vinegar and Honey. Aetius. Apply the decoction of Lupines upon the affected place, the echar being first removed, then anoint it in the warm Sun-shine, or against the fire with the fat of a Goole tempered with wilde Rue and Oyl, or else of the pap of Barley, and the broth of Lupines make a Cataplasm. Oribius. The Fulber-nut that growth in India, healeth the bitings of the Phalanges, Anicenna. Goats dung diffolved with other convenient Cataplasmes, and Oyl of Worm-wood, and the juice of Figs helpeth much Rhenetia. Apply oftentimes a cold piece of iron to the place. Petrus de Albano. Foment the place very often with the juice of the herb Plantane. Hevedgardia.

The artificiall Oyl of Balm is singular. Eunymus. A fomentation made of the leaves and thalls of Imperatoria called Misterwort, and continued a good space: or else Versan bruised and flampd, the juice being taken in wine, and further, the herb outwardly applied, is much commended of Turneifer. Beat and flample herb grace with Garlic and some Oyl, and apply it outwardly. Celus. There be but a few particular cures for the bitings of Spiders that Phyfiatans mention: yet some they doe, although the generall be most effectuall. Pliny against the biting of the Formicarius or Pilmiere-like Phalangie, that hath a red head, commendeth much another Phalangie of the same kinde, only to be shewed to the wounded patient to look upon, and to be kept for the same purpose, though the Spider be founde a little. Also a young Weafe dried, and the belly thereof stuffed with Coriander-seed, and fo kept till it be very old and flaked, and drunk in Wine, being first beaten to powder, is likewise good for the same intention.

There is a certain little beast called Ichneumon, of some it is called Mus Phareanous, Phares Moufe, and for the enmity unto Serpents, it is called Ophiomachus, (as Bellinius reporteth) being bruised and applied to the bitting of any Wasp-like Phalangie, doth utterly take away the venom of them. It often entreat and searcheth out the feats and holes of venemous Spiders and Phalangies, and if it finde any of them, the haleth and tuggeth them clean away as a Pilmiere doth a small grain of Corn: and if the Phalangie offer any refilience, the Ichneumon sparing no labour, pullleth her her contrary way: and by this struggling and thriving, sometimes it so fellath out that the Ichneumon is wearied, and then the breatheth a little, and gathering new strength and courage, lesett again upon the Phalangie with a freth assault, and woundeth her many times, so that at length the curieth her to her own lodging there to be devoured.

If the Tarantula have hurt any one, the best remedy is to firre and exercise the body continually without any intermission, whereas in all hurts that are caused by any other Spiders, rest and quietness are the best means (as Celus affirmeth.) But their Antidote is mutick and singling.

Chiliphas de benevolis counseleth to take forthwith Teares and water without any delay. He also advieth to take Butter tempered with Honey, and the root of Saffron in Wine. He proper Beazor (faith he) or the green berrys or seeds of the Lentisk-tree. Panzetus in his book De remedia, advieth to take ten grains of the Lentisk-tree in Milk, or an ounce and a half of the juice of Mullberry-leaves.

In the increafe of the grieue, he cureth them with Agarick, or the white Vine: and after much sweating, they are to be comforted and refted by strong and heathy walks with cold Medicines, as with the water.
Of the Spider.

water of Poppy, and the like (Merula saphth) they are to be remedied with the stone of Muscall Instruments, dancing, singing and colours: concerning the three former I will not contend, but how they should receive any part of help or health from viewing of any colours I do not well understand, considering that the eye-sight of all those that are bitten of a Tarantula, is quite taken away, or they see but obscurely, as being mightily deceived in their objects.

Andreas Mattiobius in his Commentaries, upon the sixth book of Dioscorides, Chap. 40. reporteth a very strange story of a certain Hermit, his old friend and acquaintance dwelling near unto Rome, who cured all those who were bitten or hurt of any venemous Worms or Serpents, which in this last place I will inter (although some may say that it is needlese, and belongeth not at all to this discourse in hand, or else will not believe it.) For when as any of the inhabitants in those parts were wounded of any poysonous Serpent, by a Meffenger forthwith signified the fame to the old Hermit; who by and by demanded of the Meffenger, whether he could be content to take or drink any Medicine in stead of the sick patient; which if the other assented to, promising to take it, the Hermit commanded him without any further delay, to pull off his right foot thence, and to set his foot on the earth, drawing a line round about the foot with his knife: then he willd him to take away his foot, and within the space of the line so marked, he write or engraved these words following Caro Carus, panem reduce, reputa panem, Emanuel paratis. Then immediately he pared away the earth with the same whittle, so that all the Characters were quite defaced, putting the same earth into a little earthen vessel full of water, letting it there to long remain, until the earth funk to the bottom. Lastly, he drained the water with a piece of the Meffengers thirt; or some other binnens that he wore next to his skin, and being liged with the sign of the Croffe, gave it to drink: But surely (fith Mattiobius) it was marvellous strange, and a wonderfull thing to consider, how that the wounded patient was perfectly healed, even at that very hour and moment of time, that the Meffenger took the aforesaid potion of the Hermit, as it is plainly known unto my self, and to all the people that dwell round about in that Territory or Shire. And thus much of this Hermetical curation by the way.

Now will I come into my path again. A man may finde a great fort both of these, and the like remedies both in Pliny, Dioscorides, and other, concerning the hurts of Spiders, but I think I have been a little too tedious, and you may imagine that I do nothing but Ta arachina hypothis, Araeae, tamet sesera refdinas in hreme tele. That is, ina frivolous matter and of small moment spend infinite and curious labour; so that I had more need to crave pardon for my long discourse about this subject, where-in though many things may want to the satisfaction of an afflicted and searching head, yet I am sure here is enough to warrant the discharge of my good will, and to repel, the cenure of the scrupulous;

"Nunc imus ad illam artificem, mens nostra cui est conformis, Arachnem, Quae medio tenera refidens in harena tene."  
"Qua ferae cursum atroc, repellit volantibus uris."  
"Tangit, utque juno vagos illi byssus ab aspho."  

In English thus;

"Unto Arachne skillfull Miftresse let us come.  
To whom conform'd from the minds of man.  
She fits in middest of web, her tender feet upon:  
Whiter she is tall with East-wind now and then,  
She trembleth at the nope of razing winds,  
At the huming Flee hard wagging finds."

Of the Tame or House SPIDER.

A Rigonde, that diligent searcher and seeker out of Nature and natural causes, termeth this kind of Spider a very gallant and excellent wise creature. King Salomon himself, at whose high wisdom all succeeding ages have and will admire, amongst those four small Creatures, which in wise do out-stript the greatest Philosophers, reckoneth the Spider for one, dwelling (as he faith) in Kings Courts, and there devising and weaving his imitable web. The Poets faign that the Spider called Arachne, was in times past a Mayden of Lydia, who being infracted of Minerva in the cunning skill of Embroidery and spinning, grew therein so excellent, and took such a pride in the same, (for you must remember she was a woman) that she stifly denied, razing it out in braving wife, that Minerva was never her Instructer, and so arrogant presumptuous she was, as that she feared not to challenge her Miftresse Goddesse to work with her, if she durst for her ears enter the lift, in all manner of Embroidery, Tapestry-works, and the like.

At which, Miftresse Minerva being netted, and taking the matter in dudgeon, thus to be provoked, and withall reprehending the mayd very sharply for her fawcinitie, in a pelting chase the brake to pieces the wchens imagery work, that was so curiously woven, and so full of variety, with her fhitte. The Mayd hereat being fore grieved, half in despair, not knowing what to doe, yeelding to passion, would needs hang her self. But Minerva taking compasion upon her, would not have her die forth with, but transformed her into a Spider, hanging by a fine small thred or line.

Arque ita vive quidem, tende ramus, improba, disit,  
Lusae adem pane, ne fis secura jam,  
Dilata duas generis, ferique nepolutus effo.
The History of Serpents.

In English thus;

So live indeed, yet hang thou womanlike,
She said, and let her self same law of punishment
Be unto thee and all thy offspring, while
All kindred lofty; full not futures thee content.

If any be desirous to know more of this fable, let him read the famous Poet Ovid, who hath excellently written thereon in the sixth book of his Metamorphosis, although somewhat differing from this of Piety. The Grecians besides do write, as Callinus Bolognus, in his 7. book Libellum Antiqu. Chap. 16. affirmeth, how that there was in the Country of Aetia a certain man called Phalanx, who had also a Sitter named Arachne, and when Phalanx had perfectly learned of Minerva the Military Science, and all other warlike exercises and offices that belong to a Souldier, and that the lad likewise instructed his Sitter Arachne in weaving, spinning, and needle-work; they concluded a match between themselves, but the Goddess being much displeased with such a shamefull and incestuous marriage, marring their fashion, disfigured them both into the number of creeping Creatures, laying this as a just punishment upon them, to be destroyed of their own young ones.

But it is at every man choice to interpret thefe to be either fables and Canterbury tales, or true historicall narrations: yet most are of this minde, that Arachne first invented spinning of linnen, weaving and working with the needle, which this mayd of Lydia first learned from the Spiders, taking her first Samplers and patterns from them for imitation; which no man ought to think to be strange, fith the craft of playfettering or working things in earth, and the Art of curing the eyes, was first taken from the Swallowes. The Eagles have taught us Architecture, and men firit received the light of Phlebotomie or letting of blood from the Hippopoetanum, which is a beast living in the River of Nilus, having feet like an Oxe, and his back and mane like a Horfe, with a winding tayl, and tusked like a Boar. The bird of Egyp called Ibis, first gave knowledge to Phytitians how to ufe the Glyster; yea, Dogs, Goats, Harts, Storks, Swallowes and Weasels, have taught men many medicines for many diseas.

To begin therefore to make an enumeration of their prays, I will declare unto you, the rich vertues and externall goods of the body, fortune and minde. And first to begin with the good gifts of their bodies. If you will weigh and confider the matter and substance of a Spiders body, you shall finde it to be light, partaking much of fire and ayr, (being two of the most noble and effectuall elements in operation) and having but little earthy diggettife and droffe refuse. If you behold their figure; they have either a Spherical and heavenly, or at leaft wise an Ovall form, which is next to the Spherical, as being the perfectt of all other. Besides, their substance is thin, fine, glittering, and subtile, yea, although they seem not, and then to be fatced up with plenty of meat, that they grow as big in bulk as a Walnut, and if the learned Cardan may be credited, they grow otherwhiles as great as a Sparrow: yet for all that, if you call your eye on them against the light, hanging in their web, the glittereth and shineth on all parts like unto the Chryfoleite, which is a kind of precious stone, shining with a golden colour quite thorow, causing a pleasant reflection to the eyes, and piercing them with singular delight.

The colour of a Spider is somewhat pale, such as Ovid affiribeth to Lovers, and when the hangeth aloft in her web, with her legs wide and large spread abroad, the perfectly and lively expresseth the shape and proportion of a painted Starre: as if nature had intended to give and settow on her, not only the resemblance and counterfeit similitude of heaven, but also the very lustre of the Starres themselves. The skin of a Spider is so soft, smooth, exquisite, pure, clean, and neat, that it farre surpasseth by many degrees, the polished skins of thofe maids that have the Greenfickenfe, or thofe young whores that are so careful in sparing no cofl to preferve their beauties: and it is of such cleerenfe and perspicuity, that it will easilie reprefent the vifage and physiognomy of any beholder of it, much like unto a fine glaffe. Further, it hath fingers, for all the world such as fair Virgins desire to have, that is to say, long, round, and slender, being also endowed with the most exquisite fene of touching that possibly can be imagined, infomuch that it farre furnmounteth any mortall man living, and all other creatures in the world besides, according to that old and common Verfe;

Nor oper auditum praecellit, Araçna tayl,  
Vultur odoratu, Lynx vijus, Simia gulf.

Which may be Englished thus;

To hear, the Boar, to touch, the Spider no exellt,  
The Lynx to see, the Vpe to taste, the Vulture for the smelle.

It hath also feet, but yet not such a multitude as Scorpiondraes have, nor yet none at all, as the meanetl rank and fort of Creatures, nor yet fix only, as the common fort of Insects: but it hath eight, a number which the meanetl Sophists in Cambridge dare not resolve, is next to the perfectt of all numbers, and these feet contriving of a few quartiall proportion, which of all Mathematicians is esteemed to be wonderfull and admirable, so that although the hinder be shorter than the fore-legs, yet notwithstanding they retain a mutuall harmony, equality, and feemblable concordance. Many Philofophers have not dared to affirm that they are blinde, but they themselves in this point are
molt blinde. For if they be deprived of their eyes and eye-sight, I would fain be resolved how they could make choice of such apt and convenient places for their hunting trade, and with what guide, Captain, or Direc\r
or, they do knit, fallen and eye one thread to another, in such admirable order, rank and range, as the excellent work-men in the world fand amazed at. Or else how they can come to the knowledge when their webs are broken by chance, or have the skill to amend them, being either thicken or burft in funder. Befides, we may all obferve by our own experience, that if one take a fly, and hold her at the fide of the web, the familiar, tame, or domelian Spider throttling her, will make all the halfe the can through thick and thin, yea though the be farre off, and will boldly affay and devour her, and will (as a man may fay) take her out of your hands into her own, which thing I have often done. Surely therefore thofe perfonis are half blinde, who neither can conceive nor fee, that Spiders can fee.

Now in that a Spider feemeth to fome to be an ugley and loathfome Creature, and even at the firft fight to be defteed, in regard it is misshapen, I will not impute this to any defect or de\r
fault that is in their form or proportion, but I rather acribe it to their exceeding great Melancholy (for this humour is molt predominant in them) and to their strange lufling or longings, by reafon of naughty humours gathered about the mouth of the flamack, yea, and to their lack of fty and moderation in their lufts and affections. For they are no leffe beholding to Nature for their elegance, handfome and proper feature, then the Butter-fly, or any other Cut-wafle whatsoever. To conclude this poynt, GOD hath given and beloowed upon this ftrange and admirable body, as strange and admirable a disposition, nature, and confluence of the skin. For a Spider changeth her skin, not ony only in a years pace, (as Vipers do) but once in the pace of a moneth the re\r
neweth it, (if the be well fed, and not hunger-harfeved) and putareth on a new hue and skin, and the fame in all poynts more freth, exquifite and neat, then the old skin which the call off.

Amongt the blessings of Fortune, or rather Fate, I egleem this to be the excellent left that is conferred upon them, in that they bear about with them an inexhausted matter or substance in their bellies, to make infinite webs, yea, fuch a manner as can never be confumed, waited or fpent, of which they have fuch foyfon, as they are able to draw out in length and breadth, and to spin and de\r
vide innumerable threads and fuffe to make and finifh their Cob-webs of, fo that if a hundred flies light in them they are of force fufficient fo to entangle and enfinare them all, as they hall never get out again. Furthermore, although they have neither food nor fuffence laid up in Barns or Store-houses, as Pinfires have, nor yet any meat fct or fowed for them as Bees have, but get their commons only by taking of booties casually, by hunting at all adventures, and by chanceable preys, yet do they lattice nature, and expell hunger, by means of that hazardous and fuddain (pooy, and sometimes you shall fee them growne very thick, far, and unwieldy, by reafon of their good difhes, and fat meffes of meat which they can purchase by their own good wary husbandry, or by any means can lay hold on, and catch into their clawes.

Befides, I muft tel you that Spiders have not the leaff benefit of Fortunes favour beftowed upon them, when as being inglutted with Courly Viands, they have been glad to exchange lodgings with an old Courtir called Podegra, or the Gowe, for it skileth not whether of these two names you will chufe. For you have heard before, the wife King Solomon's have given them the molt prife and chiefed places in Princes Courts, that the might be an abolute pattern and prefident of wit, widome, moderate frugality and vertue, and in divers poynts of regiment they might be our directors for imitation. Further, beginning their Cob webs, they have wholly bent and applied themfelves to their molt ingenious weaving trade, they have given themfelves to curious and fuperflitious hunting, to captious taking at advantage, watching and efpying their prey, nothing at all fearing any ambushes, treacheries, traps or treafons and no whit dreading any affaults, much leffe triumphs: and to speak briefly, the wifef creature of the wifeft King, beareth a great stroke, dominated, and hath (I may fay) the fole sovereignty in the molt noble, greatefl, and flatcelf Courts of Princes.

And yet for all thofe vertues, (fince Solomon's time) there have rifen up and followed fome Prin\r
ces and Governours, unadvised, desperatly naught, and unthrifty, and fuch as were not well in their wits, and of thofe it cannot eazily be fpooken how curifully they entertaind her, how they went out their proclamations and warrants, to expell the Spider, to call her down to the earth, tread under foot, undoe and kill, as a night-thief, with bedfoms, brooms, brushes and long poles, fo that by and by in a trice there flocked certain Furies of hell, (for fo I think I may juftily term them) rubbing,bruffhing, lipping, making clean fluts-cores, beating and sweeping together, and whatsoever they found curiously wrought, all that either they swept clean away, or tore all to pieces, fo that hardly they could escape the bufie beofmes of thofe quick-fighted and lewd naughty packs.

Surely, miserable was her condition and estate, which in all that abundance of wealth, the only being indigent and bare, deftelting idleness withall, might not yet be admitted tenant for fome short term of time, in fome small odder corner, in fuch large and spacious buildings, nor yet finde one hole to live at peace. Again, the great men, the rich mifers and penny-fathers, following the example of their Princes and Governours, they in like fort fent packing out of their doors, the School-miulrefle of all labour, diligence and vertue, and will not permit a web, the very pattern, index, and anathema of supernatural widome to remain untouched.

This
This same Spider which now we treat of, in times past, (it was when Dogs and Cats could speak, for now because there are so many languages in the world, they turn all to plain barking,) took a long journey into a strange Country, and by good hap fell into company with my Lady Podagre, although (being none of the belt footers) the could hardly keep way with the Spider, but lagged still behind, and having now spent one whole day in travelling, the night approaching that they should take up their Inne to lodge in, they resolved betwixt them two to betake themselves to sundry houses; so the Spider entering the Town, took up her lodging in the house of a certain wealthy Citizen. (I suppose it was near the sign of the three Tunnies in Tower-bill-street) where when according to her usual manner, hating lewd idlenesse, the began to buckle her self to her wonted task, in weaving her fine Tapestry, and other wrought work, being suddenly espied of a company of corner-creepers, Spider-catchers, fault-finders, and quarell-pickers, they presently begin to expostulate the matter with her, and not staying to hear any reason for her just defence, they made no more ado but gave her Jack-drummes entertainment, thrusting her out of doors by the head and shoulders, to seek her lodging where she could finde it; so that the lay abroad without doors a whole Winters-night in the rain and cold: and all this happened about Saint Nicholas time, when days are at the thorrer.

Now in the mean space Podagre having none of the belt feet, but indeed being somewhat lame, when she could travall no further, she by chance light into a poor Cottage or cabin of turf, builded with Elder-poles at the Towns end, and yet in this poor shed she could hardly be received, but yet at length, through her inefiant solicitation being admitted, the face down to reef her weary bones, so at length, supper being prepared, the tender-hearted Lady found courte spare, and commons farre shorter and more homely, then ever Lipped found in Westphalia: she induced all the miseries in the World, that pity it was to see. There was no infelicity, no diiftreffe, misfortune and adversity to be compared unto hers, for there was not but a little brown barley-bread set on the board to fip withall, which this nice piece so much miliick and abhorred, as that at the very fight thereof she was ready to digorge her queffe stomack, then was there brought some Cock-crown keal, having no good relifh, for they were not fesoned with salt, so that they were in taste very untouchable, and when they should drink, they fetch a little cold water out of a pit or pond, neer adjoyning to the house, in a wooden dish, whereof if Miiftreffe Podagre had fetched but one pound carouse, it would have made her run through an Alphabet of faces: but there was no remedy, hunger breaketh stone-walls, and hard need makes the old wife troth, the mule either quench her thirst with that or fall.

Having thus thinly fupped, she called for her Chamber, where they fwhelled her to clime up a Ladder, (you would have taken it to have been the fles Ladder) and behind a corner there was provided a beduffled with good Wheat-chaffe in head of Down, to harden her hide, and under her head a hard Oken-logge, with the Winnow-cloth, and the one end of an old Hop-bag, call over in head of a Coverlet, (for the poor man and his wife, thought that none but the Lord of the Town, and women in child-bed used Pillowes,) But Podagre not knowing how to mend the matter, groaned, and made a lamentable noyse, and fetching a thousand fighes she couched her self down. But alas what ill the poor heart took that night, and how ill her fofit and tender limbs agreed with such cold cheer and entertainment, I referre my self to your fecret thought. So soon therefore as the day began to break, she startet up, and the Spider and she met together again at the appoint- ed time and place: and firl of all the Spider began much to complain of the inefficiency of the rich Chaffe his boit the Citizen. Podagre contrary-wife found as much or more fault with the short and flarp commons, thin diet, miserable poverty, and indigency of his poor, bare and lean holtt, fwhelled her black and blew marks and printes into whole tender skin the boards and planks had made a deep impreffion. For which cause, being both much discontented, after the matter was throughly debated betwixt them two, they determined and resolved within themselves, that the night following they would change Holtes and Innes, that is, that the Spider should enter into some poor Cottages, or houses of poor men, and Podagre shou'd bend her course unto Noble and great mens houses, to Kings Courts, and Princely Palaces, to fee what good was to be done there. So Podagre not being unmindfull of her word, went with a fine and Smail-like pace to the house of a certain fat, rich, and well mooined man, and quietly laid herself down at the feet of this corfe Sire: which as soon as the gentle Holtt caft an eye upon, it is strange to tell with what mildenes, with what allurement and gentle intreaty, with what promptitude and alacritie she was welcomed; they prepared soft pallatts of Down for her to lye upon, the Bedfides and the Settles whereon she shou'd reft, were covered with Pillowes, soft Cuffions, and Carpets of Perfie, the Kitchen smokes, and all things are in a readinesse to give her a moft friendly welcomme. According to the words of the Poet, where he faith;

Jam dopious menfa onerauit et pocula pamum.
In English thus;
Spread are the tables, and laded with store
Of delicates, the Cups filled, could receive no more.

Briefly, he was in all points for person and provision such a one as Chaucer in his works describeth his Franklin to be:
Nay, hithe they brought fat and crammed Capons, Pheafants, Quails, Turtle-doves, Larks, and Nightingalls. I passe over Turbot or Byrt, Gilt-heads, Sturgeon, Salmons, Soals, and the like, for they were not unburnished of all these, and of other ftre of shell-fifh, as Lobifters, Creffithes, Oyfles, and whatsoever the Sea yeelded that might by love or money be purchased: for I will not speak of a great number of River-fifh and Fous that are to be had about Peterborow, Witlefley-mare, and thofe Fennifh Countreyes, for thither he fent his people to purvay for him all that was rare and furely, very much, and fome Juliana, Falernum, to Phyfick, fome of the Islands of Creta, Chio, Malara, and thofe that are called Baleares, lying neere unto the Coaft of Spain.

To speak nothing of their rear-fuppers, their fine Marchpanes, and curious Confedtions, made with fundry devifes, and exquifite skill of the Apothecary. And to conclude, there was no wanton fare unfought for, no delicate Juncate, no curious trimming and pickedneffe that might gratifie, no fair words, and pleafant enticements fit to draw and allure, nor no delection whatsoever omitted, that might feme to pleafe this great Lady Podagra, (for you muf withander thafe was none of the courfeft for Ladies, whereof there be many now adayes, for all men know the was a Gentlewoman born, both by the fathers and mothers fide, as being the daughter of Barchew and Venu,) and all this, I fay, was done to pleafe both her and her two fweet Sifters, Cziraga and Congra, who take them all three, and fo Twill let them go, and come to the Spider, who likeweife being di- rected by some favourite Planet, boldly and luckily trudged to the poor mans houfe.

--- Atque ibi mira
Dogmate, quidve maren decent, decaetque maritam
Addocet, atque tuo fefe pudore faginate.

Which may be Englifhed thus;
And there by strange inftrutions and documents,
She teacheth male and female how to live,
That is, both man and wife how to increafe their rents,
Whilif she, on her owne fweat and fat diath thrive.

But some man may here object and fay, I fee here no fuch bleftings of Lady Fortune, more then besides a bare commendation, and good hap in this theire xchange of lodging and lodgers. Yes surely, very much, not only because the fpendeth her days more freely and lately from danger, but also because as out of a high watch-tower, the no longer beholdeth in the houfes of poor perfons, lavish and needlefe prodigality, banquets, quaffings, rioting, plays, dancing, dicings, and whoring, and a thoufand vanities and villanies besides, whereof the knew her fel-confious, and a privy witneffe unto, whilft the lived in the Halls and Bowers of the rich and wealtier fort; who when they had thrust clean from houfe and home, and for ever banifhed the Spider, (the true School-mitreffe of indufly and frugality) Straightways the dazv Govt called Podagra, arrested them. Had it not been better for them (thine you) to have granted a dwelling place to a faving, prudent, and harrefle little creature, then to have given entertainment to fuch a bafe, blockifh companion and guelt as the Govt is? Let not therefore, rich, covetous men wonder, if many times they be tormented with this fore grief, fith they will neither admit true Phyfician nor phyfick, I mean, travail, diligence, indufly, moderation, and pains-taking, with the like.

Now to touch the rich and rare gifts and graces of the mind, and other noble qualities and dispositions of Spiders, I know not whether I should first begin with the commendation of their prudence, julice, fortitude, temperance, their Philantropia, Philoquias, Autarquias, their humanity and love towards men, their fludious indufly and love of labour, their contention as having fufficient, and coveting no more then is allotted unto them. Their wittineffe, policy, quickneffe and sharpneffe of fenfe, their cleanly neatneffe, with many other vertues, or else her admirable cunning and skilfulness in their weaving trade. Their prudence, fagacity, and wittineffe to conjecture things future, appeareth in this one thing, that when great abundance of rain, floods, swelling and overflows of Rivers, are like shortly to come to paffe, and thereby to threaten houfe, they then begin to build their Webs higher by a great deal, then their ufive cufome heretofore hath been. And this is another proof of the fame, in that they weare not at all in a clear Sun-thine-day,
day, or when it is fair and calm weather, when Flies are most busy in flying about to and fro, that they may be the better at leisure to give themselves to hunting and watching after them, to take advantage, and if any chance to light into their nets, forthwith to seize upon them for their repast.

Again, when houses are ready to drop down, they with their Cobwebs first of all fall, and get them into packing, alter their climate to some other surer place and dwelling to rest in. If any thing touch her body that is hard or painfully, she immediately draweth up her legs round on a heap, for this end as I think, to feel the leaffe pain, and the better to provide for the health and safety of her head, the director and governor of the whole body: for if any other part be hurt, she can easilie cure it. Who hath manifested and made known this unto them? Hath any Chaldes Star-gazer, or figure-finger, by the sight and position of the stares flewd it unto them? No certainly. But a divine prudence and foreseeming knowledge, originally inbred by Nature, to eschew that which is hurtfull, which is diffus'd into the Spider, and as that famous Poet Virgillus hath excellently described,

\[\text{Spiritus intus alit, totaque infusa per artus}\\text{Mens agitat molem,}\\In English thus;\\text{Mude bred within, infused in all limbs,}\\text{Minde moves the bodies lump, and skins.}\]

Furthermore, so soon as they espy their enemy to be caught in their nets, they do not first of all bite and prick him to death in any hasty manner, but they seem with their feet gently and joftly to brooke him, yet even to intreat and allure him with tickling, and as it were clipping and colling, until they have thoroughly infrared him within their clammy and viscous gins, and being at length wearied, turbulent, and tired with strugling and striving in vain, the fly Fly is made unable either to get away, flir, or reft. So having made sure with one, the hyath her to the center of her Web, observing and preying whether any new prey will come to hand again: so by this policy you shall see sometimes ten, yea otherwhiles twenty Flies hanging aloft by their thredes and fine-spun thredes.

They only feed on the juice of Flies, and the dry Carcasse without any moistur, they cast away as unprofitable fluffe to be used about any businesse. Moreover, because the Female Spider is sometimes greater then the Male, therefore she chufeth her flanding in the lower part of the Web, that the poor Flies may feem carelesse of her, yet is it the very obseruant, taking great heed to them: for they feening her hanging below, thinking themselves safe, do fly up into the upper part of the net, but by this means seeking to shun Charbydes, they fall into Stella, out of the smoke into the fire: for though in regard of her bodies magnitude, she be unwieldy, and very unfit to belitt her self in this hunting office: yet the crafty Male Spider playing Bo-peep, and pretending some other businesse, though minding another, playing the dissembling Hypocrite, hiden himself in the top of the Web, noting all occurrences, and being seen of no body, there he lurketh till some fifh (as we say) come to his net, and having espyed his prey, being more light, quick, and lively, it is a wonder to fee how diligent, vigilant, and earnestly bent he is to bend his course with all expedition toward this new offered booty; for there he will not suffer it very long to remain, but defending in a trice, \textit{Euro veloxis}, as quick as a Bee from the upper to the lower part (as ha have said) of the Cobweb, he maketh a very quick dispatch, and having royally feasted himself, he reverence and layeth up all his other enemies in one place, hanging them all by one of his own thredes till some convenient time to fealt himself again withall. Then again when as by reason of long continuance and length of time, the Webs have loft their binding viscomity, and tenacious substanсе, either the Spider unwaveveth them again, or else confirmeth and new strengtheneth them afresh as it were, with another new glutinosity, or fast-binding clainmines. This their work being finisht, they either contain themselves in the center of it, or keeping fentinell and warding in the upper part, they hold as it were in their hands a thread drawn from the middel or center, by which they have easie acceffe and receffe to and fro to their beguiling nets; and with all this thred ferveth to another profitable use, for if any prey be intang'd, by the light moving and flirring of it, they pretently feel and perceive it. But yet to make sure work, left the should winde down in vain, or take bootleffe labour about nothing, the draweth back the thred a little now and then, and by the motion and poize of it, the putteh all out of doubt, being fully affer-tained of the truth.

Then first, with all celerity possible the bies her to the Center, which thing the fly Flies being \\textit{fi}, and having some Senfe and feeling (as it should feem) that they are taken tardy, and for demeaninge some hurt, are as quiet as a Moufe in a trap, making no noyse at all, left either they might be wary or betray themselves, and so be further enfolden in danger. But alasfe in vain doth he avoid ware, that cannot enjoy peace, and bootleffe doth he thun pain, that hath no means to feel reft: for this avails but little, for they are not able with all these fetches to deceive their sharp inquisitors, for both with eyes and feet, they finely and quickly run unto them, making a clean riddance and quick dispatch of them every one.

But yet it is more to consider what great justice and equity is observ'd to be in Spiders: For there is not one of them so ill bent, so malapercely sawye, and impudently shamelesse, that can be seen to 

Jay
lay claim unto, or to take away another's wife or mate: there is none that intermedieth with another's substance, business, or weaving; every one liveth contented by the sweat of his own browes, by their own proper goods and industrious pains-taking procured by their own bodily labour: so that not one of them dare enter his Neighbours freehold, but it is accounted a hainous matter, and very unlawful, not one dare be so knock-hardy as to break into their friends and fellows fence and enclosure, but it is even defected as a wicked and cursed deed.

Non ipsa mortales, quos (prob dolor) urget habendi
Tactus amor, dominus domus, arvis additur arvam,
Mounticus monti, marius mare, sique potestint
Addiderint mundum mundo, suave omnia dixit.

In English thus;
Then would not mortals men so farre ingag'd in love to have
(As death it is to think,) house to house, and land to land by,
Hillock to hill, sea unto sea, to add they crave,
And if they could, world unto world, and all their own would say.

Again, they spread not their gins and nets to entrap and deceive good Creatures, and such as serve for mans use and benefit, but for Waps, Horse-flies, or Gad-bees, and Brimfees, or Oxe-flies, that in Summer-time vexe Cattle, for Drones Gnats, and other Flies, which to us are like to Theeves, Parafites, Bawds, Pander, and such Merchants that bring whores and knaves together, being Felurix inutile pondus, an unprofitable burthen of the earth, serving to no good use. And besides, being a vermin of singular and incomparable courage, the dare adventure to give the onset upon those Serpents that are called Lizardi, if they offer to contend and strive against her fury, the quickly encompass them round about, and very nimly and eagerly seizeth upon both their lips, biting and holding them together so fast, that the never giveth over till they be dead: and at length having vanquished her enemies, she like another Cacus carricth them into her Cave, or some secret corner.

Now if it happen in this hot bickering, that the nets be either broken, intertangled, or platted together, by and by without further delay the falls to mending what was amisse, to unwind, spread open, and to set them again in due order and frame very ingeniously. What say you to this? That the Spider heareth and mortali hatred to Serpents: for if so be the Serpent at any time lie in the shadow under any tree to cool himself, where Spiders do reforset, some one of them leaveth directly at him, depending down perpendicularly to the Serpents head, and with such a violence flirketh and datheth at his head with her beak or fiont, that her enemy withall making a whizzing noyse, and being driven into a giddinesse, turning round, hisseth, being neither able to break asunder the thread that cometh from above, nor yet hath force enough to escape it. Neither is this strafible or p'geant ended, until this our champion with her battering, hath sent her life to Pluto, the God of Hell for a present. Let men therefore be silent, and cease wondering at the amphitheatrical fights of the Roman, which were made with feasts and scaffoldes to behold Plays and fights, and where were presented to the Spectators the bloody fights of Elephants, Bears, and Lions, therefore a small Spider dare challenge to the field, and fight hand to hand with a black and blew Serpent, and not only to come down to him in daring wife, but also victoriously to triumph over him, entirely possessing all the fioy. Who would not marvel that in so small, or in a manner no body at all, which hath neither bones, nor finnewes, nor flesh, nor scarce any skin, there should be so great force, such incredible audacity and courage, such sharp and hard bittings, and inivincible fury? Surely we must conclude necessarily, that this cannot proceed altogether from their valiant Romacks, but rather from God himself: In like fort, they dare buckie with Toads of all sorts, both of the land and water, and in a singular combate overthrew and destroy' them, which thing not only Pindus and Albertus do recite and set down for a certain truth, but Erasorus also in his Dialogue entituled De Animis, maketh mention of, reporting how a certain Monk lying fast asleep, on whose mouth a foul Toad fate, and yet by the Spiders means was freed from all hurt. Yea, they dare enter the combat with winged and flinged Hornets, having not foit but fillie bodies, and almost as hard as horn, who although the many times breaketh through their Cobweb with main strength (as rich men undoe and make away through Lawes with Gold, and by that means many times scape foot-free) yet for all that, at length being over muddered, hand to hand in fingle combate, and intangled and infarled with the binding pallinefe, and tenacious gleeath substance of the Web, the payeth a dear price for her breaking into another house and possession, yielding at length to the Spiders mercy.

I will not omit their temperance, a vertue in former ages proper only to men, but now it should seem peccular to Spiders. For who almost is there found (if age and strength permit) that contenenth himself with the love of one as he ought, but rather applyeth his minde, body, and wandering affections to strange loves? But yet Spiders so soon as they grow to ripening age, do choose them mates, never parting till death it self make the separation. And as they cannot abide Corrivals, if any Wedlock-breakers, and Cuckold-makers dare be so fnappish to enter, or so infolently proud as to preffe into another house or Cottage, they reward him july
with condigne punishment for his temerarious enterprise, and flagitious fact: First by their cruel bittings, then with banishment or exile, and oftentimes with death it self. So that there is not any one of them, that dare offer villany or violence to another Mate, or seek by any means unlawfully to abuse her. There is such restraint, such strict orders, such faithfull dealing, uprightneffe of confidence, and Turtle love amongst them. Further, if you look into their house-keeping, you shall finde there is nothing more frugall then a Spider, more laborious, cleanly, and fine. For the cannot abide that even the least end or piece of her thred to be lost, or to be placed and let to no use or profit, and they exale and relieve themselves by substitutes, that supply their rooms and take pains for them: for whileth the Female weaveth, the Male applyeth himself to hunting, if either of them fall sick and be weak, then one of them doth the work of both, that their merits and defects may be alike. So sometimes the Female hunteeth whileth the Male is butte about Net-making, if the one stand in need of the others help and furtherance.

But yet commonly the Female-Spider being instructed of her Parents when she was young and docile, the art of spinning and weaving (which cloth was amongst us also in times past) beginneth the Cobweb, and her belly is sufficient to minister matter enough for such a piece of work, whether it be that the nature or substancc of the belly growth to corruption at fun-set and appointed time (as Democritus thought) or whether there be within them a certain languerous fertility naturally as in Silk-worms. Aristotle is of opinion, that the matter is outward as it were a certain Shell or pill, and that it is unwound, loosed, and drawn out by their fine weaving and spinning. But howsoever it be, certain it is, they will not by their good wills lose the least jot of a threads end, but very providently fee to all though never so little. The love they bear to their young breed is singular, both in the care they have for their fashioning and framing to good orders, and for their education otherwise, for the avoidance of idlenesse. For the Male and Female do by turns sit upon their Egges, and by this way interchangably taking courses, they do fibre up, quicken, move and encrease natural and lively heat in them, and although it hath been sundry times observed, that they have brought forth three hundred young ones at once, yet do they train them up all alike without exception, to labour, parfimony, and pains-taking, and inure them in good order, to fashion and frame all things for the weaving craft. I have often wondered at their cleanliness, when to keep all things from nastiness or finking, I have beheld with mine eyes those that were lean, ill-favoured, and sickly, to come glyding down from the upper to the lower part of their buildings, and there to exonerate nature at some hole in the Web, left either their shop, work-house, or frame might be detained or annoyed. And this is sufficient to have spoken of their political, civil, and domesticall vertues: Now will I proceed to discourse of their skill in weaving wherewith Pallas was so much offended: for the Scholar excelled her Miftres, and in fine, cunning and curious workmanship, did farre surpass her. First then let us consider the matter of the Web, whose substancc is tough, binding, and glutinous, plant, and will flick to ones fingers, like Bird-lime, and of such a matter it is compounded, as it neither lofeeth his clammienne and fault-holding quality, either by ficity or mothure.

The matter whereof it is made, is such as can never be consumed, wafted, or spent, whileth they live, and being so endleffe, we must needs here admire and honour the never ending and infinite power of the great God: for to seek out some natural reason, for it, or to ascribe it to natural causes, were in my minde meer madness and folly. The Autumnall Spiders, called Lapi or Halei, Wolves or Hunters, are thought to be the most artificial and ingenious: For these draw out a thread finer and thinner then any Silk, and of such a subtility, that their whole Web being folded together, will scarce be so heavy as one fine thred of Linnen being weighed together. Edwardus Monimus hath very finely and eloquently described both the Males and Females, Heptam. lib. 7. in these words following:

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Ille d. mens usum paeft, ut se
Maxonia gracies ordinatur tegmine tela.
Stamnuras venter, somnis lauter, ipsi
Pallcadam cumulatque column, calatasque ministrat.
Ipsum est fium pondus, quot fila trabiendo
Netnit et interquart parit sub tegmine dicta.
Ilia suam a medias ordinat Dea
dela telam,
Et gracie tenues intentat fiamine trebna.
Tela juge junctas, stamn cenitis arundo,

Inferitur medium radia subtignem acuio,
Aque oram a centro panum fhi flaminat illam,
Periv thela patet gemina de parte, seroci
Ne concuera cura franguntur fiamina, quoque
Musca volax tenus fretre suaminne cajias,
Reticuli priramin vic muscula contigit oram.
Mors abit in telo centum, ut dieirmine parvo
Vinciat ipsi suo peregrinam cace vulnerem.

Which may be Englishe thus:

The Spider-male by hunting gane the bowre change doth feed,
The female with Maxonian art begins to spin fine thread,
Out of Web-breeding belly, breast wooley, upscawle twine,
Wherein the diiffe he applies by art of Pallas fine:
To her belongs the prepaid weight, which does the teall out-draws,
Both matter, art, and substance, she doth shields by nature Law.
Like Dea daela out of her meddle, her web she doth begin,
And stretching out her tender workes, by pressing it fall thin.
The which is joined as in yoke, yet parted by a cane,
And planted is the middle roof in a sharp beamy frame.
And from the center draweth a thread like wool to the upper
While double work on every part doth fasten her skin:
Wherewith the blades of Eastern windes unbroken web resists,
And tender fly surprized, is fallen into those lifes.
While scarce upon the edge or brink this little Fly doth fall,
But by and by death seizes her within webs center thrift:
And so the stranger winged Flye with little or no ado,
She overcometh speedily when it the nets comes to.

Of these Cobwebs there is great diversity, variety and difference: for some of them are loose, weak, slack, and not well bound: other contrary-wise well compacted, and close couched together, some triangular, othersome quadrangular; and some are made with all sides equall, but yet not right angled or cornered like a quarry of Glaifle; others are made of such a form as will beth fit the place where they hunt, you shall perceive some of them to be orbicular, if they weave between two trees, and you shall finde this fashon also among weeds, and oftentimes in Windows hanging together with many lines and different croffe pieces: so that herein no man can deny but that they shew forth great reason, wisdom, admirable judgement, and much gallant beauty worth to be seen.

Surely Exclesior that famous Geometrician, who was Scholar to Socrates, and lived in the time of Iotomys the first, need not be ashamed to learn from Spiders the drawing of divers of his figures and Geometricall proportions. And Fifer-men also from them have been glad to learn the trade of Net-making. For from whom else could they borrow and fetch such lively representations, and such expressive patterns, than from such a skilfull and industrious School-master. But the strength of the web seemeth to be very strange, which although it seemeth to be the most weak of all other things, yet we see it is able to hold Hornets, and to endure the furious blasts of raging windes, and if one throw or cast daff upon it, the same will rather be diffended and stretched, then either undone, broken, or felled down.

And yet this is the strangest of all, which many a man would think impossible but that it cannot be called in question, in regard we may daily see and observe the proof thereof of both to passe, that a Spider shoulde begin to place the one end of her thred on the one side of a little River or Brook, and how the should fasten the other end on the other side of the water, considering that Nature never taught them the art either of flying or swimming. I would fain be resolv'd of this scruple, by what means they sayl and passe over. Or do you imagine that they jump over, or convey themselves over in a leap? Surely I dare not say so, I much doubt thereof, I will not hand to it.

The next that best deverveth to be marshalled in the second rank and place, for cunning work in weaving and spinne, be those kinde of Spiders who build and labour about the rafters of Houses, in Ceilars, Floors, and about boards, planks, and such like, and of these some are wilders, which do fashion and dresse a broad, thick, and plain web in the grasse and fields all about, stretching out the same like a sayl, or some fine spread Sheet or Curtain.

If you would duly look into their work and thoughtfully consider the strange trydles of their Looms, the Shittles they use, their Combes to make all clean, the hay of their Looms wherewith they dreader their Webs, their Croffe-lines, the frame, Wouf, their fine spinneing-fluffe, and so to their whole Cobwebs, you shall therein very plainly behold the finger of God working in his poor and weak Creatures. And quetionless in this excellent mystery they are able to put down, and farre surmount the Egyptian, the Lydians, Penelope, Tanagua (who was Wife to Tarquinius Prisco) Amestris that famous Queen of Persia, Claudiana, Sabina, and Julia, Noble Roman Ladies, and all the Queens of Macedonia, who were esteemed and renowned throughout the whole world, to be the most curious and exquisite in this kinde of work. And who in needle-work, Tapestry, and all Embroidery, were thought to be Peerlesse. For these Spiders (even contrary to all reason and Art, as we think) makes a firm, strong, and well compacted Web with no lines or threads drawn croffe-wise or overthwart, but only made out and continued still in length. When their work is perfected and brought to an end, they lay it over and cover it round about with a certain glutinous kinde of jelly, or flimed juice, by touching of which their prey being entangled, pay full dearly for their ignorant rachnefe, undispered heed-taking, and lack of fore-sight. Their Web is of the colour of the air, or rather none at all, which easily deceiveth the foolish unwary Flies, and such as be quick-fighted, circumpect, and can elpy things very quickly. For if it did represent any notorious and manifest colour, they would provide in time against such dangerous devilies, and take heed of such traps beforehand.

The bafe and wilder sort of Spiders, and such as be least reputed of, are those that live in holes, Caves, and corners of Houses, and these in respect of the former are flow, flothfull, and lazy, fat, croffe, and big-bellyed corner-creepers, and these spin a very homely, rough, and course thred, which they spread abroad, and set before the hollow places and chinks of Walls. These kinde of Spiders have a more heavy and ponderous body, shorter feet, and more unhandsome
to work or finish any Webbes in their Looms, and as for separating, dividing, picking, carding, or futing their fluffe, they are very Bunglers to the first mentioned.

They apprehend and take their preyes rather casually, then take any great pains to seek farre for it, because their hole being great outwardly, seemeth to be a good and convenient lurking-corner, and a safe corner for Flies to hide themselves in; being entangled and arrested in the very entry, they are snatch'ed up suddenly by the watchfull Spider, and carried away into the more inward places of their dens, there to be flaugthered. For they watch and ward aboute in high walls and buildings, as well to deceive such Birds as lye in wait to intrap and take them at unawares, as Sparrowes, Robin-red-breasts, Wrens, Nightingales, and Hedge-Sparrowes, which are all sworn enemies to Spiders: and besides, the more easilie to beguile the silly flies suspecting nothing at all.

There be certain other forts of Spiders, which as yet I have not describ'd: as for example; there is one (the greatest of all that ever I saw) which spredeth her artificiall nets in the Harvest-time amongst the leaves and branches of Roses, and entangleth either any other little Spider that is running away, or else Gnat-flies, and such like, being caught at unawares, and hanged by a kinde of thred, whom the first pursueth and layeth hold on with a wonderfull dexterity and quicknesse: and being fast hanged, and so made sure, the there leaveth them, for the satisfying of her hungry appetite till another time. The body of this Spider is in colour somewhat whitish, refembling scumme or frothy sorne, and almoft of an Oval-figure, the head very little, placed under her belly, being withall crooked or bending like hooks, as is to be seen in the Crab-fish, and her back garnish'd with many white spots.

This is one kinde of Autunnall Lapi, or Wolf-Spider, which in a very short space of time do grow from the bigneffe of a little Peale, to a very great bulk and thickneffe. There are also found in all places of this Country, long-legged Spiders, who make a very homely and disorderly Web. This kinde of Spider liveth altogether in the fields, her body is almoft of a round figure, and somewhat brownish in colour, living in the graffe, and delighting in the company of Sheep: and for this caufe I take it, that we English men do call her a Shepheard, either for that she keepeth and loveth to be among their flockes, or because that Shepheardes have thought those grounds and feedings to be very wholesome wherein they are most found, and that no venemous or hurtfull creature abideth in those fields where they be: And herein their judgement is to be liked, for they are indeed altogether unhurtfull, whether inwardly taken, or otherwise outwardly applied: and therefore because I am tyed within a Teacher, and thereby restrained from all affectionate discourting or dilating unlesse of poysonous and hurtfull Creatures, I will come into my path again, and tell you of another certain black Spider, that hath very short feet, carrying about with her an Egge as white as Snow under her belly, and running very swiftly: the Egge being broken, many Spiders creep forth, which go forth with their dam to seek their living al together, and climbing upon her back when night approacheth, there they rell, and so they lodge.

In rotten and hallow trees there are also to be found exceeding black Spiders, having great bodies, short feet, and keeping together with Cheeselips or those creeping vermine with many feet, called of some Somet. We have seen also (faith the learned Gejner) Spiders that were white all over, of a round compact and well knit body, somewhat broad, living in the flowers of Mountain Parsley, amongst Glos, and in the green graffe: their Egges were little, slender, and very long, their mouth speckled, and both their sides were marked with a red line running all along. He took them to be very venemus, because he saw a Marmot or Muskey to eat of them, and by eating thereof easily to escape with life, yet at length it did well again, and was freed from further danger, only by cowring down a great deal of Oyl into his throat. I myselfe have also seene some Spiders with very long bodies and sharp tayls, of a blackish or dark red colour, and I have noted other-fore again to bell all over the body green-coloured. I will not deny but that there are many other forts of Spiders, and of many more different colours, but I never read, or yet ever saw them: Neque enim nostra fert omnia tellus, The ages ensuifg peradventure will finde more.

I will only put you in remembrance of this one thing worthy to be observed, that all weavings and Net-making Spiders, according as they grow in years, so do they acquire more knowledge, and attain to greater cunning and experience in their spinning trade: but carrying a resolute and ready will to keep both time and measure with that Mufick which bell contents most ears, I will now passe to speak of the propagation and use of Spiders, and fo I will close up this discourse.

The propagation of Spiders for the most part is by coupling together, the desire and action whereof continueth almoft the whole Spring-time, for at that time by a muntall and often drawing, and cavie pulling of their Web, they do as it were wooe one another, then approach they neere together, and lastly are joyned with their hips one against another backwards as Camels do, for that is the moe ft for them, in regard of the round proportion and figure of their bodies. In like sort do the Pholulanges joyn together, and are generated by those of the fame kinde, (as Aristotle faith:) But the Pholulanges couple not in the Spring-leaon, as the other Spiders doe, but towards Winter, at what time they are very swift, quick, nimble, and of moe certain hurt, more dangerous, and more venemous in their bitings. Some of them after their coupling together, do lay one Egge only, carrying it under their belly, it is in colour as white as Snow, and both Male and Female fit upon it by turns.

Some
Some Spiders do exclude many little Eggess very like unto the seeds of Poppy, out of which it hath been observed, that sometimes there have been hatched three hundred Spiders at one time, which after their vain and idle plying and sporting together in their web, at length come forth with their Dam, and towards evening they all trudge home, until each one hath learned, and perfectly attained to the skill to spin his own web, that therein he may spend the residue of his days in mope pleasure, ease and security. They make exclusion of their young breed in hopping or skipping-wit, they sit on their Eggess for three days space together, and in a moneths space their young ones come to perfection. The dometelic or House-spider, layeth her egges in a thin web, and the sale-spider, a thicker and stronger, because they are more exposed to the injuries of winds, and lie more open to the rage and fury of storms and showers.

The place and Countrie where they are, helpeth much, and is very available to their generation. There is no Countrie almost, but there are many Spiders in it. For in the Countrie about Ariba, which is in Arabia Felix, there is an infinite number of them to be found, and all the Island of Candie swarmeth with Phaenoges, Strabo saith, that in Ethiopia there is a great number of Phaenoges found, of an exceeding bigness: although as Pliny saith in his eight Book and 58 chapters, there are neither Wolves, Foxes, Bears, nor any hurtful creature in it: and yet we all know that in the Isle of Wight (a member of England,) the contrary is to be found, for although there were never dwelling in it Foxes, Bears, nor Wolves, yet there be Spiders enough.

The Kingdom of Ireland never saw Spiders, and in England no Phaenoges will live long, nor yet in the Isle of Man, and none unto the City of Grenoble, in that part of France which lyeth next Italy. Gaulium Merula faith, there is an old Tower or Castle standing, wherein as yet never any Spider hath been seen, nor yet any other venomous creeping creature, but rather if any be brought thither from some other place, they forthwith die. Our Spiders in England, are not fo venomous as in other parts of the world, and I have seen a mad man eat many of them, without either death or deaths harm, or any other manifi accident or alteration to enue. And although I will not deny, but that many of our Spiders be swallowed down, may do much hurt, yet notwithstanding we cannot chuse but confesse, that their biting is poysonifie, as being without venom, procuring not the least touch of hurt at all to any one whatsoever; and on the contrary, the biting of a Phaenog is deadly.

We see the harmless Spiders almost in every place; they climb up into the Courts of mighty Kings, to be as it were myrrors and glaftes of vertue, and to teach them honest provencie and valian-
ty. They go into the lodgings, shops and Ware-houses of poor men, to commend unto them contentment, patience, labour, tolerance, industry, poverty and frugality. They are also to be found in rich mens chambers, to admonish them of their duties. If you enter into your Orchard, they are but in cloathing every Tree; if into the Garden, you shall finde them amongst Roses; if you travel in the field, you shall have them, their work in hedges, both at home and abroad, whithersoever you bend your course, you cannot chuse but meet with them, left perhaps you might imagine, or else complain and finde some faults, that the Schoolmistrisfe and perfect president of all vertue and diligence were in any place absent.

Who would not therefore be touched, yea and possified with an extreme wonder at these vertues and faculties, which we daily see and behold with our eyes. Poile hath briefly and copiously described their nature, properties, inclinations, wit and invention in his Greek verses, which being turned into Latin, found to this effect.


Indulhiens natura Spiders have, Exceeding Virginus bands of skil. Superflum hamures of tellers save, And into webs they weave them still. And they without all Weavers comb. Their folding orbs invaded are. And underneath their webs as tombs, Are thread the worthy work to bear, And hang their threads in air above, Bypleuses unfer to the eye of man, Without foundation you may prove. All their buildings firmly stand:


Which may be Englished thus:

Not yet clear light to the eyes most bright. Can fee the coupling of their thread. The thinness of the web in flight. On pint of air are jars spread. On Gnats and sally winged Flies. Which guilefully in nets they take. They feed their full when they epy. And yet their life much rest doth make. They labour too, and do provide. Gainst winds and things that break their swell. That bands from tackling may not flie. When greater strength doth them affair.
Their use.

The Spider put into a linnen cloath, and hung upon the left arm, is an excellent medicine to expel a Quotidian Ague, as Trallium faith: and yet it will be more effectual if many Spiders be boiled with Oyl of Bay to the confinennent of a liniment, to anoint the wriithes and the temples a little before the fit; for by this means the Fever will be absolutely cured, or will seldom return again: 

A Spider tempered and wrought up with Milt-wooll or Ceteroeb, and so fpred upon a cloth to be applied to the temples, cureth the fits of a Tertian Fever. 

Dioforides. The Spider that is called a Wolf, being put into a quill, and fped about the neck perfonment the fame effect, as Pliny reporteth. The domestic Spider, which fpinneth and weatheth a thin, a white, or a thick web, being inclofed in a piece of leather, or a Nut-fhell, and fo fped about the neck, or worn about the arm, drujeth away the fits of a Quarantin Fever, as both Dioforides and Fermelum have thought. For in the paine in the ears, take three live Spiders, boil them with Oyl upon the fire, then difflic or drop a little of this Oyl into the pained ear, for it is very excellent, as witnesmeth Mureullis Empirical. Pliny keepeth them in Vinegar and Oyl of Rofes, and fo to be fpammed together; and a little thereof to be dropt into the pained ear with a little Saffron, and without doubt, faith he, the paine will be mitigated, and the fame affirmeth Dioforides. Or else strain out the juice of Spiders, mixing it with the juice of Rofes, and with some wooke dipped in the fame liquor, apply it to the ear.

Sorauus in his book peri Daglon writeth, how that the Spider which is called Cranocatus, being flud or choked in Oyl, is a very preuent help against any poifon taken inwardly into the body, as the Scholaft of Nicander reporteth. There be some that catch a Spider in the left hand, and feast and fpread it with the Oyl of Rofes, putting some of it into the ear, or the fame fide the tooth sketh, and as Pliny tellith us, it doth exceeding much good. Spiders applied and laid upon their own bittings, or taken inwardly into the body, do heal and help those hurtz themselves procured.

What should I take of the white spots of the eyes, a most dangerous grief? and yet are they clean to be taken away with very small labour, if to be once take the legs, especially of tho' Spiders which are of the whitier fide, and flamming them together with Oyl, do make an Ointment for the eyes. Pliny.

The moiff juice that is squeezed out of a houte Spider, being tempered with Oyl of Rofes, or one dram of Saffron, and a drop or two thereof dropt into the eyes, cureth the drooping or watering of them, by means of a hume effuing out thereth, or else the moisture of a Spider or his urine being taken by themselves, laying a little wolle on the top of the part affected, worketh the fame effect; whereby you may well understand, that there is nothing in a Spider fo vile, homely, or fordidous, that doth not some good, and serveth to some end.

Against the fuffocation of the belly, Actius doth counfel to apply a Cerote to the navel made of Spiders, and faith that he hath found it to prevail much in this kinde of paffion. Pliny faith, but he yeeledeth no reafon for it, that Spiders help the paine and dwelling of the Spleen. He writeth alfo further, that if a man catch a Spider, as theis is gliding and defending downwards by her thread, and fo being cruified in the hand, and then applied to the navel, that the belly will be provoked to the fLOG, but being taken as the is afcending, and applied after the fame former manner, that any loofeneffe or flux is layed, and refrained thereby. The fame Pliny alfo writeth, that if a man take a Spider, and lay it upon a Fellon, (provided that the fick patient may not know fo much,) that within the space only of three days, that terrible and painful grief will be clean taken away. And besides he affirmeth that if the head and feet of a Spider be caft away, and the reft of the body rubbed and bruised, that it will throughly remedy the dwelling in the fundament, proceeding of inflammation.

If any be vexed with fcore of Lice, and do ufe a suffumigation made only with Spiders, it will caufe them all to fall and come away, neither will there afterwards any moe breed in that place. The fat of a Goode tempered and mixed with a Spider and Oyl of Rofes together, being used as an Ointment upon the breasts, preferveth them safely, as that no milk will coagulate or curdle in them after any birth. Anonymus. Yea, that fame knotty fource of rich men, and the scorn of Phyliitans, I mean the Gowe, which as some learned men hold can by no means be remedied, yet feeleth mitigati- on and diminution of pain, and curation alfo, only by the presence of a Spider, if it be taken alive, and her hinder legs cut off, and afterward inclofed in a purfe made of the hide of a Stag. Moreover, we fee, (while all other medicines can never do) that all they are freed from the moft part, both from the Gowe in the legs and hands, where the Spiders are moft found, and where they are moft buife in working, and framing their ingenious deviled webs. Doubtlesse, this is a rare miracle of nature, and a wonderful vertue, that is in this contemptible little creature, or rather esteemed to be fo vile, ab- ject, and of no estimation. Rich men were happy indeed, if they knew how to make ufe of their own good.

Antinomirus Pius was wont to fay, that the sharp words, witty fayings, quicks and subtiles of Sophi- fters, were like unto Spiders webs, that contain in them much cunning Art, and artificial conceit, but
Of the Spider.

but had little other good besides. If any one be newly and dangerously wounded, and that the miserable party feareth a bleeding to death, what is a more noble medicine, or more ready at hand then a thick Spiders web, to binde hard upon the wound, to stay the inordinate effusion of blood? Questionable, if we were as diligent and greedy to search out the true properties and virtues of our own domestic remedies, which we would buy of others for dearly, we would not enforce our selves with such eager pursuit after those of forain Countries; as though things fetched far off, were better then our own neer at hand; or as though nothing were good and wholesome, unless it came from Egypt, Arabia, or India. Surely, unless there were some wide worm in our brains, or that we were bewitched and posseted with some fury, we would not so far be in love with foreign wares, or be so much befotted, as to seek for greedy new phyrick and Physical means, considering that one poor Spiders web will do more good, for the blanching of blood, the cureation of ulcers, the hindering of flains, flame, or flough to grow in any fore, to shave and quench any inflammations, to conglutinate and consolidate wounds, more then a Cart-load of Bole fetcht out of Armenia, Saracotta, Sardaracha, or that earth which is so much nobilitated by the imprafe of a seal, and therefore called Terra Sigillata, the clay of Samori, the dirt of Germany, or the loam of Lemnos. For a cobweb adstringeth, refirgerateth, folderedeth, joyenth, and closeth up wounds, not suffering any rotten or filthy matter to remain long in them.

And in regard of these excellent vertues and qualities, it quickly cureth bleeding at the nofe, the Harnormboids, and other Bloody-fluxes, whether of the opening of the mouthes of the veins, their operations, breakings, or any other bloody evacuation that too much aboundeth, being either given in itself alone in some Wine, either inwardly or outwardly, or commixed with the Blood-flone, Stelion Maria, and other the like remedies fit for the fame intentions.

The cobweb is also an ingredient into an unguent which is made by Phyfitians, against the disease called Serpes, and being bound to the dwellings of the fundament, if there be inflammation joyned with them, it consumeth them without any pain, as Marcellus Empericow writeth. It likewise cureth the watering or dropping of the eyes, as Pliny reporteth, and being bound about the wounds of the joints: and some for the same intent, use the cobwebs, with flour and white Wine mixed together.

Some Chirurges there be that cure Warts in this manner; They take a Spiders web, rolling the same up on a round heap like a ball, and laying it upon the Wart they then set fire on it, and do burn it to ashes, and by this way and order the Warts are eradicated, that they never after grow again. Marcellus Empericow taketh Spiders webs that are found in the Cypresse tree, mixing them with other convenient remedies, to give them to a podagral person for the aflwaging of his pain. Against the pain of a hollow tooth, Galen in his book De Compoñ. medicam. secundum loco, much commendeth, (by testimony of Arbigenes) the Egges of Spiders, being tempered and mixed with Orum Nar- dinum, and so a little of it being put into the tooth. In like fort Kiranides giveth Spiders egges for the cureation of a Tertian Ague. Whereupon we conclude with Galen, in his Book to Pifs, that Naure as yet never brought forth any thing so vile, mean, and contemptible in outward fiew, that it hath manifald and most excellent and necessary ues, if we would show a greater diligence, and not be so qveamish as to refuse those wholesome medicines which are ealle to be had, and yet great charges and water acquired.

I will add therefore this one note before I end this discourse, that Apes, Marmofets or Monkeys, the Serpents called Lizards, the Stellion, which is likewise a venomous Beast like Grizzle, having spots in his neck like unto fars. Waps, and the little beast called Ichneumon, Swallows, Sparrows, the little Tittoue, and Hedge-Sparrows, do often feed full favourly upon Spiders. Besides, if the Nightingales, the Prince of all singing Birds do eat any Spiders, the is clean fceed and healed of all diseases whatsoever.

In the days of Alexander the Great, there dwelled in the City of Alexandria a certain young maid, which from her youth up, was fed and nourished only with eating of Spiders; and for the same cause the King was premmost not to come neer her, lest peradventure he might be infected by her poyfonous breath, or by the venom evaporated by her sweating. Akeriaus lef the bath recorded, in his writings, that there was a certain noble young Virgin dwelling at Colen in Germany, who from her tender years was fed only with Spiders. And thus much we English men have known, that there was one Henry Lilgrave, living not many years since, being Clerk of the Kitchen to the right Noble Ambrose Dudley Earl of Warwick, who would search every corner for Spiders, and if a man had brought him thirty or forty at one time, he would have eaten them all up very greedily, such was his detrurous lengthing after them.

of the Stellion.

They are much deceived that confound the green Lizard, or any other vulgar Lizar for because the Stellion hath a ruffie colour: and yet (as Mathiolas writeth) seeing Arisfaile hath left recorded, that there are venomous Steallions in Italy, he thinketh that the little white Beast with fars on the back, found about the City of Rome, in the walls and ruins of old houses, and is there called Tarantula, is the Stellion of which he speaketh, and there it liveth upon Spiders. Yet that there is another and more noble Kinde of Stellion, anciently so called of the learned, shall afterward appear in the succeeding discourse.
This Beast or Serpent is called by the Grecians, Colotes, Acolabotes, and Galotes, and such a one was that which Arisphantes signifieth from the side of a houfe eafed her belly into the mouth of Socrates as he gaped, when in a Moon-shine night he observed the courfe of the flars, and motion of the Moon. The reafon of this Greek name Acolabotes, is taken from Akolos, a circle, becaufe it appeareth on the back full of fulc circles like flars, as writeth Ptolemy. Howbeit, that feemeth to be a signifieth Etymo-

Monte

Gulf of Guademabras

ble general back cleaneffe among that about for writeth. in fame

fame imitation

Amfing the houfe. 

Lizards, angry, and in graves and Sepulchres, becaufe it climbeth up the walls even as Rats and Mice; or as Kinamides will have it, from Culis, signifieth a piece of wood, becaufe it climbeth upon wood and trees. And for the same reafon it is called Galotes, becaufe it climbeth like a Weafil, but at this day it is vulgarly called among the Grecians, Ligops; although fome are alfo of opinion, that it is alfo known among them by the words Teniamitis, and Ταμιαμάιθε. 

Among the vulgar Hebrews, it is alfo sometimes called Leviath, and fometimes Sememitis, as Manfier writeth. The Arabian call it Sarabamus, and Senabrot, a Stellion of the Gardens. And peradventure Gueffil, Gualfambras, Alrett, and Gnafer. And Sybarites alfo, ueth Epibates, for a Stellion. And the general Arabian word for fuch creeping biting things, is Vaffa, which is alfo rendered a Dragon of the houfe. In read of Colotes, Albertus hath Arcaulis. The Greeks, English, and French, have no words for this Serpent, except the Latin word, and therefore I was justly constrained to call it a Stellion, in imitation of the Latin word.

As I have flewed fome difference about the name, fo it now enfeth that I fhould do the like about the nature and place of their abode. First of all therefore I muft put a difference betwixt the Italian Stellion or Tarantula, and the Thracian or Grecian, for the Reletion of the Ancients is proper to Greece. For they lay this Stellion is full of Lentile spots, or speckles, making a sharp or shrill shrieking noife, and is good to be eaten, but the other in Italy are not fo. Alfo they fay in Sicilia, that their Stellions inflict a deadly biting, but thofe in Italy caufe no great harm by their teeth. They are covered with a skin like a shell or thick bark, and about their backs there are many little finifhing spots like eyes, (from whence they have their names) streaming like flars, or drops of bright and clear water, according to this verfe of Ovid;

Aptomque coloris

Nomen babef unius Stellatus corpora guttis.

Which may be Englifhed thus;

And like his {potted} brea, fo is his name,

The body flarr'd over like {drops} of {rain}.

It moveth but slowly, the back and tail being much broader then is the back and tail of a Lizard, but the Italian Tarantulas are white, and in quantity like the smallest Lizards: and the other Grecian Lizards, (called at this day among them Hocmi) is of bright finifh colour, and are very harmful and angry, whereas the other are not fo, but fo meek and gentle, as a man may put his fingers into the mouth of it without danger. One reafon of their white bright finifhing colour, is becaufe they want blood, and therefore it was an error in Sybarites to fay that they had blood.

The teeth of this Serpent are very small and crooked, and whensoever they bite, they fllick faft in the wound, and are not pulled forth again except with violence. The tail is not very long, and yet when by any chance it is broken, bitten, or cut off, then it groweth again. They live in houfes, and neer unto the dores and windows thereof make their lodgings, and fometimes in dead-mens graves and Sepulchres, but moft commonly they climb and creep aloft, fo as they fall down again; fometimes into the meat as it is in dressing; and fometimes into other things, (as we have already faid) into Socrates mouth, and when they deffend of their own accord, they creep fide-long, They eat Honey, and for that caufe creep into the Hives of Bees, except they be very carefully flopped, as Virgil writeth;

Nam {sepe} favos, ignotum {adedit} Stello.
Of the Stellion.

Many times the Stellion at unawares meeteth with the Honey-combs. They also of Italy many times eat Spiders. They all lie hid four months of the year, in which time they eat nothing, and twice in the year, that is to say, both in the Spring time and Autumn, they cast their skin, which they greedily eat so soon as they have dripped it off. Which Theophrastus and other Authors write, is an envious part in this Serpent or creeping creature, because they understand that it is a noble remedy against the Falling-Jacknife: wherefore to keep men from the benefit and good which might come thereby, they speedily devour it.

And from this envious and subtle part of the Stellion, cometh the crime in Ulysses called Crime men Stellianus, that is, when one man fraudulently preventeth another of his money, or wares, or bargain, even as the Stellion doth man kinde of the remedy which cometh unto them by and from his skin.

The crime is also called Extortion, and among the Romans, when the Tribunes did withdraw from the Souldiers their provision of victual and corn, it is said, Tribunos qui per Stellatum Militibus aliquid absolvissent, capitati pena affecti. And therefore Budesius relateth a History of two Tribunes, who for this fellacie were worthily stoned to death by the commandment of the Emperor. And all frauds whatsoever, are likewise taxed by this name, which were not punishable but by the doom of the Supream or highest Judge, and thereupon Alciatus made this Emblem following.

Parva lacrata, arris Stellato corpore gutia Stellato, qui lateris & cana buita colit, Invota pravitate doli fert symbita, illius : Hen minimum nutibus cognitus Zelotypis.

Nam turpi obtinent faciem lenitigne, quisquis
Sit quibus inmererus Stellius, via bibat.
Hinc vindicta frequens, decepta pellece vinis,
Quam formae amisso fero relinquit amans,

Which may be Englanded this;

The little Lizard, or Stellion starred in body grain
In secret holes, and graver of dead which debt remain,
When painted you it set, or drawn before the eye,
A symbole then you view of deep deceit and cursed entry:
Alias, this is a thing to jealous wits known too well,
For whofsover of that Wine doth drink his fill
Wherein a Stellion hath been drencht to death,
His face with filthy Lentile spots all ugly it appeareth,
Herein a Lover oft requires the fraud of concubile,
Defring her of beauties bled by draught of this same Wine.

The Poet Ovid hath a pretty fiction of the Original of this cursed envy in Stelliones, for he writeth of one Abas the son of Metaneira, that received Ceres kindly into her house, and gave her hospitality, whereby the said Abas being displeased, derided the sacrifice which his mother made to Ceres; the Goddesse seeing the wretched nature of the young man, and his extreme impiety against the sacrifice of his Mother, took the Wine left in the goblet after the sacrifice, and poured the same upon his head, whereupon he was immediately turned into a Stellion, as it is thus related by Ov. Metam. 5.

Combibit os maculae, & que modo brachis gisfit
Crua gerit, cauda eft mutatis addita membris :
Inque brevem formam, ne fit vis magna nocturni,
Contradixit, parvaque minor mensura laoceta est.

In English thus;

His mouth lacks in those spots: and now where arms did stand,
His legs appear, and to his changed parts was put a tail,
And left it should have power to harm, small was the bodies band,
And of the Lizards poysonous this least in shape did tail.

Their bodies are very brittle, so as if at any time they chance to fall, they break their nails. They lay very small egges, out of which they are generated: and Piny writeth, that the juice or liquor of these egges lay upon a mans body, caufeth the hair to fall off, and also never more permitteth it to grow again. But whereas we have said, it devoureth the skin, to the damage of hurt of men, you must remember, that in ancient time the people did not want their policies and devises to take away this skin from them before they could eat it. And therefore in the Summer time they watched the lodging place and hole of the Lizard, and then in the end of the Winter toward the Spring, they took Reeds and did cleave them in funder, thefe they composeth into little Cabinets, and let them upon the hole of the Serpent: Now when it awaked and would come forth, it being grieved with the thicknife and straithnife of his skin, prefeth out of his hole through those Reeds or Cabinets, and finding the fame somewhat straith, is the more glad to take it for a remedy; so by little and little it lilith through, and being through, it leaveth the skin behinde in the Cabinet, into the which it cannot re-enter to devour. Thus is this wily Serpent by the policy of man jutly beguiled, losing that which it so greatly Desired to possesse, and changing nature, to line his gue with his coat, is prevented from that glutony, it being sufficient to have had it for a cover
The History of Serpents.

The History of Serpents.

in the Winter, and therefore unsuufferable that it should make food thereof, and eat the same in the Summer.

Thee Stellions (like as other Serpents) have also their enemies in nature, as first of all they are hated by the Asles, for they love to be about the Mangers and racks on which the Asse feedeth, and from thence many times they creep into the Asles open Nostrils, and by that means hinder his eating. But above all other, there is greatest antipathy in nature betwixt this Serpent and the Scorpion, for if a Scorpion do but fee one of thefe, it falleth into a deep fear, and a cold sweat, out of which it is delivered again very freely: and for this caufe a Stellion putrified in Oyl, is a notable remedy against the biting of a Scorpion; and the like war and diffenfion, is affirmed to be betwixt the Stellion and the Spider.

We have fhewed already, the difference of Stellions of Italy from them of Greece, how these are of a deadly poynous nature, and the other innocent and harmleffe, and therefore now it is also conveiient, that we should fhew the nature and cure of this poyson, which is in this manner:

Whensoever any man is bitten by a Stellion, he hath ach and pain thereof continually, and the wound received looketh very pale in colour, the cure whereof, according to the saying of Actius, is to make a plaiter of Garlic and Leeks mixed together, or elfe to eat the said Garlic and Leeks, drinking after them a good draught of sweet Wine, unmixed and very pure, or elfe apply Nigella Romana, Saffronnes and sweet Water unto it. Some (as Arnolus writeth) prescribe for this cure the dung of a Faulcon, or a Scorpion to be bruized all to pieces, and laid to the wound. But sometimes it happeneth, that a mans meat or drink is corrupted with Stellions that fall into the fame from some high place where they defire to be climbing, and then if the fame Meat or Wine fo corrupted be eaten or drunk, it caufeth unto the party a continual vomiting and pain in the stomac. Then mult the cure be made elfe by vomits to avoid the poyson, and by Glyders to open the lower paflage, so there may be no flop or flay, to keep the imprifoned meat or drink in the body. And principally those things are prescribed in this cafe, which are before expressed in the Cantharides, when a man hath by any accident been poiyned by eating of them.

The remedies which are observed out of this Serpent are these: Being eaten by Hawks, they make them quickly to call their old coats or feathers. Others give it in meat after it is bowelled, to them that have the Falling-fickneffe. Also when the head, feet, and bowels are taken away, it is profitable for those perfons which cannot hold in their urine: and being fodder, is given against the Bloudy-flux. Also fod in Wine with black Poppy-fed, cureth the pain of the loins, if the Wine be drunk up by the fick patient.

The Oyl of Stellions being anointed upon the arm-holes or pits of children, or young perfons, it restrainevth all hair for ever growing in those places. Also the Oyl of Stelleions, which are sod in Oyl-olive with Lizards, do cure all boils and wens, confusing them without lancing or breaking. And the afhes of the Stellion are most principally commended against the Falling-fickneffe, like as also is the skin or trunck, as we have faid before. The head burned and dried, and afterward mixed with Honey-attick, is very good againft the continual dropping or running of the eyes; and in the days of Piny, he writeth that they mixed Sibiuon herewithal. The heart is of fo great force, that it being eaten, bringeth a moft deep and dangerous sleep, as may appear by these verfes:

Mandev cor, et tans profernt corpore formus,
Ut jundis postum abique dolore manus.

Which may be Englished thus;

Eat you the heart, and when it should sleep, the body will possesse,
That hands may from the same be cut away painlesse.

To conclude, the Phyftitians have carefully observed sundry medicines out of the egges, gall, and dung of Stellions, but because I write for the benefit of the English Reader, I will spare their relation, feeing we fhall not need to fear the bitings of Stellions in England, or expect any drugs among our Apothecaries out of them, and therefore I will here end the History of the Stellion.

Of the Tyre.

Tbere be fome which have confounded this Serpent with the Viper, and taken them both to be but one kinde, or at leaft the Tyre to be a kinde of Viper, because the Arabians call a Viper Thiron, of the Greek word Therion, which signifies a wide heafe, and whatsoever the Grecians write of their Echides, that is their Viper, the fame things the Arabians write of the Tyre, and Leonti-nes compiled a whole Book in the defence of that matter: and from hence cometh that noble name or composition antoditory, called Therion, that is, Triacle. But Asien in the mention of the Triacle of Andromachus, distinguifteth the Triacle of the Viper, from that of the Tyre, and calleth one of them Trebios Tyre, and the other Trebios Viper. So Gentilius and Florninius do likewise put a manifeft difference betwixt the Tyre and the Viper, although in many they are alike, and agree together.

This Tyre is called in Latine Tyros and Tyria, and also among the Arabians, as Sylvaticus writeth, Esfani, and Alphabes. Rabbi Moses in his Aphorisms writeth, that when the Hunters go to seek the
Of the Tortoise.

The Serpents, they carry with them bread, which they call unto them, and while the Tyre doth eat it, he closeth his mouth so fast, that his teeth cannot suddenly open again to do his hunting adversly any harm, and this thing (as he writeth) is very admirable at the first, to them that are ignorant of the secret in nature. Galien also writeth so much to Piso of Vipers, and he faith that the Circulators, Juglers or Quackalvers, did cast certain mazes or small cakes to them, when which they had tasted, they had no power to harm any body.

This Tyrus is said to be a Serpent about the coasts of Jericho in the Wilderneffe, where it hunteth Birds, and liveth by devouring of them and their eggs. And a concoction of the flesh of this Serpent, with the admixture of some few other things, taketh away all intoxicate poyson, which concoction is called Triaile. It is also reported, that whereas the Dragons have no poyson of themselves, they take it away from this Serpent, and so poyson with a borrowed venom. For this poyson is very deadly: and there is a tale (which I will not tell for truth:) that before the coming and death of our Saviour Jesus Christ, the same was unremediable, and they dyed thereof. Whereover they were that had been poysoned by a Tyre; but on the day of Christ his passion, one of them was found by chance in Jerusalem, which was taken alive, and brought to the side of our Saviour hanging upon the Cross, where it also fastened the teeth, and from that time ever since, all the kinde have receaved a qualified and remediable poyson, and all their flesh made apt to cure it self, or other venons. It is reported that when the Tyrus is old, he calleth, or rather wretgeth off his coat in this manner following; first it getteth off the skin which groweth betwixt the eyes, by which it looketh as if it were blinde: and if it be strange to a man, (I mean the first time that ever he saw it:) he will verily take it to be blinde: afterward, it also flayeth off the head, and so at last by little and little, the whole body, at which first it appeareth as though it were an Embryon, or skinleffe Serpent. They keep their eggs in their belly, and in them breed their young ones, as the Vipers do, for before they come out of the dam's belly, they are in all parts (according to their kinde) perfect creatures, and so every one generateth his like, as do four-footed Beasts.

It taketh by the relation of Cenon, that the Diphas in Italy is called Tyrus. Alfo Cardan writeth, that there is a suppos'd and false conceit, that with the flesh of this Tyre, mixed with Hellebore and water, is made a concoction to restore youth: but the truth is, it rather weakeneth and destroyeth bodiies, then helpeth them, and maketh a counterfeit or varnished false youth, but no true youth at all. Thus far Cardan, and thus much of this Serpent, the other things written of it, are the same that are written of the Viper.

Of the Tortoise.

He left four-footed Egge-breeding Bealt, cometh now to be handled in due order and place; namely, the Tortoise, which I have thought good to insert also in this place, although I cannot finde by reading or experience, that it is venomous, yet seeing other before me have ravelled the fame in the number and catalogue of these Serpents and creasing creatures, I will also follow them; and therefore I will first expresse that of the Tortoise, which is general and common to both kindes, and then that which is special, and proper to the Land and Sea Tortoises.

The name of this Bealt is not certain, among the Hebrews some call it Sebabul, some Kopul, and some Homer; whereas every one of these do also signifie another thing, as Sebabul, a Snail; Kopul, a Hedge-hog; and Homer, a Lizard. The Chaldeans call this Bealt Thribila; the Arabians term it Sijme, alfo Kasen fulhabafe, and Halccatale: the Italians call this Tisulfus, tradinus, vetustiger, tartus, essifarruce, turtoco, et confiscina. And in Ferraris, Gallinae, tartua, bica festinella, the Inhabitants of Laurinum, Cupparia; the Portugals, Gagada, the Spaniards, Galpago, and Tartusae; the French, Tortue, and Tartue; and in Savoy, Bog conte; the Germans, Schillkat, and Tallerkat; the Flemings, Schilt-padle, which answereth our English word Shell-crab; the Grecians call it Chelone, and the Latines, Te-fuda: which words in their several languages, have other significationes, as are to be found in every vocabular Dictionarie, and therefor I omit them, as not pertinent to this businesse or Historie.

There be of Tortoises three kinde, one that liveth on the land, the second in the sweet waters, and the third in the Sea, or salt waters. There are found great store of these in India, especially of the Water-tortoises, and therefore the people of that part of the Countrey are called Chelonephagi; that is, Eaters of Tortoises, for they live upon them: and these people are said to be in the E击-part of India. And in Carmania the people are likewise so called. And they do not only eat the flesh of them, but also cover their houses with their shells, and of their abundance, do make them all manner of vessels. Pliny and Salinas write, that the Sea-tortoises of India are so big, that with one of them they cover a dwelling Cottage. And Strabo faith, they also row in them on the waters, as in a Boat.

The Island of Serapis in the Red-sea, and the farthest Ocean Islands, toward, the East of the Red-sea, hath also very great Tortoises in it: and every where in the Red-sea they do abound, that the people there do take them and carry them to their greatest Mars and Fairs to sell them, as to Raphitis, to Polemaris, and the Island of Dioscorides, whereof some have white and small shells. In Libya also they are found, and in the night time they come out of their lodgings to feed, but very febrly, so as one can scarcely perceive their motion.
And of one of these Scaliger telleth this story. One night (faith he) as I was travelling, being overtaken with darkness and want of light, I cast about mine eyes to seek some place for my lodging, safe and secure from wild Beasts; and as I looked about, I saw (as I thought) a little hill or heap of earth, but in truth it was a Tortoise, covered all over with moss: upon that I ascended and sat down to rest, whereupon after a little watching I fell asleep, and so ended that night's rest upon the back of the Tortoise. In the morning, when light approached, I perceived that I was removed far from the place, whereon I first chose to lodge all night; and therefore rising up, I beheld with great admiration the face and countenance of this Beast, in the knowledge whereof, (as in a new nature) I went forward, much comforted in my wearisome journey.

The description of the Tortoise and several parts thereof now followeth to be handled. Those creatures (faith Pliny) which bring forth or lay eggs, either have feathers as Fowls, or have scales as Serpents; or thick hides as the Scorpion, or else a shell like the Tortoise. It is not without great cause that this shell is called Scutum, and the Beasts Lutaria, for there is no buckler and shield so hard and strong as this is. And Palladum was not deceived when he wrote thereof, that upon the same might safely passe over a Cart-wheel, the Cart being loaded. And therefore in this the Tortoise is more happy than the Crocodile, or any other such Beast.

Arthurus writeth that it hath two shells, one upon the back, the other on the belly, which are conjoined together in four places, and by reason of this so firm a cover and shell, the shell thereof is dry and firm, also long lasting, and not very easie or apt to putrefaction. This shell or cover is smooth, except sometimes when it is grown old, it hath moss upon it, and it never calleth his coat in old age, as other creeping things do. In the head and neck it resembleth a Serpent, and the great Tortoises have also shells upon their heads like a shield, yet is the head but short; and the aspect of it very fearful, until a man be well acquainted therewith. And by reason of the hardneffe of their eyes, they move none but the sincerest lid, and that without often winking. The liver of it is great, yet without any blynd. It hath but one belly without division, and the liver is always foul, by reason of the vitious temperature of the body. The milt is exceeding small, coming far short of the bodies proportion.

Besides, the common nature of other thick-hided creatures. It hath also reins, except that kinds of Tortoise called Lutaria, for that wanteth both reins and bladder; for by reason of the softneffe of the cover thereof the humor is over-fluent; but the Tortoise that bringeth forth eggs hath all inward parts like a perfect creature: and the females have a singular passage for their excrements, which is not in the males. The eggs are in the body of the belly, which are of a party-colour like the eggs of Birds.

Their flones cleave to their loins, and the tail is short, but like the tail of a Serpent. They have four legs, in proportion like the legs of Lizards, every foot having five fingers or divisions upon them, with nails upon every one. And thus much for the several parts.
They are not unjustly called Amphibias, because they live both in the water and on the land, and in this thing they are by Pliny referred to Beavers: but this must be understood of the general, otherwise the Tortoises of the land do never dare come into the water: and those of the water can breath in the water, but want respiration, and likewise they lay their Eggs and sleep upon the dry land. They have a very slow and easy pace; and thereupon Pertunius calleth it Tardi-gradus, and also there is a Proverb, Testudinem inco sits a low and soft pace, when such a motion is to be express'd. The Tortoise never calleth his coat, no not in his old age. The voyage is an abrupt and broken halting; not like to the Serpents, but much more loud and diffused. The male is very facetious and given to carnal copulation, but the female is not so; for when she is attempted by the male, they fight it out by the teeth, and at last the male overcometh, whereat he rejoiceth as much as one that in a hard conflict, fight, or battle; hath won a fair Woman; the reason of this unwillingness is, because it is exceeding painful to the female. They engender by riding or covering one another. When they have laid their Eggs, they do not set them to hatch them, but lay them in the Earth, covered, and there by the heat of the Sun the young one is formed, and cometh forth at due time without any further help from his Parents.

They are accounted crafty and subtle in their kind, for subterfus is not only ascribed to things that have a thin bloud, but also to those that have thick skins, hides, and covers, such as the Tortoise and Crocodile have. The Tortoise is an enemy to the Partridge, as Philer and Alcmane write: Alfo the Ape is as fraid thereof, as it is of the Snail: and to conclude, whatsoever enemy it hath, it is safe enough as long as it is covered with his shell, and clingeth fast to the earth beneath; and therefore came the proverb, Oikos philos, oikos aristos: That house which is ones friend, is the best house.

The Poets give a fabulous reason, why the Tortoise doth ever carry his house upon his back, which is this: They say, that on a time Jupiter bad all living creatures to a banquet or Marriage feast, and thither they all came at the time appointed, except the Tortoise: and the at laft appeared at the end of the feast when the meat was all spent: whereas Jupiter wondered, and asked her why she came no sooner: Then it answered him, Oikos philos, oikos aristos: at which answer Jupiter being angry, adjudget her perpetually to carry her house upon her back, and for this cause they fable, that the Tortoise is never separated from her house.

Flaminius the Roman diffuating the Acheans from attempting the Island of Zoeinthus, used this argument, and fo afterward T. Livius. Caternum sicut Testudinem, ubi collleta in sua tegumen est, tutam ad omnes illias vitæ esse: ubi exeritis partes alienas, quodunque nudavit, obviavitque infrimmium babere: Haud dissimiliter vobis Achai, clausus undique marius, quod intra Peloponesum est, termino, ea & jungere vobis, & juncta tuerti facile: si semel avideitate plus amplectendns, vinc excedat, nuda obiit omnia que extra sint & expetita ad omnes illias esse. Thus far Pliny. That is to say. Even as when the Tortoise is gathered within the compass of her shell, then is it safe and free from all troubles and feelth no violence, but whensoever the putteeth forth a limb or part, then is it naked, inoffenfible, and easy to be harmed: fo is it with you Acheans, for by reason of the inclosed feast of Peloponesus within the Straights of the Sea, you may well winde all that together, and being conjoynd, as well defend it: But if once your audacious and covetous minds to get more, appear and stretch it self beyond those limits, you shall lay open your naked infirmity and weakness, to all force, blows, and violence whatsoever. Wherefore the Tortoise careth not for flies, and men with good armour care not much for light and easy adversaries.

Alictus hath a witty Emblem of a Tortoise to express a good Huswife, and that the fame of her virtues, spreadeth much further then either beauty or riches.

Anna Venus, quem sem bac facies? quid dema at illa
Tetudo, moles quam pede diva premis?
Me sse effe miti Phidas, sexuque referri
Which may be Englished thus;

Quae holy God, what means that ugly face?
What doth that Tortoise signify indeed,
Which thou & God alike under soft foot pace?
Declare what means the same to me with speed:

These is the shape that Phidas did me frame,
And bade me go resembling Womanlike,
To teach them silence, and in houle remain,
Such pictures underneath my feet you finde.

There is a manifold use of Tortoises, especially of their cover or shell, and likewise of their fleth, which cometh now to be handled. And firft of all, the ancient ornaments of Beds, Chambers, Tables, and Banqueting houses, was a kind of artificial work, called Carutilis, and this was framed in gold and silver, brasse and wood, Ivory and Tortoise-shells; but, Modo luxuriae non fuerit contenta ligas, jam ligam emi testudinem facta: That is to say, Ryot not contented, bought precious frames of wood; and again, the use of wood cau'd Tortoise-tshells to be dearly bought, and thereof alfo complained the Poet Iuvenal, where he faith;

---Nemo curabit
Rivalis in Oceani flatus testudinis notaret
Claram Titus genitrix & nobilis fulcrum.

YYYY
The History of Serpents.

In English thus:

Then none did care for Tortoife in the Ocean flood,
To make the noble beds for Trojans blood.

We have shewed already that there are certain people of the East called Chelopagi, which live by eating of Tortoises, and with their shells they cover their houses, make all their vessels, row in them upon the water, as men use to row in boats, and make them likewise serve for many other uses.

But as concerning the eating of the flesh of Tortoises, the first that ever we read that used this ill diet, were the Amazonis, according to Callius *Eadus*; and other Authors writeth. Besides, Aloisius Cassanarius affirmeth, that he himself did taste of the flesh of a Tortoise, and that it was white in colour, much like unto Veal, and not unpleasant. But Ruffis is of a clear contrary opinion, condemning it for very unfitness, and unwholesome, because the taste and temperament thereof is betwixt the Land and the Water, it being a Beast that liveth in both Elements. And in eating hereof the Grecians have a proverb, *Ccelones kreat be phagein, be me phagein*: That is, either eat Tortoises flesh, or eat it not. Meaning that when we eat it, we must eat nothing else, and therefore must be filled sufficiently only with that kind of meat. For to eat little, bredeth fretting in the belly, and to eat much is as good as a purgation, according to the observance of many actions, which being done *frigida ir ignorantia*, that is, coldly and slothfully to halfe, do no good, but being done *actus* et *explicature*, earnestly and thoroughly bring much content and happiness.

But I marvel why they use in this age, or defined by Meat-mongers, seeing *Apicus* in all his Book of Variety of Meats, doth not mention them; and I therefore will conclude the eating of Tortoises to be dangerous, and hateful to Nature it self, for unless it be taken like a Medicine, it doth little good, and then also the Sawees and decoctions or compositions that are confected with it, are such as do not only qualify, but utterly alter all the nature of them, (as Stephanus Aquae hath well declared in his *Frensis* discourse of Frogs and Tortoises.) And therefore to conclude this History of the Tortoise, I will but recite one riddle of the strangeness of this Beast which *Tertullian* out of *Pavonius* maketh mention of, and also in *Greek* by *Methophius*, which is thus translated.

*Animal prægnat nativit, fine fluitat spiro, geminis oculi virtutis cerebrum, quibus dicibus aurorum progression. Super ventre carnulo perge, sub quo ventre latent albus, aperitus & clausus. Oculi non operimur, nem progression, donec venter intitus albus vatus eff. Hoc staturum, oculi non apparent insignis, & pergo ad ster; Et quiesquant mutans variis edo voces: That is to say, I am a living creature, of a strange nature, I breathe without streams, with two eye behinde, near my brains do I go forward, I go upon a blew belly, under which is also another white, open and short, my eyes never open, I go forward until my belly be empty, when it is full, then they appear plain and I go on my journey, and although I am mute or dumb, yet do I make many voices. The explication of this riddle, will shew the whole nature of the Beast, and of the Harp called *Chelys*. For some things are related herein of the living creature, and some things again of an Instrument of Musick made upon his shell and cover. And thus much for the Tortoise in general, the Medicines I will reserve unto the end of this History.*

**Of the Tortoise of the Earth, whose shell is only figured.**

The Tortoises which never come in water, either sweet or Salt, clear or muddy, are called by the Grecians, *Chelone Chefiate*; by the Latines, *Cerastes*, and *Tesselates*, *Tortes*, *Psevletes*, and *Montane*; and by Nescander, *Orine*; and the French peculiarly *Tortue des Bous*, a Tortoise of the wood.

These are found in the Desarts of Africa, as in Libya and Mauritania, in the open fields, and likewise in Libya in the Corn-fields, for when the Plough-men come to plough their land, their thares turn them out of the earth upon the furrows as big as great Gribes of land. And the thieves of these the Husbandmen burn on the land, and dig them out with Spades and Mattocks, even as they do Worms among places full of such venom.

The Hill Persians, and Savans, *Asenidia*, do yeeld many of these land Tortoises. The shell of this living Creature is very pleasantly distinguished with divers colours, as earthy, black, blewith, and almost like a Salamanders. The liver of it is small, yet apt to be blown or swell with with winde, and in all other parts they differ not from the common and vulgar general prefixed description.

These live in Corn-fields, upon such fruits as they can finde; and therefore also they may be kept in Chefs or Gardens, and fed with Apples, Meall, or Bread without Leaven. They eat also Cockles, and Worms of the earth, and Three-leaved-grasse. They will also eat Vipers, but presently after
Of the Tortoise.

After they eat Origan, for that herb is an antidote against Vipereine poyon for them, and unless they can instantly finde it, they die of the poyon. The like use it is said to have of Rue, but the Tortoises of the sandy Sea in Afric live upon the fat, dew, and moistneffe of those Sands. They are ingenere like other of their kinde, and the males are more veneration then the females, because the female must needs be turned upon her back, and the cannot rise again without help: wherefore many times the male after his luft is satisfied, seek away, and leaveth the poor female to be destroyed of Kites, or other adversaries: their natural wisdom therefore hath taught them to prefer life and safety before luft and pleasure. Yet Thurtium writeth of a certain herb, that the male Tortoise getteth into his mouth, and at the time of luft turneth the fame to his female, who presentely upon the smell thereof, is more enraged for copulation then is the male, and so giveth up her self to his pleasure without all fear of evil, or providence against future danger: but this herb neither he nor any other can name.

They lay Eggs in the earth, and do not hatch them, except they breath on them with their mouth, out of which at due time come their young ones. All the Winter time they dig themselves into the earth, and there live without eating any thing, insomuch as a man would think they could never live again, but in the Summer and warm weather they dig themselves out again without danger.

The Tortoises of India in their old and full age change their shells and covers, but all other in the World never change or call them. This Tortoise of the earth is an enemy to Vipers, and other Serpents, and the Eagles again are enemies to this, not so much for hatred as defirous thereof for Physick, against their lickneffes and diseases of nature; and therefore they are called in Greek Che-

To the end, in a fair Sun-thine clear day he fate in the fields, and suddenly an Eagle let a Tortoise fall down upon his head which brake his skull, and crushed out his brains, whereupon the Greelans wrote:

Aeschylo graphomi, epipsoke Chelone.

Which may be Englisht thus;

Aeschylos writing upon a rock,

A Tortoise falling, his brain out knock.

The use of this land Tortoises, are first for Gardens, because they clear the Gardens from Snails and Worms: out of the Aegadian Tortoises they make Harps, for their shells are very great, and this kinde of Harp is called in Latine Taphado, the inuenfer whereof is said to be Mercury, for finding a Tortoise after the falling in of the River Nilus, whose flesh was dried up, because it was left upon the Rocks, he struck the finewes thereof, which by the force of his hand made a musical sound, and thereupon he framed it into a Harp, which caused other to imitate his action, and continue that unto this day. These Tortoises are better meat then the Sea or Water Tortoises: and therefore they are preferred for the belly; especially they are given to Horfes, for by them they are raised in flesh, and made much fatter. And thus much shall suffice for the Tortoises of the earth.

Of the Tortoise of the Sweet-water.

Pliny maketh four kinde of Tortoises, one of the Earth, a second of the Sea, a third called Lataria, and the fourth called Smyda, living in Sweet-waters, and this is called by the Portugalls, Can-

gado; and Gazado; the Spaniards, Giglap; and the Italianis, Gaiandre de aqua. There are of this kinde found in Helvetia, near to Zurich, at a Town called Andelfingen: but the greatest are found in the River Ganges in India, where their shells are as great as tus, and Damosen writeth, that he saw certain Embassadors of India, present unto Augustus Caesar at Antiochia,a Sweet-water Tortoise, which was three cubits broad. They breed their young ones in Nilus. They have but a small Milt, and it wanteth both a bladder and reins. They breed their young ones and lay their Eggs on the dry land, for in the water they die without repirarion: therefore they dig a hole in the earth wherein they lay their Eggs, as it were in a great ditch, of the quantity of a Barrel, and having covered them with earth, depart away from them for thirty days; afterwards they come again and uncover their Eggs, which they finde formed into young ones, thofe they take away with them into the water: and these Tortoises at the inundation of Nilus follow the Crocodiles, and remove their nestes and eggs from the violence of the floods.

There was a magical and superstitious use of these Sweet-water Tortoises against Hail, for if a man take one of these in his right hand, and carry it with the belly upward round about his Vineyard, and so returning in the same manner with it, and afterward lay it upon the back, so as it cannot turn on the belly, but remain with the face upward, all manner of Clouds should passe over that place and never empty themselves upon that Vineyard. But such Diabolical and foolish observations were not so much as to be remembered in this place, were it not for their silliness, that by knowing them,
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Of the TURTLEDOE of the SEA.

I

T were unproper and exorbitant to handle the Sea-tortoise in this place, were it not because it liveth in both elements, that is, both the water and the land, wherefore seeing the Earth is the place of his generation, as the Sea is of his food and nourishment, it shall not be amiss nor improper (I trust) to handle this also among the Serpents and creeping things of the earth.

Pony calleth this Sea-tortoise Mus Marinus, a Mouse of the Sea, and after him Albertus doth so likewise. The Arabians call it Asfulnasb; and the Portuguese Tartarugas; and in Germany, Meefchlickoet, which the common Fisher-men call the Souldier, because his back seemeth to be armed and covered with a shield and helmet, especially on the fore-part: which shield is very thick, strong, and triangular, there being great veins and finews which go out of his neck, shoulders, and hips, that tie on and fasten the same to his body.

His fore-feet being like hands, are forked and twilled very strong, and with which it fighteth and taketh his prey, and nothing can preffe it to death except the frequent strokes of Hammers. And in all their members except their quantity, and their feet, they are much like the Tortoises of the earth, for otherwise they are greater, and are also black in colour. They pull in their heads as occasion is ministered to them, either to fight, feed, or be defended, and their whole shell or cover seemeth to be compounded of fine Plates. They have no teeth, but in the brims of their beaks or snouts are certain eminent divided things like teeth, very sharp, and that upon the under lip like the cover of a Box, and in the confidence of the sharp prickles, and the strength of their hands and backs, they are not afraid to fight with men.

Their eyes are most clear and splendent, calling their beams far and near, and also they are of white colour, so that for their brightness and rare whitenesse, the Apples are taken out and included in Rings, Chains, and Bracelets. They have reins which cleave to their backs, as the Reins of a Bugle or Ox. Their feet are not apt to be used in going, for they are like to the feet of Seals or Sea-calves, serving in stead of Oars to swim withal. Their legs are very long and stronger in their feet and nails, then are the claws of the Lion.

They live in Rocks and the Sea-finds, and yet they cannot live altogether in the water, or on the land, because they want breathing and sleep, both which they perform out of the Water: yet Pony writeth, that many times they sleep on the top of the water, and his reason is, because they lie still unmoveable, (except with the Water) and snort like any other Creature that sleepeth, but the contrary appeareth, seeing they are found to sleep on the land, and the snorting noife they make is but an endeavour to breath, which they cannot well do on the top of the water, and yet better there then in the bottom.

Castovii.

Arjalea.

Oppianus.

Flusarch.
Of the Viper.

of the body, it dieth not presently, nor clofeth the eyes, for if a man shake his hand at it, then will it wink, but if he put it neer, it will also bite if it can reach it. If by the heat of the Sun their backs grow dry, they also grow weak and inflexible, and therefore they halien to the water to remollifie them, or else they die within short time: and for this cause this is the best way to take them. In the hottest day they are drawn into the deep, where they swim willingly with their backs or shells above the water, where they take breath, and in continuance, the Sun so hardeneth them, that they are not able to help themselves in the water, but they grow very faint and weak, and are taken at the pleasure of the Fisherman.

They are also taken on the tops of the water after they return weary from their feeding in the night-time, for then two men may easily turn them on their back, and in the mean while another calleth a Snare upon them and draweth them safely to the land. In the Phoenician Sea they are taken safely without danger, and generally where they may be turned on their back, there they can make no resistance, but where they cannot, many times they wound and kill the Fisher-men, breaking the nets asunder, and let out all the other Fish included with them.

Bellarius writeth, that there be of these Sea-tortoifes two kindes, one long, the other round, and both of them breath at their Nozes, because they want gills, and the long ones are most frequent about the Port Tripolis in the Red-sea, whole cover is variable, for the males shell is plain and smooth underneath, and the females is hollow. The Turky have a kinde of Tortoise, whose shell is bright like the Chryfolite, of which they make hafts for Knives of the greatest price, which they adorn with plates of gold. In Amboslea, an Iland of the South, there are also found certain Monstres or living creatures, which are not very great, yet are they admirable in Nature, and in the vertue of their blood.

Their bodies are round and like the Tortoise, having two croffe lines over their backs, in the ends of which is an eye and an ear at either side, so as they seem to have four ears, the belly is but one, into which the meat paffeth out of the mouth. They have feet round about, and with them they go both backward and forward. The vertue of their blood is affirmed to be admirable: for whatsoever body is cut asunder and put together, if it be sprinkled with this blood during the time that it breatheth, it counteth as before.

The ancient Troglydites had a kinde of Sea-tortoife, which they call Celitium, which had horns unto which they fasten'd the fringes of their harps; these also they worthipped and accounted very holy. Yet some think that they might better be called Celium than Celitium: but I think Hermolaus doth better call them Celitium apostes Chelius, which signifies both a Tortoise and their broad breasts; and with their horns they help themselves in swimming. Albertus also maketh mention of a Tortoise called Barubara, but it is thought to be a corrupt word from Ophi a Cadeburnus. These Sea-Tortoifes are found sometimes to be eight cubits broad, and in India with their shells they cover houses, and such use they also put them unto in Taprobane, for they have them fifteen cubits broad. And thus much for all kinde kinde of Tortoises.

Of the VIPE.

Notwithstanding the affer- vation of Sutus, who will needs exclude the Viper from the Serpents, because a Serpent is called Ophis, and the Viper Echis, yet I trueth there shall be no reaonable man that can make exception to the placing of this living creature among Serpents; for that great learned man was deceived in that argument, seeing by the fame reason he might as well exclude any other, as the Snake, Dragon, Scorpion, and such like, who have their peculiar names, besides the generall word Ophis; and yet must he also have been better advis'd, then to affirm a Viper not to be called a Serpente: for even in Aristate whom he expoundeth and approveth, he might have found in his fifth Book of Gen. animal, and the last Chapter, that the Viper is recorded. Later genera ophiem: that is, Amongst the general kindes of Serpentes, although as we shall shew afterward, it differeth from most kindes of Serpentes, because it beareth the young one in his belly, and in the Winter time lieth in the Rocks, and among Stones, and not in the earth.

The Hebrews as it appeareth, Esa. 59. and Job 6. call it Ahabynthesis, and according to Manier Aphi- gnath, or Aphiagnath, for Vipers, because of the variety of colours, whereby they are set all over. The Arabians
The History of Serpents.

Arabians from the Greek word θερός, signifying all kinds of wide Beasts, do also call it θερός, and that kind of Viper whereof is made the Triangle, they call a Μάκσαρα, and Αθύριον, they also call it Στίθον, (as Leonicus writeth.) Beside it is called Στίθον, whose teeth are to be derived of the Hebrews, and Απίς, which may likewise be conjectured to arise from the Greek word Επίς. The Greeks call the Male peculiarly and properly Επίς, and the Female Επίδανα, and it is a question whether the vulgar word among the Grecians at this day Εχεδάνα, do not also signify this kind of Serpent. Bellerus thinketh, that it is corrupted of Επίδανα the female Viper. The Germans have many words for a Viper, as Brand Schlangen, Natter, Ech, Hiek nater, and Viper-nater. The French, use Vipere; the Spaniards, Vipera, and Ech; the Italians, Vipera, Mara Rae, Scurnio, and sometimes Scurzon, although Scarzo, and Serzone, be general words in Italy for all creeping Serpents without feet, and that strike with their teeth.

There is also about the word Macha some question, although Leonicus decideth the matter, and maketh it out of all Controversie, and Robigimus thinketh it a very significant word derived from the people Μαχάς, because they carried away about Vipers. The Mountebanks do also call Sauffis, from Si-bila, the hissing voyce which it maketh. Some will have Nepa to be also a Viper, yet we have thowed that already to signify a Scorpion.

The Grecians say, that the Viper is called Εχεδάνα, para to σεισμον, in aetate ten genet, accigenie: because to her own death she beareth her young one in her belly; and therefore the Latines do also call it Vipera, quae Βιπερα is, because it dyeth by violence of her birth or young: and they attribute unto it venom and pelilience, and generally there are few Epithets which are ascribed to the Serpent, but they also belong unto this. There is a precious stone Eactices, (greenish in colour) which feemeth to be like a Viper, and therefore taketh name from it. Also an herb Eebits, like Semmymy, and Echidain or Vipers, in Coryne there are Mice, which from the fimitude of Vipers are called Eebes; ecb on was the name of a man, and Eebitides and Ecboit, of people; and Echidain a City bevide the Sea Αγεμον: Also the Eagle which by the Poets is laign to eat the heart of Prometheus, is likewise by them said to be begotten betwixt Lyphon and Epidaus, and the same Echidna to be also the Mother of Coimera: which from the Navel upward was like a Virgin, and downward like a Viper, of which also Docnored Scelus, and Herodotus telleth this story:

When Hercules was driving away the Osten of Geryon, he came into Sythia, and there fell asleep, leaving his Mares feeding on his right hand in his Chariot, and so it happened by divine accident, that whiles he slept they were removed out of his sight and estrayed away from him. Afterwards he awaked, and missing them, he went all about the Countrey, and came unto a certain place, where in a Cave he found a Virgin of a double natured proportion, in one part resembling a Maid, and in the other a Serpent, whereat he wondered much: but the told him, that if he would lie with her in carnal copulation, he would shew him where his Mares and Chariot were: whereunto he confessed, and begat upon her three Sons, famous among Poetical Writers: Namely, Agythyrus, Gelonos, and Syphus: but I will not prosecute either the names, or these fables any further. And so I will proceed to the description of Vipers. The colour of Vipers is somewhat yellowish, having upon their skin many round spots, their length about a cubit, or at the most three palms. The tail curled, at the end very small and sharp, but not falling into that proportion equally by even attenuation, growing by little and little, but unequally sharped on the sudden from thickneffe to thinneffe. It is also without feth, confiling of skin and bone, and very tharp. The head is very broad, compared with the body, and the neck much narrower then the head: the eyes very red and flaming, the belly winding, upon which it goeth all in length, even to the tail, and it goeth quickly and nimblly; some affirm that it hath two canine teeth, and some four. And there is some difference betwixt the male and female; the female hath a broader head, the neck is not so eminent, a shorter and thicker body, a more extended tail, and a softer pace, and four canine teeth. Again, the male hath a narrower head, a neck swelling or standing up, a longer and thinner body, and a swifter pace or motion, so that in the Pictures propounded in this discourse: the first of them are for the male, and the last for the female: & this is the peculiar outward difference betwixt the male and the female Vipers. Besides that, the tails of Vipers make a noise when they go or move Thoese are taken to be the most generous and lively, that have the broadest and hollowest head like a Turbot, quick and lively eyes, two canine teeth, and a griffle or claw in the nose or tail; a short body or tail, a pale colour, a twift motion, and bearing the head upward. For the further description of their several parts. Their teeth are very long upon the upper chap, and in number upon either fide four, and those which are upon the neither gum are so fmall, as they can scarce be discerned, until they be rubbed and preffed; but alfo it is to be noted, that while they live, or when they be dead, the length of their teeth cannot appear, except you take from them a little badder, in which they lie concealed. In that badder they carry poyson, which they infuue into the wound they make with their teeth: they have no ears, yet all other living creatures that generate their like, and bring forth out of their bellies have ears, except this, the Sea-calf, and the Dolphin, yet in fhe thereof, they have a certain griffly cave or holloweness in the same place where ears should stand. The womb and place of conception (faith Pliny) is double, but the meaning is, that it is cloven as it is in all females, (especially Women and Cows.) They conceive Egges, and thes Egges are contained neer their rens or loins. Their skin is soft, yeelding alfo to any stroke: and when it is eyed ed off from the body, it strecheth twice fo big as it appeared while it covered the living Serpent: To conclude, Phylis, writeth, that their face is somewhat like the face of a man, and from the
Navel it refembled a Crocodile, by reason of the small passage it hath for his ejection which exceeded not the eye of a Needle. It conceiveth at the mouth. And thus much for the description in general.

There is some difference among this kind also, according to the distinction of place wherein they live, for the Vipers in Æthiopia are all over black like the men, and in other Countries they differ in colour, as in England, France, Italy, Greece, Asia, and Egypt, as writeth Bellonius. There is scarce any Nation in the World wherein there are not found some Vipers. The people of Amynta which were of the Grecian blood, drove away all kind of Serpents from among them; yet they had Vipers which did bite mortally; and therefore could never be cured, being shorter then all other kinds of Vipers in the World.

Likewise in Arabia, in Sygroi, the sweet Promontory of Frankincense, the Europeen Mountains, Sciron, Parnassus, Aethiopia, Crete, and Rhipheus: the Mountains of Asia, Egyptus, Bucertenor, and Cercophas, abound with Vipers. Likewise Egypt, and in all Africa they are found also, and the Africans affirm, (in detection hereof;) that it is not so much Animal, as Malum nature: that is, A living Creature; as evil of Nature: To conclude, they are found in all Europe. Some have taken exceptions to Crete, because Aristotle writeth, that they are not found there, but Bellonius affirmeth, that in Crete also he saw Vipers which the Inhabitants call by the name of Chevutra, which seemeth to be derived from the Greek Echidna. At this day it is doubted whether they live in Italy, Germany, or England, for if they doe, they are not knowne by that name: yet I verily think that we have in England a kind of yellow Adder which is the Viper that Bellonius saw here, for I my selfe have killed of them, not knowing at that time the difference or similitude of Serpents, but since I have perceived to my best remembrance that the proportion and voyage of it did shew that it was a Viper. The most different kinds of Vipers are found in Egypt and Asia.

Concerning the quantity, that is the length and greatness of this Serpent, there is some difference, for some affirm it to be of a cubit in length, and some more, some leFFE. The Vipers in Europe are very small, in comparison of them in Africa, for among the Traguloses (as writeth Elianus) they are fifteen cubits long, and Neurobus affirmeth as much of the Indian Vipers; Arifabolus also writeth of a Viper that he saw one, which was nine cubits long, and one hand breadth; & some again (as Strabo) affirm, that they have seen Vipers of sixteen Cubits long, and Nicander writeth thus of the Vipers of Asia:

Fort Asia ultra tres longis qui tradibus ultus
Se tendant rigidum quales Bucertonor, atque
Arduus Aegagus, & celtus Cercopus intra
Se multis refuuet.
In English thus:

Such as Asia yields in length, as are three elites,
In Bucertonor: these rough, these Vipers flourish,
Hard Egygsus and high Cercopus cells,
Within their compass many such do nourish.

Others there be in Asia sixteen foot long, and some there be again twenty, as in the Golden Cystiga, where their heads are like the heads of Kids. There be some that make difference between Echois and Echidna, because one of them when it biteth causeth a convulsion, and so doth not the other, and one of them maketh the wound look white, the other pale, and when the Echo biteth you shall see but the impertion of two teeth, and when the Echidna biteth you shall see the impertion of more teeth. But these differences are very idle, for the variety of the pain may arise from the constitution of the body, or the quantity of the poyson, and so likewise of the colour of the wound, and it is already set down, that the Echo or Male Viper hath but two canine teeth, but the other, namely, the Echidna hath four: thus faith Nicander;

Musculo eminit, petitus color, ipsa canino
Binos perpetuo monstrat, sed femina plures.
Which may be englished thus;

The Male two canine teeth, whose colour well is known,
But in the Female more continually are flown.

But yet the Male hath besides his Canine teeth, as many as hath the Female: and besides the Male is known from the Female, as the name Nicander writeth, because the Female when the goeth, draweth her tail as though she were lame, but the Male more manlike and nimble, holdeth up his head, stretheth out his tail, restrainteth the breath of his belly, seteth not up his Scales (as doth the Female;) and besides draweth out his body at length.

The Meate of these Vipers are green Hearbes, and also sometimes living Creatures: and namely, Galen. Hore-flies, Cantharides, Fidincombers, and such other things as they can come by, for these are fit and convenient meat for them. Aristotele writeth, that sometimes also they eat Scorpions, and in Arabia they not onely delight in the sweet juice of Baljam, but also in the shadow of the same. But above all kinds of drink, they are most infatiable of wine. Sometime they make but little folds, and sometime greater;
greater, but in their wrath their eies flame, they turn their tailes and put forth their double tongue.

In the winter-time as we have said already, they live in the hollow Rocks, yet Pliny affirmeth, that then also they enter into the earth, and become tractable and tangible by the hands of man, for in the cold weather they are nothing so fierce as they are in the hot, and in the Sommer also they are not at all times like furious, but like to all other Serpents. They are most outrageous in the Canicular daies, for then they never rett, but with continual disquiet move up and down till they are dead or expired of their poiyon, or feel an abatement of their heat. Twice in the year they cast their skins, that is to say, in the Spring, and in the Autumn: and in the spring time when they come out of their hole or winter lodging, they help the dimmefle of their eye-fight by rubbing their eyes upon fennel. But concerning their copulation and generation, I find much difference among wri- ters: wherefore in a matter so necessary to be known, I will first of all fet down the opinion of other men, aswell Historians as Poets, and then in the end and conclusion, I will be bold to interpose my own judgment for the better information of the Reader.

Heredatus in his Thalia writeth, that when the Vipers begin to rage in luft, and desire to couple one with another, the Male cometh and putteth his head into the mouth of the female, who is so infatiable in the desire of that copulation, that when the male hath filled her with all his seed-genital, and so would draw forth his head again, the bitch it off, and destroiyeth her husband, whereby he dieth and never liveth more; but the female departeth and conceiveth her young in her belly, who every day according to natures inclination, grow to perfection and ripeneffe, and at last in revenge of their fathers death, do likewise destroy their mother, for they eate out her belly, and by an unnatural issue come forth into the light of this world: and thus this thing is also thus witnessed by Nicander:

Cum durum fugiens mosua ignecestis coliditae
Freund ecis, vel uti jevante libidinis estu
Saeve ducte sui refeact copul illaruit:
Aft ubi pust vegetam orperrum pignora visum,

In English thus;

When the male Viper gazeth, avoiding females bite,
Whose fiery rage is all on ardent luft,
Tell when he burns for copulation right,
Her cruel tooth doth Husband head off cruft.

Vpto this agreeeth Galen, Iffidre, Plutarch, Athanasius: and Lucan who writeth;

Viperem sequunt abrupto corpora natu
That is to say:
The geniture of Vipers blood
Engender, breaking bodies good.

Pliny agreeith with the residue for the death of the Male in carnal copulation, but he differeth in this, about the Female, affirming that when the young Vipers grow ripe and perfect in their Mothers belly, the caltie forth every day one for three daies together, (for her number is sometimes twenty) at last the other, impatient of delay, gnaw out her guts and belly, and so come forth, destroying their mother: And here is no great difference, for in the sum and destruction of Father and Mother they all agree, and Saint Jerome, Saint Basilis, and Horace do agree and subscribe to the truth of these opinions. Thus we have thewed the opinions of the Ancient and first Writers: now it followeth that we should likewise thew the opinions of the latter Writers, which I will performe with as great brevity and perspicuity as I can. Pierius therefore writeth, that in his time there were Learned men defirous to know the truth, who got Vipers, and kept them alive, both Males and Females, by fluttering them up safe where they could neither escape out, nor do harme, and they found that they engendered, brought forth, and conceived like other Creatures, without death or ruine of Male and Female.

Amatus Lusitanus also writeth thus. The Male and Female Viper engender by their tailes together, even to the one half of their body, and the other half standeth upright, mutually kiffin one another. In the Male there is a genital member in that part beneath the Navel, where they embrace, which is very secret and hidden, and against the fame is the Females place of conception, as may appear manifestly to him that will look after the fame; and therefore all the Philosophers and Physitians have been deceived, that have wrote they have conceived at their mouth, or that the Male perfified at the time of engendering, or the Female at the time of her delivery. Thus faith Amatus.

This Plutarch he likewise writeth in this manner; The young Vipers do not eate out their way, or open with their teeth their Mothers belly, nor (if I may speak merrily) do make open their own passage by breaking up of the doors of their Mothers womb, but the womb being narrow, cannot contain them; and therefore breaketh of it own accord: and this I have proved by experience, even as the same falleth out with the fift called Asmodeus and therefore I must crave pardon of Heredatus, if I affirm his relation of the generation of Vipers to be meerly fabulous. Thus far Theophrastus.

Apollonius
Apollodorus also writeth, that many have seen the old Vipers licking their young ones like other Serpents.

Thus have I expressed the different judgements of sundry Authors both new and old touching Celius, the generation of Vipers, out of which can be collected nothing but evident contradictions, and unreconcilable judgements, one mutually crossing another. So as it is unpossible that they should be both true, and therefore it must be our labour to search out the truth, both in their words, and in the conference of other Authors. Wherefore to begin, thus writeth Aristotle. The Viper amongst other Serpents, almost alone bringeth forth a living creature, but first of all she conceiveth a several egg of one colour, above the eggs lieth the young ones folded up in a thin skin, and some-times it falleth out, that they gnaw in vnder that thin skin, and so come out of their mothers belly all in one day, for the bringeth forth more than twenty at a time.

Out of the words of Aristotle, evilly understood by Pliny and other ancient Writers, came that errore of the young Vipers eating way out of their mothers belly, for in stead of the little thin skin which Aristotle faith they eat thorough, other Authors have turned it to the belly, which was clean from Aristotle meaning. And another error like unto this, is that wherein they affirm, that the Viper doth every day bring forth one young one, so that if the hath twenty young ones in her belly, then also the must be twenty days in bringing of them forth.

The words of Aristotle from whence this error is gathered, are these, Titel de en miximera katof, Titel de ptos bo eikofs, which are thus translated by Ganea, Parit enim singulas δειδος σιγιλας, plures quam vigintinumeros: That is to say, the bringeth forth every day one, more then twenty in number. But this is an absurd translation, and agreeth neither with the words of Aristotle, nor yet with his mind, for his words are these: Parit autem una die singulas, parit autem plur quam viginti numero. That is to say in English, the bringeth forth every one in one day, and the bringeth forth more than twenty: so that the sense of these words shall be, that the Viper bringeth forth her young ones severally, one at a time, but yet all in a day.

But concerning her number, neither the Philosopher, nor yet any man living, is able to define and let it down certain, for they vary, being sometimes more, and sometimes fewer, according to the nature of other living creatures. And although the Viper do conceive eggs within her, yet doth the lay them after the manner of other Serpents, but in her body they are turned into living Vipers, and so the eggs never see the sun, neither doth any mortal eye behold them, except by accident in the dissection of a female Viper when she is with young. I cannot also approve them that do write, that one, namely the Vipers, among all Serpents, bringeth forth her young ones alive, and perfect into the world, for Nicander and Crevins, do truly affirm, with the constant consent of all other Authors, that the horned Serpent called Cerastes, of which we have spoken already, doth likewise bring forth her young ones alive. And beides, Herodotus writeth of certain winged-Serpents in Arabis, which do bring forth young ones as well as Vipers, and therefore it must not be concluded with apparent fallibhood, that only the Viper bringeth her young ones perfect into the world.

The like fable unto this, is that general conceit of the copulation together, betwixt the Viper and the Lamprey; for it is reported that when the Lamprey burneth in luft for copulation, she forsaketh the waters, and cometh to the Land, seeking out the lodging of the male Viper, and doth yoneth herselfe unto him for copulation. He againe on the other side, is so tickled with desire hereof, that forfaking his owne dwelling and his own kind, doth likewise betake himselfe unto the Waters and Rivers sides, where in an amorous manner, he highteth for the Lamprey, like as when a young man goeth to meet and call his Love; so that these two creatures, living in contrary elements: the earth and the water, yet meet together for the fulfilling of their lufts in one bed of fornication. Upon which Saint Bayle writeth in this manner: Viper insecutisse humanum animal rurum, quae fornunt cum mutere congruitur, &c. that is to say, the Viper a most pernicious enemy to all living creeping things, yet admittedh copulation with the Lamprey, for he forsaketh the Land, and goeth to the water-side, and there with his huffing voyce, giveth notice to the other of his presence, which the hearing, instantly forsaketh the deep waters, and coming to the Land, suffereth hirselfe to be imbraced by that venemous beast. Also Nicander writeth thus thereof in his verses.

Fama est, si modu vera, quod hae sua pascua linquant,
Atque est in fuscum cognitum linitum,
Et cum Viperos coeunt serpentes gravatur,
Which may be englisht thus:

Fame saith (if it be true,)that the her feed forfakes,
I mean the store, and goes upon dry land,
Where for her luft the Viper male he takes,
In fleshly couitise to be he husband.

But this opinion is vaine and fantastical, as Pliny and divers others have very learnedly proved, for the Lamprey cannot live on the Land, nor the Viper in wet places, besides the waters: and therefore, besides the impossibility in nature, it is not reasonable that these will hazard their own lives, by forsaking their own elements for the satiastion of their lufts, there being plenty of either kinds to work upon, that is to say, both of female Vipers in the Land, to couple with the male, and male Lampreys in the water, to couple with the female. Although
Although I have else-where confuted this error, yet I must here again remember that which is said already. The occasion of this fable is this; the male Lamprēy is exceeding like a Viper, for they wait, eat, and have long bodies, which some one by chance seeing in copulation with his female, did rashly judge it to be a Serpent because of his likeness, as afore-land; and therefore they deviled a name for it, calling it Myris, which some have made a kind of Viper, and others a Snake: but Androclus hath notably proved against Archeclus, that this Myris neither is nor can be any other then the male Lamprēy: and so I will conclude, that neither Vipers ingender with Lamprēys, nor yet the female Vipers kill the male in copulation, or that the young ones come into the world by the deftruction of their dams.

In the next place we are to consider, the antipathy and contrariety that it observeth with other creatures, and the amity also betwixt it and others. First of all therefore it is certain and well known, what great enmity is betwixt man-kind and Vipers, for the one alwaies hateth and feareth the other: wherefore, if a man take a Viper by the neck, and spit in his mouth, if the sportive glide down into his belly, it dieth thereof, and rottest as it were in a consummation. Vipers also are enemies to Oxen, as Virgil writeth, *Pisces acerra buman petorique aegera viris*: that is, a sharp plague of Oxen, calling his poiyon upon all other Cattel. They are also enemies to Hens and Geese, as Columella writeth, wherefore in ancient time they were wont to make fence walls for the custody of their pullen against Vipers. They are likewise enemies to the Dormouse, and they hunt very greedily after their young ones, whereof *Hyphorius* in a discourse against Origen writeth thus: When the Viper cometh to the nest of a Dormouse, and findeth there one of his eggs, he putteth out all their eies, and afterwards feedeth them very fat, yet killeth every day one, as occasion of hunger serveth; but if in the mean time a man, or any other creature do chance to eat of those Dormice, whose eies are to put out by the Viper, they are not poisoned thereby. And this is a wonderfull work in nature, that neither the little Dormice receive harme by the poiyon, but grow fat thereby, nor yet the Viper be poisoned herewith, while the eate them, and yet a man or beast which is a stranger unto it, dieth thereof.

All kind of Mice are as much afraid of Vipers, as they be of Cats, and therefore whensoever they bear the huffing of a Viper, infinitely they look to themselves and their young ones. There is a kind of harmeloffe Serpents called Parce, whereof I have spoken before in his proper place, which is an enemy unto Vipers, and that same which is harmeloffe unto men, killeth them. *Aelianus* also telleth a story of a Viper that climbed up into a tree, to the net of a Magpie, whereupon the old one was sitting, this poore Pye did fight with the Viper, untill the Viper took her bale by the thigh, so as she could fight no more, yet she ceased not to chatter and cry out to her fellowes to come and help her, whereupon the male Pye came, and seeing his female so grieved by the Viper, he ceased not to peck upon his head until the braines came out, and so the Viper fell down dead. This story is also alluded by *Carden*.

The Scorpions and the Vipers are enemies one to another, for at Padua a Viper and a Scorpion (for the trial of this matter) were both included in a vial, where they continued fighting a little while, but at lat they both died by one anothres poiyon. The Torroyle of the earth is also an enemy to the Viper, and the Viper to it, wherefore if it can Origan, or wild-Savory, or Rue, it eateh thereof, and then is nothing afraid to fight with the Viper, but if the Torroyle can find none of thefe, then they die inconveniently by the poiyon of the Viper, and of this there hath been triall, as both *Aristotle* and other Authors affirm.

And as there is this contrariety betwixt Vipers and other living creatures, so there is betwixt them and Plants of the earth, and this biebling God in nature hath bestowed upon many beastis, that when they feel themselves to be hurt by one herb, they know another to cure them: as for example, Garlick is poiyon to the Viper, and therefore having tafted thereof the dieth, except the eate some Rue. A Viper being brook with a Reede once, it amazeth her, and maketh her faintpeare, but being flook the second time, the recovereth and runneth away: and the like is reported of the Beech-tree, saying that it layeth the viper, and she is not able to go from it. But most marvaulous is the antipathy betwixt the Viper and the Yew-tree, for it is reported by *Mercurialis*, that if you lay fire on the one site, and a piece of Yew on the other side, and then place a viper in the middle betwixt them both, the will rather chufe to runne thorow the fire, then to go over the branches of Yew.

The Viper is also afraid of Mustard-leaf, for it being laid in her path, she fleeth from it, and if the tale of it, the dieth. There is an herbe called *Arris*, if the hands or body of a man be anointed with the juice of the root thereof, the viper will never bite him; the like is reported of the juice of Dragons, expressed out of the leaves, fruit or root. It is also said, that if a viper do behold a good Smaradge, her eyes will melt and fall out of her head. But above all other plants in the world, the Viper is most delighted with Vetches, and the Savyne tree, for in Italy (as Carden writeth) there was once seen a great number of Vipers about a Savyne Tree, and many of them did climb up and down upon that Tree.

There is no love betwixt this Serpent and other creatures, fave onely to his own kind, and therefore are two things memorable in the nature of this뉴 Savage Serpent, the one is the love of the male to the female, and the other of the female to her young ones. It is reported by Saint Ambrose and Saint بطس, that when the male miffeth the female, he seeketh her out very diligently, and with a pleasing and flattering noyce, calleth for her, and when he perceiveth the approcheth, he calleth up
Of the Viper.

up all his venom, as it were in reverence of matrimonial dignity. The female on the other side, maketh much of her young ones, licking and adorning their skins, fighting for them unto death, both against men and beasts. For this occasion and some medicinal uses, the Arabians counted Vipers holy Serpents, for by reason (as we have said already) that the Vipers do harbour the Balm-trees, whereof there be plenty in that country, they hold them for holy keepers of that precious fruit: wherefore they never kill them, but at the time of year when the Balm is ripe, they come unto the trees bearing in their hands two wooden rules, which they smite one against another, by the noise whereof the Vipers are terrified and driven away, and so the Trees are freed for the Inhabitants to take the fruit thereof at their pleasure.

Now forasmuch as we read that Paus King of India sent many great Vipers for a gift unto Augustus, it is profitable to express the means whereby Vipers are safely taken without doing any harm. Wherefore Aristotle writeth, that they are very much desirous of Wine, and for that cause the Country-people set little vellels of wine in the hedges and haunts of Vipers, whereunto the Vipers coming, easily drink themselves tame, and so the Hunters come and kill them, or else so take them, as they are without danger of harm. Plini reporteth, that in ancient time, the Marfians in Libya did hunt Vipers, and never received harm of them, for by a secret and innate vertue, all Vipers and serpents are afraid of their bodies, as we have already shewed in other places. Yet Galen in his discourse to Pijus, writeth that the Marfians in his time had no such vertue in them, as he had often tried, fave onely that they used a deceit or sleight to beguile the people, which was in this manner following.

Long after the usual time of hunting Vipers, they use to goe abroad to take them, when there is no courage nor faint any venom left in them, for the Vipers are then easily taken if they can be found: and them they take, they accultome to their own bodies, by given them such meats as doth evacuate all their poison, or at the least drive doth stop up their teeth, as it maketh the harm very small; and so the simple people being ignorant of this fraud, and feening them apparently carrying Vipers about them, did ignorantly attribute a vertue to their natures, which in truth did not belong unto them. In like manner there were (as hath already in another place been saide) certain jugglers in Italy, which did boast themselves to be of the image of Saint Paul, who did do deceitfully carry themselves, that in the presence and sight of many people, they suffered Vipers to bite them without any manner of harm.

Others again when they had taken a Viper, did drown her head in mans sippit, by vettue whereof of the Viper began to grow tame and meek. Besides this, they made a certain oyntment which they set forth to sale, affirming it to have a vertue against the biting of Vipers, and all other Serpents, which oyntment was made in this manner. Out of the oil of the seed of wild-raddish, of the roots of Dragons, the juice of Daffadul, the brain of a Hare, leaves of Sage, Sprigs of Bay, and a few such other things, whereby they deceived the people, and got much money: and therefore to conclude, I cannot find any more excellent way for the taking and destroying of Vipers then that which is already expressed in the general discourse of Serpents.

We do read that in Egypt they eat Vipers and divers other Serpents, with no more difficulty then they would do Eels, so do many people both in the Eastern and western parts of the New-found-Lands. And the very selfsame thing is reported of the Inhabitants of the Mountain Atlas, the which meat they prepare and dress on this manner. First they cut off their heads and also their tails, then they boyle them and salt them, after which they feeth them or bake them, as a man would see the or bake Eles, but sometimes they hang them up and dry them, and then when they take them down again, they eat them with Oyl, Salt, Anyfeedes, Leeks and water, with some such other observations. Whole diet of eating Vipers I do much pity, if the want of other food constrain them thereof; but if it arise from the intastible and greedy intertemperance of their own appetites, I judge them eager of dainties, which adventure for it at such a market of poyson.

Now it followeth that we proceed to the handling of that part of the Vipers story, which concerneth the venom or poison that is in it, which must begin at the consideration of temperament of this Serpent. It is some question among the learned, whether a Viper be hot or cold; and for answer hereof it is said, that it is of cold constitution, because it lieth hid, and almost dead in the Winter-time, wherein a man may carry them in his hands without all hurt or danger: and unto this opinion for this selfsame reaason, agreeeth Galen. Mercuriusia maketh a treble diversity of constitution among Serpents, whereof the first are those that with their wound do influe a mortal poyson that killeth instantly, and without delay: a second fort are those that kill but more leisurely, without any such speed: and the third are those whose poyson is more flow in operation then the second, among which he assigns the Viper. But although by this knownes of operation he would enforce the coldnes of the poyson, yet it is alwayes to be considered, that the difference of Vipers, and of their venom, ariseth from the place and region in which they are bred, and also from the time of the yeer wherein they bite and wound, so that except they fortune to hurt any one during the time of the Cunicularia, (in which feason their poyson is hottest, and themselves most full of spirit) the same is but weak, and full of deadnes. And again it is to be considered, whether the Viper harm in her mood and fury, for anger doth thrust it forth more fully, and causeth the same to work more deadly.
Likewise the Region wherein they live, begoteth a more lively working spirit in the Serpent, and therefore before all other, the Vipers of Numidia are preferred, because of the heat of that Country. Also their meat causeth in them a difference of poifon, for those that live in the woods and eat Toades, are not so vigorous or venemous, but those that live in the mountains, and eat the roots of certain herbs, are more poiyonful and deadly. And therefore Cardan relateth a story, which he faith was told him by a Phcenician, that a Mountain-Viper chafed a man so hardly, that he was forced to take a tree, unto the which when the Viper was come, and could not climbbe up to utter her malice upon the man, she emptied the fame upon the Tree, and by and by after, the man in the tree dyed, by the faavour and secret operation of the fame.

But of the Arabian Vipers which haunt the Bafom-trees, I have read, that if at any time they bite, they only make a wound like the pricks of yron, void of poifon, because while they fuck in the juice of that tree, the acerbity and strength of the venom is abated. About the Mountain Helicon in Greece, the poifon alfo of Vipers is inifirme and not strong, fo that the cure thereof is alfo ready and easie. But yet for the nature of Vipers poifon, I can say no more then Wolfwine hath faid, that it is ofit felt and in it felt considered, hot: and his reafon is, because he fa\w as a combat in a glaffe betwixt a Viper and a Scorpion, and they both perifhed one by the others poifon. Now he faith that it is granted, the Scorpion to be of a cold nature, and his poifon to be cold; therefore by reafon of the antipathy whereby one died by the malice of another, it muft needs follow that the Viper is hot, and her poifon likewise of the fame nature. For a Serpent of a cold nature, killeth not another of the fame nature, nor a hot Serpent, one of his own kind, but rather it fall eth out clean contrary, that the hot kill tho\w that are cold, and the cold Serpents the hotter.

All the Vipers that live near the waters, are of more mild and meek poifon then others. If there be any fuch, but I rather believe there be none, but that the fame Author which wrote of the Vipers of the water, did intend Serpents of the water. But concerning the poifon of Vipers, there is nothing reported more strange then that of Vincentius Bellonensis, who writeth, that if a man chance to tread upon the region of a Viper unawares, it paineth him more then any venom, for it spreadeth it selfe over all the body incruably. Alfo it is written, that if a woman with child chance to passe over a Viper, it caufeth her to suffer abortion, and the Mushrooms or Toade floothes which grow neere the dennes and lodgings of Vipers, are alfo found to be venemous.

The Scythians alfo do draw an incurable and unreffistible poifon out of Vipers, wherewithall they anoint the sharp ends of their darts and arrows when they goe to warre, to the end that if it chance to light upon their adversary, he may never any more do them harm. They make this poifon in this manner. They observed the littering places and time of the Vipers, and then with strengthe and Art, did take the old and young ones together, which they precently killed, and afterward suffered them to lie and rot, or foake in some moist thing for a fea\w on: then they took them and put them into an earthen pot filled with the blood of some one man; this pot of mans blood and Vipers they stoppd very cloe, so as nothing might issue out at the mouth, and then buried or covered it all over in a dunghil, where it rotted and confumed a few daies, after which they uncovered it again, and opening it, found at the top a kind of watery fubftance swimming, that they take off, and mixe it with the rotten matter of the Viper, and hereof make this deadly poifon.

We have shewed already, that there is outwardly a difference betwixt the biting wound of the Male and the Female Viper, for after the male hath bitten, there appeareth but two holes, but after the Female hath bitten, there appeareth foure; and this is also a great deal more deadly then the biting of the male, according to the verfes of Nicander where he faith,

Ferox Viperes quad amica germine perior
Femina: que velati majores accumulat ura,
Sic venenum magis fari necia vulnura mori,

Venemata rurceus in tempe touch natura.

Which may be englified thus,

But of the Viper’s brea\w the female is the worst,
Whic\w as it were, with greater wrath doth burn (curse)
And therefore when she bites, makes bodies more ac-

Which is reported to be true, that the wounds which the female maketh by her biting, being well considered, is more deadly then the wounds which the male giveth: yet for the proportion of the poifon which the male venteth into the wound he maketh, it is more deadly then the females: so that with refepect of quantity: they both say true which affirm either the one or the other. But which sooner is the greatest, it skilleth not much, for both are deadly enough, as may appear by the common symptoms and figues which follow, and also death.

Malthus reporteth a history of a Country-man, who as he was mowing of grasse, chanced to cut a Viper clean afunder about the middel, or some what nearer the head, which being done, he stood still, and looked upon the dying di\w far parts a little while, at last, either presuming that it had no power left to hurt, or thinking it was dead, he took that part in his hand where upon the head was: the angry Viper feeling his adversaries warm hand, turned the head about, and bit his
Of the Viper.

his finger with all the rage, force, and venom that it had left, so that the blood issued out. The man thus bitten for his boldness, did hastily call it away, and began to suck the wound, putting his hand to his mouth, which when he had done but a little while, he suddenly fell down dead.

By the like story unto this, is related by Aetius Lepidus of another, which moreboldly than wise-

ly, did adventure to take a live Viper into his hand upon a wager of money, but as the other, so this paid for his rashness, for the angry Viper did bite him as did the former, and he sucked his wound as did the Country-man, and in like manner fell down dead.

As both which examples, we may well see the danger of the Vipers poison, so that if once it come into the Romack, and touch the open passage where the vitall parts goe in and out, it never stayseth long but death followeth. Wherefore Aetius faith well, that sometimes it killeth within the space of seven hours, and sometimes again within the space of three daies, and that respite of time feemeth to be the longest, if remedie be not had with more eftectual speed.

The Signes or effects of the Vipers biting, are briefly these, first there is fluxeth a rotten matter, sometimes bloudy, and sometimes like liquid or molten fatneffe, sometimes again with no colour at all, but all the flesh about the forefeeth, sometimes having a red, and sometime a pale hue or colour upon it, issuing alfo forth a corrupted matter matter. Alfo it causeth divers little blifters to arise upon the flesh as though the body were all scorched over with fire, and spee-

dily after this, followed putrefaction and death.

The pain that cometh by this Serpents wounding, is so universal, that all the body seemeth to be set on fire, many pitiful noyles are forced out of the partes throat by fene of that pain, turning and crackling of the neck, alfo twinkling and wrying of the eyes, with darkneffe and heavineffe of the head, imbecility of the loynes, sometimes thrilling intolerably, crying out upon his dry throat, and again sometimes freezing at the fingers ends, at leaft fo as he seeleth such a pain. Moreover, the body sweateing a sweate more cold then now it felleth, and many times vomiting forth the bilious tumors of his owne belly. But the colour going and coming is often changed, now like pale, then like black, and anon as green as the rufh of braffe, the guns flow with bloud, and the Lawr it felleth to be infamous, deepneffe and trembling pooffelth the body and feve-

ral parts, and difficulty of making urine, with Feavers, fneezing and shortneffe of breath.

These are related by Aetius, Agicina, Grevium and others, which work not alwayes in every body generally, but some in one, and some in another, as the humours and temperament of nature doth lead, and guide their operation. But I marvel from whence Plato in his Sympoium had that opinion, that a man bitten and poisoned by a Viper, will eli it to none, but onely to those that have formerly suffered of that miserie : for although among other effects of this poison, it is said that madness, or a distracted mind alfo followeth, yet I think in nature there can be no reason given of Platos opinion, except he mean that the patient will-never manifeit his grief at all. And this howsoever alfo is confuted by this one story of Grevium. There was (as he writeth) a certain Apothecary which did keep Vipers, and it happened one day as he was medling about them, that one of them caughthim by his finger, and did bite him a little, so as the prints of his teeth appeared as the points of needles. The Apothecary onely looked on it, and being busied, either forget, or (as he said after ward) felt no pain for an hours space : but after the hour, firft his finger smarrted and began to burn, and afterward his arm and whole body fell to be suddenly distempered therewith, so as neceffity contrayning him, and opportunity offering it elfe, he fent for a Phyfitian at hand, and by his good advice. (chorow Gods mercy) was recovered, but with great difficulty ; for he suffered many of the former paffions and symptomes before he was curre.

Therefore by this story, either Plato was in a wrong opinion, or else Grevium telleth a fable, which I cannot grant, because he wrote of his owne experience, known then to many in the world, who would quickly have contradicted it : or else if he had confented to the opinion of Plato, no doubt but in the relation of that matter, he would have expreffed alfo that circumftance.

Thus then we have, as briefly and plainly as we can, delivered the pains and tormentes which are cauoy by the poison of Vipers ; now therefore it followeth, that we alfo briefly declare the vertue of fuch Medicines, as we find to be applid by diligent and careful obseruations of many learned Phyfitians, against the venom of Vipers. Firft of all they write, that the general rule muft be obser-

ved in the curing of the poison of Vipers, which is already declared against other Serpents, namely, that the force of their poison be kept from spreading, and that may be done either by the preface extraction of the poison, or else by binding the wounded member hard, or else by cutting it off, if it be in finger, hand or foot.

Galen reporteth, that when he was in Alexandria, there came to the City a Countryman which had his finger bitten by a Viper, but before he came, he had bound his finger close to the palp of his hand, and then he theewed the fame to a Phyfitian, who immediately cut off his finger, and so he was curre. And besides he telleth of another country-man, who reaping of Corne, by chance with his sickle did hurt a Viper, who returned and did raze all his finger with her poisonfull teeth. The man presently conceiving his own peril, cut off his own finger with the fame sickle, before the poi-

son was spred too far, and fo was cured without any other Medicine.

Some time it hapneth that the but is in fuch a part that it cannot be cutoff, and then they apply a Hen cut in funder alive, and laid to as hot as can be, alfo one muft fift wath and anoint his mouth with oy, and fow suck the poison. Likewife the place muft be scarified, and party fed and diered with old Buter, and bathed in milk or Seawater, and be kept waking, and made to walk up and down.
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It were too long, and also needless, to express all the medicines which by natural means are prepared against the poison of Vipers, whereof seeing no reasonable man will expect that at my hands; I will merely touch two or three cures by way of history, and for others, refer my Reader to Physiades: or the Late Discourse of Caracius. In Noroberia, the country of that great and famous Gellius who translated Avicen, there is a fountain, into which if any man be put that is flung or bitten by a Serpent, he is thereof immediately cured; which Amatus Lusitanus approveth to be very natural, because the continual cold water killeth the hot poison. The fame Author writeth, that when a little maid of the age of thirteen yeares, was bitten in the heel by a Viper, the legge being first of all bound at the knee very hard, then because the maid fell distraft first he caufed a Surgeon to make two or three deeper holes then the Viper had made, that fo the poison might be the more easily extracted, then he scarified the place, and drewd it with cupping-glasses, whereby was exhausted all the black blood, and then also the whole leg over, was scarified, and blood drawn out of it as long as it would run of it own accord. Then was a plaister made of Garlick, and the sharpest Onions rolled, which being mixed with Triacle, was laid to the bitten place. Also the maid drank three daies of Treacle in wine, and foure hours after a little broth made with Garlick.

The second day after the abatement of the pain, he gave her the juice of Yew-leaves falling, which he commendeth as the most notable Antidote in this kind, and so made a second plaister, which lay on three days more, and in the mean time the drink falling every day that juice of Yew-leaves, whereby her trembling and distraft etate was abated, but from the wounded place till flowed matter, and it looked black. Then the four next daies, the said matter was drawn out by a linnen cloth, wherein was Goates dung, powder of Lawrell, and Euphorbium in Wine, all mixed together, and afterward he made this ointment, which did perfectly cure her, Res: of long Arisfaloebiti two ounces, of Briony and Daffadil one ounce, of Galbanum and Myrrhe, of each one ounce, with a convenient quantity of oyle of Baies and Wine. This applied to the bitten place in a linnen cloth, and tentures twice a day, did perfectly recover her health within a month.

Rhus Viperis Eau ague cured himselfe, with binding his finger hard that was bitten, and applying to it Triacle dissoyled in Aque vita, and drunk up in linte or bumball: and he advieth instead of old Triacle, to take M thứdlate. Gofer faith, that he saw a maid cured of the eating of Vipers fliehs, by being constrained to drink Wine abundantly. Theophrastus and Aelopides do write, that many are cured by the sound of good Musicke, as the like is already shewed, in the cure of the poifon of the Potentium: and no marvlss, for Ipmenias the Thican affirmeth, that he knew many in Beuta, that were cured of the Sciratica, by hearing of the musical found of a good pipe.

Of the Medicines which may be made of the Viper.

The eating of Vipers is an admirable remedy against the Leprose. And being prepared after that fort as was mentioned immediately before in the former Section, they are miniftred to the sick persone sitting in the sun, yet his head must be well covered or shadowed. Neither indeed to eat Vipers alone, or twice is sufficient, but it must be done often, fith it is without danger, and moreover bringeth great commodity. And let the Vipers be new, and taken out of moist places, for those which are bred near the Sea, are very thristy and dry. The broth also of sod Vipers, is for such persones good supping meat.

The flesh of Vipers is in temperature apparently hot and dry, and purgeth the whole body by sweat; hence upon many fore tormented with Leprose, by eating and drinking them have been cured.

Avertisse faith, the flesh of Tyrreni clenfeth Leprose, because it driveth the matter thereof to the skin, and therefore they that drink it, fall first into the passion of Tyrria, that is, the pilling of the skin, and after are cured of it.

Chufe the Vipers of the Mountain, especialy being white, and cut off their heads and tails at once very speedily, and then if the issue of blood be plentiful, and they continue alive, and wallowe to and fro a long time, there be good. After their beheading, let them be made clean and sod, and let the diseased party eat of them, and by their broth.

And by the drinking of wine wherein a Viper dieth or liveth, certain have been cured accidentally, or by an intent to kill them.

The Leaper must first drink the broth of Vipers decocted, in manner as afore-faid, then let him eat the flesh, no other wise then as mutton or fowles, which daily men dine with, but falling and in the morning this flesh must be eaten, halfe a Viper at once, and sometime a whole Viper, according to the strengt of the party diseased. After the eating whereof, he must not eat or drink in the space of fix hours: but if he doe sweat, it is most expedient that in his sweat he look to himself very carefully. And the skin is worn to be off it the Leaper, as it usually befalleth Serpents.

A man may easieley see the flesh of Vipers to be hot and dry, when they are dressed as Eels. And that they purge the whole body throw the skin, thou mayst learne even by those things, which my self being a young man, had experience of in our Countrey of Asia, which thing severally and in order I shall relate.

A certain man infected with the diseafe which men call Elephas, that is, Leprose, for a time conversed still with his companions, till by his company and conversation, some of them were infected with the contagion of the diseafe, and he now became lothsome to smell, and filthy to fight. Building therefore
therefore a cottage for him near the Village, on the top of a bank, hard by a Fountain, there they place this man, and daily bring to him so much meat as was sufficient to sustain life. But at the rising of the Dog-star, when by good hap, Reapers reap'd not far from that place, very fragrant Wine was brought for them in an earthen vessel: he that brought it, set it down near the Reapers, and departed; but when the time was come that they should drink it, a young man taking up the vessel, that according to their manner having filled a boul, he might mingle the Wine with a competent measure of water, he poured the Wine into the bowl, and together with the Wine fell out a dead Viper.

Wherefore the Reapers amazed the least, and fearing lest if they drank it, they should receive some harm thereby, chose rather indeed to quench their thirst by drinking water: but when they departed thence, of necessity and in piety, gave the Wine to this Leper, supposing it to be better for him to die, than to live in that misery. Yet he when he had drunk it, in a wonderful manner was restored to his health: for all the scurf of his skin fell off as the flakes of tender shelled creatures, and that which remained, appeared very tender, as the skin of Crabs or Loculce, when their outward shell is taken away.

Another example by a chance not much unlike, hapned in Myia, a Countrey of Asia, not far from our City. A certain Leper went to wash himself in Spring-water, hoping thereby to receive some benefit. He had a maid-servant, a very fair young woman, importuned by divers luters: to her the sick man committed both certain other things pertaining to the house, and also the store-house. When they therefore were gone into the room, to which a filthy place and full of Vipers adjoining, by chance one of them fell into a Vessel of Wine there negligently left, and was drowned. The Maid effecting that a benefit which Fortune offered, filled that Wine to her Master, and he drank it, and thereby in like fort as he that lived in the Cottage, was cured.

There are two examples of experiment by casual occasion. Moreover, I will add also a third, which proceeded from our imitation. When one was sick of this disease, in mine more than the common fort Philosophical, and despising death, took it exceeding grievously, and said it were better once to suffer death, then to live so miserable a life: and drinking Wine so mingled with popion, he became a Leper: and afterward we cured his Leprosie by our acclimated medicines.

Also a fourth man took Vipers alive, but that man had only the beginning of this disease; therefore our care and industry was very speedily to restore him to health: wherefore having let him bloud, and by a medicine taken away melancholy, we had him use the Vipers he had taken, being prepared in a pot after the manner of Eels. And he was thus cured, the infection evaporating through the skin.

Lastly also, a certain other man very rich, not our Country-man, but of the middle of Thracia, admonished by a dream, came to Pergamum, where God commanded him by a dream, that he should daily drink the medicine which was made of Vipers, and outwardly he should anoint his body, and not many days after, his disease became the Leprosie: And again also, this infirmity was afterward cured by the medicines which God commanded.

Matthew Grady fed Chickens and Capons with the broth and fleth of Vipers mingled with bread, Galen, till they cast their feathers, purposing by them to cure the Leprosie.

A certain Noble-woman in this City, infected with this malady (the Leprosie) after divers infortunate attempts of many, came to my hands, in whose case, when generous medicines availed nothing, at last, with consent of her husband, I purposed to try her with Vipers' fleth: whereupon a female Viper being cleansed and prepared after that fort as Galen preferreth in his Book De Terri- statica, mingling the fleth of the Viper with Galangal, Saffron, &c. I fed her very well: then I took a Chicken, which I commanded well to be fed in the juyce and broth of the Viper. And left the should take any harm thereby, I first minified unto her Mithridate, then the Chicken with the broth, by eating whereof she faid she felt herself better: Which when I saw, I took another male Viper, whom I f lod alone without adding any other thing, and the broth thereof I minified to her three days, whereupon he began to sweat extremely, the sweat I restrained by syrup of Violets and pure water. After six days, scales fell from her, and she was healed. Moreover, the day after conceived a man-child, having been barren before the space of forty years.

Autumina Myia a Phyfician, when he met with an incurable Ulcer, he gave his patients Vipers to eat, and cured them with marvalious celerity. When the servants of Graterus the Phyfician fell into a strange and unusual disease, that his fleth fell from his bones, and that he had proved many medicines which profited him nothing, he was healed by eating a Viper dressed as a fift.

Vipers' fleth if it be sod and eaten, cleareth the eyes, helpeth the defects of the linews, and repref feth swellings.

They say that they eat Vipers become lousie, which is not so, though Galen affirm it. Some add Diocorides them to live long who eat that meat, to wit, Vipers. Iobgoma affirmeth the Creti, a kinde of Indian, to live an hundred and forty years. Also he thinketh the Ethiopiaans, and Seres, and the Inhabitants of Mount Athos to be long lived, because they eat Vipers fleth.

The Seythians cleave the head of the Viper betwixt the ears, to take out a stone, which they say Pliny. the devoureth when she is affrighted.

The heads of Vipers burnt in a pot to ashes, and after beaten together with the grooff decotion of bitter Lupines, & spred as an ointment on the temples of the head layeth the continual rheume of Z z z.
The History of Serpents.

The flow of the Viper cureth the Ring-worm. The skin of the Viper beaten to powder, and laid upon the places where the hair is fallen, it doth wonderfully restore hair again.

Some extend and dry whole Vipers, and after beat them to powder, and minifier them in drink against the Gowt. Others about the rising of the Dog-flar, cut off the head and tail of Vipers, and burn the middle, then they give those ashes to be drunk 21 days, so much at a time as may be taken up with three fingers, and so cure the swelling in the neck. Joynets paind with the Gowt, are profitably annointed with Oyl wherein a Viper hath been foded, for this cureth perfectly.

The making of the Oyl of Vipers, is described in these words: Take three or four Vipers, cut off their extram parts, the head and the tail, in length four fingers, divide the relf into four goblets, and put them in a pot open above and below, which pot must be put into another greater pot; then the mouth of them must be well flut with clay, that they breath not forth; then put them into a Caldron full of fething water, and there let them continue boiling two hours in those pots: then will diffil a liquor from the Vipers, which were in the pot open above and below, with that Oily liquor anoint the members of the party molefted with the Palfie, for by a secret property it cureth the grief of that disease.

Of Triacle and Trochuk of Vipers.

Theriaca or Triacle, not only because it cureth the venemous biting of Serpents, but also because the Serpents themselves are usually mingled in the making thereof, it is so named of both significations. Here also we will insert something concerning Trochus of Vipers, which are mingled in the making of Triacle.

Triacle is very ancient, and hath always very carefully, and not without ambition, been refined by the Physitians, till Andromachus Neso his Physitian, added the flesh of Vipers, as the full accomplishment of this drug. The flesh of Vipers alone is mingled in Triacle, and not the flesh of other Serpents, because all the reft have something malignant more then Vipers. Vipers are thought to have leffe poyfon in them then other Serpents.

Vipers for Triacle must not be taken at any time, but chiefly in the beginning of the Spring, when having left their dens, they come forth into the Sun-shine, and as yet have not poyfon much offensive.

Take female Vipers, for we must take heed how we take male Vipers for the confection of Antidotes. For Trochus all Vipers are not convenient, but thofe which be yellow, and of the yellow, the females only.

Vipers great with young you must refufe, for being pregnant, they are more exasperate then themselves at other times.

Of Vipers be made Trochus, which of the Grecians are called Theriac, four fingers being cut off at either end, and the inwards taken out, and the pale matter cleaving to the back-bone: the reft of the body must be boiled in a dish in water, with the herb Dill, the back-bone must be taken out, and fine flowre must be added. Thus these Trochus being made, they must be dried in the shade, apart from the Sun-beams, and being so prepared, they be of very great use for many medicines.

The use of Triacle is profitable for many things, for not only by his own nature it availeth against the biting of venemous creatures and poysons, but also it is found by experience, to help many other great infirmities. For it easeth the Gowt and pain in the joynets, it dryeth fluxes, it very much profiteth men molefted with the Dropifie, leprous and melancholick persons, thofe that have Quartane Agues, or the Jaundife, thofe that have a weak voice, or that spet blood: thofe that are troubled with aking reins, with Dyfentery, with the flone, with fit breath, with passion of the liver or milk, with choler, with heart-ach, with the Falling-fickneffe. It driveth all kinde of Worms out of the bowels. It is the moft sovereign remedy of the Plague.

Even to them that are in health the often use of it is wholesome, for it promifeth long life, and firm health, it consumeth excrements, it strengthenth natural actions, it quickenth the wit, and sharpeneth all the fenses; it preferveth the body from poyfon and other offences, and maketh it scarce subject to danger by such casualties; it begetteth good blood, it corrupteth the air, and waters; neither alone doth it deliver from infant diseases, but also preferveth from thofe that be imminent.
Of the Earth-worm.

Although there be many and sundry sorts of Worms which do contain in them some poiysonous quality, yet for all that, at this time my purpose is to discourse especially of Earth-worms, whereof some are bred only in the earth, and others among plants, and in the bodies of living creatures. Worms of the earth are termed by Plautus and Columella Lumbrici, peradventure as being derived a Lubriciate. They are called also Terra Intestina of the Latiners, as well because they take their first beginning and breeding in the very bowels and inward parts of the Earth, as because being pressed and squeezed between the fingers or otherwise, they do void forth excrements after the fashion of living beasts that have inwards in them. The Greeks call them Gei entera; Hesychius calleth them Embellaw; Brunfelsius Otko in his Physick Lexicon writeth, that they are usually called in the Cilicien tongue Cophagos, fetching the derivation of the word para. To gain, phe.; for they feed upon earth. Of the Englishmen they are called Media, and Earth-worms; of the French, Vert de Terre; of the Germans, Eri wurr, and Erdwurmen, Melet, Ode Regina-wurr, or Renenwurr; of the Italians, Lumbrighe; of the Spaniards, Lumbriques; of the Polonians, Gliti; of the Hungarians, Galizes; of the Arabians they are called Charatih. Manardus in his second Book and 40. Epistle writeth, that in times past they were called Onisculi, and Niscoli.

There are found especially two sorts of Earth-worms, which are either greater or lesser. The greater Earth-worms are somewhat long, almost like in proportion and shape to those round Worms which do breed in mens bodies. They are half a foot long at least, and being stretched out in length they are found to be a foot long; they are of a whitish colour, and sometimes though seldom of a bloody hue: and for the most part they are all adorned with a chain about their necks, or rather they seem to wear a certain collar, wherein there is a little blood contained, and they lack eyes and eye-lights, as all sorts of Worms do.

They breed the slime of the earth, taking their first being from putrefaction, and of the fat moisture of the same earth they are again fed and nourished, and into earth as alfe are resolved. When there falleth any thowre of rain, then this kind of Worm creepeth suddenly out of the earth, whereupon old Euclio in Plautus being very careful of his pot of Gold, speaketh aptly to his Drudge Strobilus in these words:

_Fors, furm Lumbrici, qui sub terra crepfti modo,\nSub modo nafium camparebo, nunc autem cum comparis, peri._

Which may be Englished thus:

_Away, a way thou Worm, late from the earth crept out,\nSafe thou wast unseen, but seen, life fails I doubt._

In Aulularia.

Here Euclio very properly terrneth his Bondman Strobilus, a Worm, because not being espied of his Master before, he suddenly came sneaking out from behinde an Altar where he was hid, much like a Worm, that in moist weather influxeth out of the ground. Those little heaps which are cast up and lie shining and wrinkled before the mouth or edges of their holes, I take them to be their miry excrements: for I cold never as yet finde other excremenitious substance, drothy matter, or other feculency, but only bare earth in them, whose alimentary juice and moiurne being clean exhausted, they call out the remainder, as an unprofitable burthen, nothing fit for nourishment. At the entrance of their doors, which yet readeeth them to some commodious use, for stopping and damming up their holes that the rain cannot so easily foke in, they are by these means safely defended from many annoyances and dangers, that otherwise might light upon them.

Their delight is to couple together, especially in a rainy night, cleaving together until the morning: and in the same they are not folded round about one another like unto Serpents, but are straitly closed together side-wise, and thus do they remain flacking close the one to the other. They fend forth a certain frothy fibre or jelly when that they join together. They do ever keep the middle part of their body within the earth, I mean their hinder-parts; yea even in their mutual joyning together; neither are they at any time so faint gleaved and closed, but with the leaf flitting and motion of the ground that can be imagined, they are straightly-waves severed, withdrawing themselves speedily into their lurking holes. In rainy weather they are whiter a great deal then at other times, unseelie it be when they couple together, for then they appear very red. I myself about the midft of April, did once open a thicke female Worm, and within the flesh I found a certain receptacle ringed round about, and filling up the whole cavity of the body, having a thin membrane or fin enclosing it, and in this aforesaid house-houe the earth which the had fed on, and wherewith they was sustained, was held and contained. Her egges were found to be in a safe place above the recepacle, next to the mouth, there were many of them on a heap together, being all of a whitish colour.

The leffer Earth-worms for peculiarities fake, we with Georgius Agricola will name Aforidere; and these are often found in great numbers in Dung-hills, Mixens, and under heaps of stones. Of this sort some are red, (which we Englishmen call Dugs) and these be they that Anglers and Fishers do.
The History of Serpents.

do so much desire, for Fitches will greedily devour them, and for that end they with them do bait their hooks.

There be some others of thefe leffer Earth-worms that are somewhat of a blew colour; other-fome again are yellow only about the tail: whereupon they have purchas'd the name of Yellow-tails. Some again are ringed about the necks, withall very fat. Some others there be that have neither chains nor rings, and these commonly be more lank and slender of body then the former, and these I judge to be the males. These Worms do specially breed in Autumn, or at the fall of the leaf, by reason then there is but little moisture in the earth, and this is Aristotel's opinion. Both kinds do live long in the water, but yet at length for want of suffulence there they die. They move from place to place with a kinde of reaching and thrumling forwards, for we cannot properly say that they do either rowl or tumble. Olympio in Plautus would go about to make a simple plain fellow believe that Worms did eat nothing but very earth, because he used these words to Chalinus:

Post autem nifs nifs ruri tu erumn comedies: (for thus Lambine readeth)

Ait quafi Lumbricis terram.

In English thus:

And afterward thou nought but Tares shalt eat, Or else like Worms, the earth shall be thy meat.

But by earth here in this place, he understan'deth not pure earth, and such as is without any other mixture, but rather the fat, juicy, and moisture of the fame. And this is the reason, that Earth-worms are not to be found in all soils alike, as in barren, sandy, stony, hard, and bare grounds, but only in fat, gravelly, moist, clammy and fertile. And for this respect England hath many Worms, because both Country and soil are very moist: and this moisture whereon they feed mulf not be falt, lowe; tart, or bitter, but sweet and toothsome: and therefore it is, that Lucretius in his second Book writeth, that Worms are bred moist when it showreth, as in rainy seaons and moist weather.

Quantem in pullos animales dixit ovum
Cerminius altitum, vermeus: effore terram
Intempestivos ejus putor copit ob imbres.

In English thus:

Even as in time of rain, we see
Birds Eggs their young forth hatch,
And Worms in heat of generating be
When they clouds rev do catch.

And to this opinion of Lucretius, Nicander seemeth to lean, when he affirmeth, that these Worms are nourished altogether of the earth that is moisten'd with long rain, or with some smoking shower: for making a difference between the Serpent Serpentes, and the Amphisbenæ, he thus writeth;

Stellicis pacibus, tes elminibos pelei agros
He cai entera get oia trepeli ommemias oia. Id est.
Manubris ligonis latitudo longitudo veris et qua Lumbrico,
Aut terra intemfina, qua imbrubus irrigata terra alit.

That is to say:

As broad as heft of Spade, his length like little Worm,
And fed with dreary earth, moist by clouds and rainy form.

The greater sort of Earth-worms live in the bowels of the earth, and moft of all in an open free air, and where there is some repair and confluence of people. Every morning they withdraw themselves into their secret holes and corners within the ground, fencing the entrance of them with their excrements they have voided forth, in a fair and Sunnhine weather: but in rainy weather they use to stop the mouths of their holes with some Balk or leaves of herbs or trees, being drawn a little inwardly into the earth. They feed upon the roots of thofe Plants which have any sweet juicy or moisture in them; and therefore one may many times finde them amongst the roots of common Meddow-graffe: and they do live for the moft part by the fat moisture of the earth, yet will they also greedily devour crums of white Bread unleavened, as I have often seen. In the Spring time, they first appear to come forth from the bowels of the earth, and all the Winter they lie hid in the ground, but yet if it be a very sharp and pinching cold Winter, and a dry Summer follow, for lack of moisture they do almost all die.

Besides, if you dig into the earth, or make a great motion, trampling, or hard treading upon the same pouring in any strange liquor or moisture into the same, wherewithall they are unacquainted; as for example, the juuce of Wall-nut-trees, the water wherein Hemp either seeds or leaves are
Of Earth-worms.

are foaked, or been laid to rot in common lye, and the like, they will issue out of the earth speedily, and by this means Fisher-men and Anglers do take them.

In like manner, they cannot endure Salt, or aromatical things, nor by their good will come née them, for but touching any of these they will draw themselves on a heap, and so die. Worms are found to be very venemous in the Kingdom of Mogor, and the Inhabitants there do stand in fo great fear of them, that they be destroyed and slain by them when they travel any journey; and therefore they use ordinarily to carry Beefsoms with them to sweep the plain ways for fear of further hurt. Georgius Agricola faith, that the little Worms called Aferides, are not all of one colour: for some are white, some yellow (as I remembred a little before) and others again are very black: and many of these in tilling the earth are caught up by the plough, and many found in divers places all on a heap together. These be they that destroy corn-fields, for by tharing or biting the roots the fruit dyeth.

Some say, that those Worms do moff mischief to corn-grounds, which in some places of Italy the people term Zecarde, and there are thick, almost a finger long, being naturally of a very cold constitution of body; and therefore they never use to come forth of the earth, but when the weather is pailing hot, for then will they come forth, even to the surface of the ground, as it is notably set down, by the famous Poet Homer:

\[
\text{Exs.amos. 1.3.}
\]

\[\text{Vatum Piestis labra rigitur aqua.}\]

In English thus;

By whom, as by an everlastings filling Spring.

With Master liquour, Poets lips are bal'd to sing.

Homer very fitly comparithe Harpalion when he fell down dead amongst his companions, to a silly Worm, when as seeking to escape by flight out of the battle, he was wounded to death by Meriones, shooting an arrow or fleet darr into his hanch or hip, his versus be these;

Meriones d' apionains ite chalke re oifoun.
Koi r'ebale glacon kato dexton autar oifis.
Antikon kato kufun ap' oisone eupheretofen:
Examens de' cat' authi philon en ekerin etiaron.
Thumon apionio, oile xolex epi gaias.
Kelo techno r'd' aima melan ree, deue de gaias.

Meriones autem in absuntum misit areum sagittam,
Et vulneravit oxem ad destrum, ac jagitata.
Et regione per versusam sub as penetravit:
Refrains autem illic berorum inter manum sociorum
Animam effulent, tanquam vermis super terram
Faciebat extensus: sanguisflit, effuebat, tingebat autem terram.

That is to say;

But ut he went away, behold Meriones
With braccard, did his right hip-bone wound,
Which near the bladder did the bone through pierce;
In friends deer bands, he dyed upon the ground.
So slreeth upon the earth as Worm he lyed.
Black blood out flowing, the same bedeys.

Mark well the slenderneffe of this comparison, whereby he would give us to understand the base estate, and faint heart of Harpalion. For in other places having to write of noble, valiant, and magnanimous persons, when they were ready to give up the ghost, he uethe the words Sper-duceas, Browhen, and the like to these, secretly intiminating to us, that they fell not down dead like impotent Cawards, or timorous objects, but that they raged like Lions, with grinding and gnashing their teeth together, that they were blafed, benumbed, or suddenly deprived of all their lives and tenes, &c. But here this pusillanimous and fordiduous minded man Harpalion, seemed to be disgraced by his remembing to a poor Worm, being peradventure a man of fo small effimation, and vile condition, as that no greater comparison seemes to fit him. It seemeth he was a man but of a faint courage, and very weak withall, because sharking and thrusting with his Spear or Javelin at the Shield or Target of Arieres, he was not able to strike it through. But although this famous Poet doth so much seem to extenuate and debase a weak Worm: yet others have left us in their writings such commendations of their singular ufe and necessity, for the recovery of mans health (then which no earthly thing is more pretious) and have so nobilitated the worth of these poor contemptible Creatures, as I think, nature as yet hath scarce given any other fimple Medicine, or experience found out by tract of time, nor knowledge of plants by long study hath revealed; nor Paracelsus by the Dithilations of his Limbeck hath made known to the world, any secret ended with so many vertues and excellent propereties against so many diseases: and for proof hereof, it shall not be bedefe the purpofe to examine and describe the rarest and most probable that are recorded amongst the learned.
Earth-worms do mollifie, conglutinate, appease pain, and by their terrestriall, and withall water-in humidity, do counterper any affected part, orderly and measurably moderating any excelle whatsoever. The powder of Worms is thus prepared: They use to take the greatest Earth-worm that can be found, and to wrap them in Muslin, suffering them there to remain for a certain time, thereby the better to purge and cleanse them from that clammy and filthy slimynesse, which outwardly cleaveth to their bodies. When all this is done, they press hard the hinder-part of their bodies near to the tail, squeezing out thereby their excrements, that no impurity so near as is possible may be retained in them.

Thirdly, they use to put them into a pot, or some fit vessel with some white Wine, and a little salt, and straining them gently between the fingers, they first of all cast away that Wine, and then do they pour more Wine to them, and after the washung of the Worms, they must also take away some of the Wine, for it must not all be poured away (as some would have it) and this must so often be done and renewed until the Wine be passing clear without any filth or drossineffe, for by this way their filthy jelly, and glutinous evil quality is clear loft and spent. Being thus prepared, they are to be dryed by little and little in an Oven, so long till they may be brought to powder, which being beaten and feared, it is to be kept in a Glasse vessel far from the fire by it self. A dram of this powder being commixed with the juice of Marigolds, cureth the Epilepsie, with some sweet Wine, as Muscadel, Baltard, or the Metheglin of the Welchmen. It helpeth the Dropifie. With white Wine and Myrrhe, the Jaundife, with new Wine, or Hydromel the Stone; Ulcers of the Reins and Bladder: It layeth also the loofenesse of the belly, helpeth barrenneffe, and expelleth the Secondine, it affwageth the pain of the hanch or hip; by some the Salsitude; it openeth obstructions of the Liver, driveth away Tertian Agues, and expelleth all Worms that are bred in the Guts, being given and taken with the decocation or diliffled Water of Greman.de, Worm-wood, Southern-wood, Garlicke, Scorbus, Centory, and such like.

The decocation of Worms made with the juice of Knot-graffe, or Common, Solamons Seal, or Sarsaparilla compound, cureth the disease termed by Physicians Diabetes, when one cannot hold his water, but that it runneth from him without flay, or as fast as he drinketh. A Glyster likewise made of the decocation of Earth-worms, and also taken accordingly, doth marvellously affwage and expelle the pain of the Hemorrhoids. There be some that give the decocation of Earth-worms to thowe persons that have any congealed or clotted blood in their bodies, and that with happy success. The vertue of Earth-worms is exceedingly set forth, both by the Grecians and Arabians, to encrease Milk in womens breasts.

Hieronymus Mercurialis a learned Physician of Italy, advieth Nurses to use this confection following in case they want milk, always provided that there be not a Fever joyned withall. Take of the Kernels of the fruit of the Pine-tree, sweet Almonds, of each alike, one ounce, seeds of Fennel, Parsley, and Rapes, of either alike one dram, of the powder of Earth-worms washed in Wine, two drams; with Sugar so much as is sufficient, to be given the quantity of a dram or two in the morning, and after it drink some small Wine, or Capon-broth boyled with Rape-seeds and Leeks. Against the Tooth-ach the same powder of Earth-worms is proved singular, being decocted in Oyl, and dropped a little at once into the ear, on the same side the pain is, as Pliny witnesseth, or a little of it put into the contrary ear, will perform the same effect, as Diaforesides telleth. And thus far of Earth-worms taken into the body, and of their manifold vertues, according to the evidence and testimony of Diaforesides, Galen, Aetius, Paulus, Egeria, Myrtopus, Pliny, and daily experience which goeth beyond the precepts of all skilful Musters: for this is the Schoolmistris of all Arts, as Manilius in his second Book hath written;

*Per varios uos artem experientia fecit,  
Exemplo muniram viam.*

In English thus;

*Experience teacheth art by use of things,*  
*When an example plainly so forth brings.*

Being also beaten to powder, and outwardly applied, they do close and folder up wounds, and conglutinate sinewes that are cut, and consolidating them again in the space of seven days, and to perform this cure the better, Democritus advieth to keep them in Honey. The ashes of Earth-worms duly prepared, cleaneth Sordious, stinking and rotten Ulcers, confumung and washeng away their hard lips, or callous edges, if it be tempered with Tar and Simbium Honey, as Pliny affirmer Diaforesides faith, that the Honey of Similia was taken for that of Simbium in his time. Their ashes likewise draweth our Darts or Arrows shot into the body, or any other matter that sticketh in the skin, if they be tempered with Oil of Roses, and so applied to the place affected. The powder also cureth Kibes in the heels, and Chibblans on the hands, as Marcellus telleth, for hurts that happen to the sinewes when they are cut in pieces, Quinimum Serenus hath these verces;

Profuerit terrae Lumbrios indurae tritos,  
Quis vetus & rancor sociari avangia debet.
Of Earth-worms.

It is good (faith he) to apply to finews that are disfected. The powder of Earth-worms mixed and wrought up with old, rammith, and unfavor Barrows gresce, to be put into the grief. Marcellus Empiricus, Besides the powder of Earth-worms and Axunger, addeth further, Grounnwell, and the tender tops of the Box-tree with Oibumun : all these being made up and tempered together to make an Emplaster, he counselleth to be applied to finews that are laid open, cut alunder, or that have received any puncture, or suffer any pain or aking whatsoever. Phony faith, that there cannot be a better medicine found out for broken bones, then Earth-worms and field Mice dried and pulverized, and so mixed together with Oyl of Rofes, to be laid in the form of an emplaster upon the part fractured. Yea, to allwage and appease pain, both in the joynts and in the finews of Horses, there hath not been found out a more notable Medicine, as we may well perceive by the writings both of Eafius, Abylus, and Didymus : whereupon Cardus hath observed, that all pains whatsoever may be mitigated by their apt ufing. Cardus Chafus faith, that the Indian can make an excellent unguent of Earth-worms against the difafe called Eryspelas, being a swelling full of heat and redneffe with pain round about, commonly called S. Antonius fire : And thus it is prepared : They flitl take Earth-worms alive, feeding them either with the leaves of Musa, or else with fine Meal, until by this means they grow fat, afterwards boiling them in an earthen vefel, (remembering ever to feem the fame) they do drain them, boyling them yet again, to the confidence almoft of an emplaster, which if it be rightly prepared is of a yellow colour. And this Medicine may well be used for any burning or fcaling. My purpofe is not to vouch all those authorities I might, concerning the admirable Nature and vertue of Earth-worms: for lo I think I might alledge fix hundred more, which is not meet to be inferted in this place. I will therefore now passe to their qualities and medicinal ufe for irrational creatures.

Pelagius much commendeth Earth-worms as an excellent medicine for the Bots or Worms that are in Horses, and in the bodies of Oxen and Kine, afffirming that the belt way is to put them alive into their Nothirs, although without question it were far better to convey them into their maws by the means of fome hore. Tardinau advifeth to give the powder of Earth-worms with fome hot fleth, to Hawks when they cannot exonerate nature (or how Faulkners teem it, I know not.) For that (faith he) loo fen their bellies. Moles do also feed full favorly upon them, and if they fall a digging, it is strange to fee with whatudden haft and speed then poor Worms will infamous out of the ground. In like fort Hogs and Swine (as Varror writeth) by their turning upon the mud, and rooting in the earth with their fnows, do by this means dig up the Worms, that they may eat them.

Albemus Magnus faith, that Toads do feed upon Worms. Bellonius faith, that Lizards and Tanentims, that the Sea-fiyth called Gryff or Empire, doth greedily devour them, and finally experience it felf witnefleth, that Frogs, Eels, Gudgeons, Carps, Breams, Roches, and Trowts, do fatisfie their hunry guts by feeding upon them. Arifotle in his eighth Book De Nat. Animal Cap. 3. describes a certain Bird that liveth in the waters, which Gaea interpreteth Capella, though the Philofopher calleth it Asis, and fome have called it Uthelius, that liveth for the moft part upon Worms: yea, Thrufhes, Robin-red-rafts, Mun-murderers, and Bramblings, Hens, Chaffinches, Gnat-snappers, Bull-finches, and all forts of Crows will feed upon them; and therefore it is that there be more Crows in England, than in any other Country in the world, refpecling the greatneffe,because here the boif being molif and far, there is abundance of Earth-worms serving for their food, as Pol- devus Virgilii in his fift Book of the History of England, (which he dedicated to King Henry the eighte) hath excellently delivered it.

The people of India, if we will credit Manoeus, do make of these Worms divers juncates, as we do Tarts, Marchpanes, Wafers, and Cheefe-cakes, to eat instead of other dainties. And the inhabitants of West-India do devour them raw, as Francis Lopes teelfith. The people of Europe in no place that ever I heard or read of, can endure them to be set on their Tables, but for medicinal ufe, only they defire them. Plutus ufed in head of a proverb this that followeth;

None ab transfensa hic turdus Lumbriicum petis.

It is an allegory taken and borrowed from a gin or snare wherewith Birds are taken: by which Chryfus the bond-man bringing certain Letters to Nicobulu an old man, dignifith and givet warning, that the weak old man was by the reading of the letter no otherwife enframed, intangled, and deceived, then fome Birds are taken by subtle and crafty fliers. For Tranfensa is nothing but a deceitful cord stretched out to take Birds, especially Thrufhes or Mavifles withall, and Worms is their proper food, which while they endeavour to entrap, they themfelves are deceived and taken. Surely I fhould not think that thofe Fishers and Anglers be very wife, who to take Worms, ufe to pour lye or water into the earth wherein Hemp, Southern-wood, Centory, Wormwood, or Vermin have been long fofaked, or any other fpangle moifure, cauine them by this mean to infuce forth out of the earth, for the Earth-worms by this kind of dealing being made more bitter, unfavourable, and unpleafant, no fishers will once touch or eat them, but rather seek to avoid them. But contrarywise, if they will let them lie a whole day in Wheat-meal, putting a little Honey to it, and then put their books with them, they will be fo sweet, pleafant, and delectable, as that the unwary fisher will sooner bite at it, then at Ambrosia, the very meat of the Gods.
Earth-worms do also much good to men, serving them to great use in that they do prognosti-
cate and foretell rainy weather by their soilain breaking or sifting forth of the ground: and if
none appear above ground over-night, it is a great signit will be calm and fair weather the next
day. The ancient people of the world have ever observed this as a general rule, that if
Worms pierce through the earth violently, and in haste by heaps, as if they had bored it through
with some little Auger or Piercer, they took it for an infallible token of Rain shortly after
to fall. For the Earth being as it were imbured, distained, made moist, and moved with an
imperceptible motion, partly the South winde, and partly also a vaporous air, it yeeldeth an
caste passage for round Worms to winde out of the inward places of the Earth, and into the
moist soil, and to midnite store of fat juyces, or fattish jelly, wherewith they are alto-
gether delighted.

Some there be found, that will fashion and frame Iron after such a manner, as that they will
bring it to the hardnesse of any steel, after this order following. They take of Earth-worms
part, of Raddish roots one part, after they are bruised together, the water is put into a
Limbeck to be distilled, or else take of the distilled water of Worms l, iiij. of the juice of Raddish
l, ii. mix them together, for Iron being often quenched in this water, will grow exceeding hard.

Another. Take of Earth-worms l, iiij. distill them in a Limbeck with an easie and gentle fire, and
temper your Iron in this distilled water. Another. Take of Goats blood so much as you please,
adding to it a little common salt, then bury them in the earth in a pot well glased and luted for
thirty days together. Then distill after this the same blood in Balneo, and to this distilled liquor, add
so much of this water of Earth-worms. Another. Take of Earth-worms, of the roots
of Apple-trees of Rispers, of each a like much, distil them apart by by themselves, and in equal por-
tions of this water so distilled, and afterwards equally mixed, quench your Iron in it, as is said be-
fore. Antiquus Galium.

It shall not be impertinent to our matter we handle, to add a word or two concerning those
worms that are found and do breed in the snow, which Theophrastus in Strabo calleth Oipan: but be-
cause it may seem very frande and incredible, to think that any worms breed and live only in the
Snow, you shall hear what the Ancients have commited to writing, and especially Strabo his opinion
concerning this point. It is (faith he) received amongst the greater number of men, that in the
snow there are certain clots or hard lumps that are very hollow, which waxing hard and thick, do
contain the salt water as it were in a certain coffin; and that in the calm and pure air those do breed
worms. Strabo call them Oipan, and Apolloniodes, Vermes.

Aristotle faith, that living creatures will breed also even in those things that are not subject to pu-
trefaction; as for example, in the fire and snow, which of all things in the world, one would take
never to be apt to putrefie, and yet in old Snow Worms will be bred. Old Snow that hath lyen long,
will look somewhat dun, or of a dullish white colour, and therefore the Snow-worms are of the same
hew, and likewise rough and hairy. But those Snow-worms which are found to breed when the air
is somewhat warm, are great, and white in colour, and all these Snow-worms will hardly fir, or
move from place to place. And Pliny is of the same judgement, and the Author of that Book which
is intituled De Platis, falsely fathered upon Aristotle.

Yet some there be that denying all these authorities, and rejecting whatsoever can be objected
for confirmation thereof to the contrary, do stoutly maintain by divers reasons, that creatures
cannot breed in the Snow: because that in Snow there is no heat, and where no quaking heat is, there
can be no production of any living thing. Again, Aristotle writeth that nothing will come of
Ice, because it (as he faith) melt cold: and hereupon they infer that in all reaso, nothing like-
wise can take his beginning from Snow; neither is it credible, that husbandmen would so of-
ten with for Snow in Winter to destroy and confume Worms, and other little Vermine, that else
would prove so hurtful to their corn and other fruits of the earth. And if any Worms be found
in the Snow, it followeth not strightways that therein they first receive their beginning, but ra-
ther that they first come out of the earth, and are afterwards seen to be wrapped up, and lie on heaps
in the Snow.

But by their leaves these reasons are very weak, and may readily be answered thus; that whereas
they maintain that nothing can breed in the Snow, because it is void of any heat at all, herein they
build upon a false ground. For if we will admit credit to Aristotle, there is nothing com-
pounded and made of the three Elements, that is absolutely without heat. And Aristotle in his first
Book De Generatione Animalium, teellith us precisely, that there is no moisture without heat. His
words are Ondi sunt in natura therma. Now Snow is a compact, and fast congealed substanct, and
somewhat moist, for although it proceeded by congelation, which is nothing else but a kind of
exication, yet notwithstanding the matter whereof it first cometh is a vapour, whose nature is
moist, and with little ado may be turnd into water.

I must needs say that congelation is a kinde of exication, but yet not simply: for exica-
tion is, when as humidity goeth away, it putteth forth any matter, but in Snow there is no hu-
midity that is drawn out, but it is rather wrapped in and inclosed more strongly, and as it were
bounded round. Furthermore Aristotle in his first Book of his Meteors faith, that Snow is Nubes
congelata, a cloud congealed or thicked together, and that in Snow there is much heat. And in his
first Book De Generatione Animalium, he further addeth, that the whiteneffe of the Snow is caused
by the air, that the air is hot and moist, and the Snow is white; whereupon we conclude, that
Snow
Snow is not so cold, as some would bear us in hand. I well hold that nothing will take his Original from Ice, in regard of his effectual coldness, but yet snow is nothing nigh so cold as that. So then all the hinderance and let is found to exceed of cold, which is nothing to effectual or formidable in Ice, and the cold being proved to be far leffer, there can nothing be alleged to the contrary, but that it may perpetue.

Now in that Snow is such an enemy to Worms, and many other small creatures, as that for the most part it doth destroy them, yet it followeth not, that the reason of Aristotle is quite overthrown: because (as we daily fee) that those creatures which live in the air, will for the most part be suffocated and die in the water; and contrariwise those that live in the water, cannot endure the air. Yet hereupon it followeth not, that if they be choked in the water, that none at all will live in the water, and the same reason is to be alleged concerning the air. Therefore it is no marvel if those Worms that first breed in the earth, and live in the earth, be killed by the Snow; yet it neecessarily followeth not, that no living creature can take his first being either from one or in the Snow. But if it can, as Aristotle wittreth, it is so far unlikely that the same Snow shoulbe the destroyor of that it first was bred of, as I think rather it cannot live separately, but of necessity in the same Snow; no otherwise then fishes can live without water, from which they first sprung and had their beginning.

And to this opinion leaneth Theophrastus, in his first Book De Caufis Plantarum, whose words be these, Apertum que fieri, tali es, non, ut planta, utiaminita, uti genetmen, en hoc ordinario, quo: For all creatures (faith he) whatsoever seem, both plants to remain, and to be generated and bred, in their own due and proper places. And after this he addeth and urgeth a little further, Abintur men huea lunton; from his own home and special particular place of abode, nothing can suffer, suffer, harm, or be corrupted. And in his first Book De caufa plano, he fetteeth it down more peripatetically, how that Worms which are bred in some special trees, are afterward translated and changed to other trees, where they never came before, cannot possibly live. Wherefore it is more consonant to reason, and more agreeable to common fene, to affirm that those Worms which are found folded and rolled up in the Snow, to have been first bred in the same Snow, rather then to have issu'd out of the earth.

Neither are we to make any question or scruple concerning their food; for there is no doubt, but the mother from whence they proceeded, will provide sufficient nourishment for her own children. For as we said a little before, the Snow is no simple thing, but compacted and concrete together of many, and of this nature ought every aliment to be. Julius Caesar Scaliger is of this minde, that Worms are engendered and brought forth in the very Snow, because there is in it much air and spirit, which afterwards being heated and brought to some warmth together, may cause them to generate; for it is the nature and quality of Snow to make fat the earth, of which fattish moisture or Jelly, there may (heat being joyned) be produced a living creature.

There be some that do constantly hold, that in the mid of certain stones, of which they use to make Lime, there do breed divers creatures, of very different kinds, and sundry proportions and fizes, and likewise Worms, with hairy backs, and many feet, which are wont to do much harm to Furies and Linbckels where they make Lime. Yet Caelinim in his first Book De Metal, chap. 2. thinketh the contrary, as putting us that in Metal-mines, Quarries of Marble, and other fones, there can never any living body be found. And yet in Rocks of the Sea, within the hollow places and rifts of the fones, they do commonly finde certain small living things called Deldith.

I do not doubt, whatsoever he faith to the contrary, but that many creeping, and other living creatures, may be found both in the secret Mines of stone, and sometimes also amongst Metals, although it be seldom seen. And for confirmation hereof, I will alledge one example happening not many years since in our own Countrie. At Harlestone a mile from Holclney in Northamptone, there was a Quarry of free fone found out, of which they digged for the building of Sir Christpher Hattones house, where there was taken up one being a yard and a half square every way at the leat, and being cloven andfurer, there was found in the very mid of ita great Toad alive, but within a very short space after, conning to the open air, it dyed. This fone amongst others, was taken very deep out of the earth, it was split and cut asunder by one whose whole name is Lotte, an old man yet living at this day; it was seen of five hundred persons, Gentlemen and others, of worthy repute and esteem, the most part of them living at this hour, whole attestation may defend me in this report: and surely if Toads may live in the mid of fones, I can see no reason but that Worms may there be found, but as yet I could never see it.

In the year of Grace 970, at what time Romualdus the son of Sergius a young Monk, was advanced by the Nobility of Rome to be their Archbishop, there followed a great death and mur- rein among Earth-worms: after that again enu'ed scarcity and death of all fruits of the earth, as Carolus Signum in his Chronicle of the Kingdom of Italy declareth: Henry Emperor of Rome, the son of the Emperor Henry the third, as Craultius hath written, when he took his voyage into Italy, being suddenly stayed of his intended course, with an Army sent against him by Matild, that he shoulde passe further then Lombardy, yet having taken Mutina, a. a. a there
there appeared a strange and uncouth sign in the air, for an innumerable company of Worms, smaller and thinner than any Flies, did fly about in the air, being so thick that they might be touched with any small flick or wand, and sometimes with the hand, so that they covered the face of the earth one mile in breadth, and darkened likewise the air two or three miles in length. Some did interpret it as a sign or fore-telling, that some Christian Prince should go into the Holy-land.

In the year of our Lord God one thousand one hundred and four, there were seen divers fiery and flying Worms in the air, in such an infinite multitude, that they darkened the light of the Sun, seeming to deprive mens eye-sight thereof; and shortly after this monitory and unnatural wonder, there followed other strange and seldom-seen prodigious sights on the earth: and what a boisterous storm of troubles, and raging whirl-winde of War and blood-shed shortly after ensued, the event thereof did plainly manifest.

FINIS.
A Physical Index, containing plentiful Remedies for all Diseases incident to the Body of Man, drawn from the several Creatures contained in this First Volum.

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**Note:** The table is a section from a medical index, listing various medical conditions and their symptoms or treatments. Each term is followed by a page number indicating where more information can be found. The index is from a historical medical text, likely from the 17th or 18th century.
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FINIS.
THE THEATER OF INSECTS:
OR,
Lesser living Creatures.

As,
BEES, FLIES, CATERPILLARS, SPIDERS,
WORMS, &c. a most Elaborate Work.

By THO. MOUFFET, Doctor in Physick.

LONDON, Printed by E. C. 1658.
To the Noble Knight, and the Kings chief Physician, Dr. William Paddy:

Theodore Mayerne, Knight, Baron of St. Albons, and Companion to the chief Physicians in the Court of Britain, wisbest much health.

Our Countryman Monfett, a notable ornament to the company of Physicians, a man of the more polite and solid learning, and well experienced in most Sciences, had formerly entituled this work of Insects to the ever famous Elizabeth, (who was wife above her Sex, valiant, born to reign well, and ruled so many years by the Vores of her Subjects, and by her own undertakings and actions, that were so successful that they were envied at,) it was begun by others, but augmented by him, polished, and as it now comes forth exactly perfected, and he thought it no indignity to Dedicate to the greatest Prince the miracles of Nature, which are most conspicuous in the smallest things; which exhibits the infinite power of the supreme Creator of all things, and raise the minds of Princes who are the children of the most Highest, to the cause of all causes, that they may in all places acknowledge the presence of the Deity, and his bountiful hand in his singular direction in respect of them, and his influence that acts by election, and may adorn him with an humble, as with a grateful mind; so weighing by reason the degrees of proportion, that he is most obliged who hath received most. The Author before he could accomplish this purpose, died; he was worthy to have lived longer for the advantage of Art and Learning. Thus the Book was left after his death to his Heir, who had a smaller estate than joined with the name of his Father, or his merit required, and his many watchings and labours sustained for the publick good, in curing of the sick, justly deferred. Fortune is blinde and will hardly favour those that are the best but against her will, as if it were disagreeing and disseminating that there should be any commerce between Pluto with Apollo, Minerva and Mercury. Elizabeth being then holding the reins of the British Empire piously and justly, and ruling peaceably amongst the sorts that at that time shook all Europe, having weeded out by his Majestick Scepter, and by the providence of his soul which was prudent even to miracle, all Monsters, which endeavoured to shake the foundations of the Kingdom by Treason, Deceit, Wickedness, Lust, and Wrath. The Overseers of this Orphan left in a very poor condition, were resolved to Dedicate this learned Work to this Noble Heros, who was no less famous for his Learning than for a concourse of all Virtues that met in him: but great poverty at home, delayed the busines, and hindered this windy intention from taking effect, and the off-spark from coming to the light. So the Book lay for a long time in obscurity under the custody of the friends of the Author departed, until such time as it was offered to me by Darnells, who was formerly his Apothecary, and a very honest man, who wished well to his Master being dead, and was very desirous of his glory; so it lay for some years in my Study cast aside in the dust among Worms and Moths; truly it was no fault of mine, but of the Printers, who were so greedy of Money, that though in many Countries I invited them by my Letters, and did solicit them to receive the Orphan, yet they refused (as they said) to take upon them an unthankful busines; they were not pleased with the benefit of a noble Art, unless it would pay more than the straight. Of the times wherein the pains of learned men are valued at the price the work will be sold for, and the money that must be laid out for ink and paper, or by the depraved opinion of the vulgar (who commonly applaud what is worst) and not by the essence of the thing itself, or dignity of the subject, or the solid explanation of the same! Then there was an Epistle prefixed to the beginning which men call Dedication, which being it was to carry the name before it of one of the foresaid Princes, the Edition seemed to come forth unseanably after they were both dead. Perchance some other man would have catch'd at this occasion, to have brought it to King Charles, the great Son of a great Fa-
ther, under whose fortunate reign in his Kingly person, all Kingly virtues run together in troops, each striving to have the upper hand) and kneeling down before his Majesty, would have offered unto him, in hopes of a reward, another mass Works would with a falte cover of commendations, or obscured with the great smoke of courtly eloquence. But I have no such genius, for though I have not lived hitherto unwellcome to Princes, yet I have learned by long practice, that we must use their favour soberly, and never to abuse their ears or eyes, and though you do know efface entrance and fit times to come into their presence, yet opportunity is always unfeasable, and especially that which hires mercenary Mules for money to fet them forth, which are branded with marks of infamy. Do not think that I depret to much from this Work that I think it not worthy to carry the name of a King in the Frontispice, and might live in prouck under the protection of so ambitious an Incription; but I held it no lefs than sacrilegious to name the childe instead of another of my own accord, or to bring a deac person upon the ftage, as to what concerns the exposition of the Argument, and with other birds feathers in the very entrance of the work foolishly and vainly to pride myself: yet that the Book might come forth evry way compleat, and that the Reader who is a lover of the custome may not desire an Epiftle, or complain that there is one wanting, according to my manner (wherewith I honour great men with the honour that belongs unto them, but my friend I respect above all, and that continually) I would prefix to this Natural and Phyfical History the famous name of some man, who by the common content of the Learned, is well acquainted with both, and who is joinced unto me by no ordinary alliance, who is dear to all good men, and eminent for his own endowments; which office of Reverence and good will may testify to posterity, in what esteem such men are with me, who are intrinsically furnished with the real tincture of manifold learning, but chiefly with that of the most noble Art of all, which I practise: so I have made choice of thee alone amongst many, that thou mayst be to me in stead of them all, Noble Man, my dearest friend Paddy, who art Knighted by the wiseft Monarch James, who never did any thing vainly, who adornst thy Virtues by thy Titles, and thy Titles by thy Virtues, as our Tho
tius hath written of thee. Thou art he who after the wicked Parricide of Great Henry, formerly my moft milde Matter (which shall for ever convey the said memory of his age to posterity) when I was called by the moft Serene James from the French Court by his own Letters, and by a guide appointed to conduct me into Britain, and was immediately honoured with the title of Companion of the chief Physicians, didst not look upon me with bleer and swoon eyes, with the vipers venom of envy; but thou didst entertain me, being a stranger, candidly, and with a cheerful countenance, as it becomes one of noble Birth, contrary to that of Horace, who accuseth the Britains divided almost from all the world, of fierceness toward strangers. After that, in the many meetings we had amongst sick people, and in my prouce in Physick, when I pleasantly hearkened to the opinions of thole that consulted, weighed them, and as it belonged to my place, concluded what was to be done, thou didst hear me without brawling or contradiction, which is the imbred evil custome of some unworthy Physicians; and thou didst very often approve of my opinion, as confirmant to reason. In the famous Colledge of London, (where as thou wert alwayes moft worthy, fo thou wert of ten President) when I was by the votes of the chief, and first of all by thy suffrage made a Colleague, according to the Kings Character for my place at Court, thou didst willingly suffer me to have the next place to our President: I farther add, that thou didst never oppose thy self to the many petitions or commendations that were offered by me to our moft excellent Colleagues, but thou didst alwayes afford me thine ear to hear me, and thy hands to help me. Lastely thou didst alwayes praise me being absent, and as far as it was thy power, of thy own accord, from the imbred motion of thy noble minde, thou didst defend my good name privately wounded by the calumnies of envious men, and torn by malice, which is the condition of good, and of the greatest Princes) by that authority which thou hast amongst thy own Courteymen of what condition for- ver, and thou wouldst not suffer this scab of backbiting to proceed any farther. O moft excellent Man! what shall I repay unto thee, who as a true Philosopher, haft no defire of vain glory, and such things as make a great shew and are vulgarly praised, bought for, and defined by other men, are now esteemed base with thee? My grateful minde, and moft full of love towards thee, commands me to offer this small token to thee in testi-
mony
The Epistle Dedicatory.

mony thereof, which a cept freely and willingly, and suffer that by this sincerest gift, that wicked laying may be disanuiled, that men of one profession cannot endure one the other. God the best and the greatest hath granted unto the long life, by a prosperous aspect of the Stars, for the good of thy Citizens, whose health thou hast preserved and restored by thy care for many years effectually hitherto, that posterity must justly acknowledge that thou hast lived long, worthy not only of a Garland of oak, but a Statue of gold also, (if our times would afford such honour). Now thou well deserving Captain, discharged by age, thou Champion freed by reason of years with a token of honour, thou conqueror of monsters, that daily spring up with too fruitful an increas for the destruction of mankind, dwellest with thy felt, thy foul yet sustaining thy dry body yeading to awaiting time by degrees very easily, which being defiled with no conditions of her prion, sees the Haven, and is almost come into it; thy minde being abstracted from the sad vexations of humane life: and what time thou hast to spare from divine Meditations, penetrating into all Nature, and the secrets of things, thou dost expatiate into the pleasant green Gardens of various natural Philosophy. Behold here is a most exquisite Garland for thee gathered out of the most secret Orchard of our great Parent, which will not only feed the eyes, but will lead the singular acuteness of thy wit, which thou abounds with, into her most hidden places. Thou being an excellent Anatomist, I beseech thee try if thou canst discover Invisible, the great Stagyrite being thy guide, who did not disdain to fetch into the parts of Animals. Thou shalt finde in the little body of Bees a bottle which is the receptacle of Honey sucked from flowers, and their legs loaded with Siemens which sticks fast to make wax. Also in the tail there is a horny sting full of revenging poylon, that is ready to draw forth as soon as the Bee pleases; but the King of the Swarm is said to want one, for there naturally belongs to the supreme power, who can overthow all when he will at his pleasure, and there ought to be an inbred gentleness, whence it is that Kings by their proper attribute are called Fathers and Parents of the people. In Gnats you shall observe their sounding trumpet that will suck blood out of Animals, and will draw out moisture through the joints of the most fold wood, and wine-vessels. How wilt thou be pleased to see the small proboscis of Butterflies woven always into a spiral line, after they have drawn forth nutriment from flowers, their extended large wings painted by nature's artificial pencil, with paints cannot be imitated; to which the very Rain-bow is scarce comparable;

Which right against the Sun a thousand colours shows.

What a pleasant spectacle will this be when the artificial hands carefully and curiously guide the most sharp pen-knife, and very fine instrument by direction of the light! To behold the pipe of the Grailhoppers that live upon dew, and the organs of the thril found they make, that in the heat of the Dog-dayes incomparably bears upon the ears of travellers, which are so framed, that their concave belly is made vaulted under the Diaphragm, over which is extended a cover of a thin and dry membrane, like to a Drum, which lets in the air by an oblique turning, which being beaten by the regular and successive motion of their wings, and flomach, coming in at a strait passage, and presently dilated, beating against the rough-cast walls of the hollow place, and refracted, makes a sound. To see the horns of the great Beetles, that are like to Stags horns, and with sharpest points are able to make wounds, and the muscles that move them, and ye them on exceeding fast. The Rhinoceros is of the kind of great Beetles. The swelling purifie which is the matter of the silk, and is wound back again into many turnings, by Silk-worms which are chief of all Caterpillars, of divers forms and colours: in which after the time designated for the concoction of their food, which is gathered chiefly from Mulberry-leaves, a tenacious glew or jelly is reserved, untill such time as their ventricle swelling, and nature affecting to attain her end, the Worm by degrees belaceth forth her spittle, the thread whereof growing firm by the air (which is provided to make garments for great men) this little creature dispenceth through her very narrow claws, and spinning with the motion of her head and of half her body, with the keeming of it by the help of her forefeet, she first dispooeth it for the strengthening of her clew of yarn, and after that upon her own sepulchre where she must receive her transmutation. How the Spider thrusts out her excrements by her lower parts of her body, which is drawn...
forth into a web, of which the poor creature frames nets with great labour, which are necessary to sustain her life; and with her long legs that end in sharp claws, the knots them into knots, being continually obnoxious to repair her work. In the uppermost cafes of the green Locusts which feed upon hedges, there are two scales that are hard as horn, the mutual rubbing together whereof by the ministration of the air beaten with their softer wings, make a very sharp sound. The head of all of this kinde is armed, their hinder legs are hard, dry, long, by the vehement thrusting whereof against some firm object, with the help of their most strong tendons they will cast their body a great way, being equally ballanced, and is heavy enough for the proportion of it, like an arrow coming forth of a bow, as it happens to Fleas that leap with a huge force. But which is yet more, besides their pincers which are as sharp as keen razors, where is a direct pilage from their mouth to their tail; the pylorus is compassed about with toothed bars, that answer one the other with a thorny gomphosis, wherewith they destroy whole fields with devouring fore-teeth, like chisels, and grind them as it were in a mill, and very suddenly they void it forth again; their hunger never ceases until the vile creatures have consumed whole Countreys which God is angry with, divine revenge commanding them, and brings to nought that people, who ridiculously threaten heaven with destruction. You shall see the sharp spacers that arm the mouth of the Spiders Phalangia, and by the small wounds they make, a strange venom enters, and penetrates into the center of the body, and sticks fast to the deepset marrow, lasting so long in the subject which receives it as the cruel beast lives; and is exasperated periodically at certain hours, troubling the phantastic of the perfons wounded, which is abated with colours objected like to this Spider; yet it ceaseth not to rage, until mufick caufeth them to dance, and provokes them to sweat abundantly, whereby the paroxysm is dissolved, which the day following returns at the same hour. You shall behold the internal fire of Glow-worms fastned to their tails, and the torches of the Indian Cocuia that shines in the night, and overcomes Cimmerian darknes. And moreover, if you take lentillar opticke Glasses of crystal, (for though you have Lynx his eyes, there are necessary in searching after Atoms) you will admire to see the dark red colour of the Fleas that are curialhers, and their back blishe with brillies, their legs rough with hair, and between two foreyards there stands a hollow trunk to torture men, which is a bitter plague to maids, and is the greatest enemy to humane reft, especially when that men would sleep. You shall see the eyes of the Lice flicking forth, and their horns, their body crannied all over, their whole substance diaphanous, and through that, the motion of their heart and blood, as if it floated in Universe. There will appear to thee the flat bodies of the petulant Crab lice, with their grapples, wherewith they perpetually lance mans skin between the hair with their mouth, and tick on faster than Cockles do to the rocks. Alfo little Hand-worms which are indivizible they are so small, being with a needle pickt forth of their trenches near the pools of water which they have made in the skin, and being laid upon ones nail, will discover by the Sun-light their red heads, and feet they creep with all. And if from the inspection of parts you will recall your minde to consider the generation and beginning of Insects, and will weigh the various trammutations which they undergo, as of Worms into Flies, of Catterpillars (the feveral species whereof have their original from the corruption of feveral vegetables) into Chrystals, (that shine as if leaves of gold were laid upon them) and Butterflies, whose eggs again produce an offpring like Worms, Nature acting successively in a circle, and constantly by a perpetual motion running back into her fell; you will doubtles enter upon a large field of Philosophy concerning three Kingdoms of the universal spirit, (the Vegetable, Animal, and Mineral) equally penetrating, replenishing, and governing, and upon the power and activity of it, introducing divers forms into beings that pertain to each of them, according to the disposition of the matter: also the commerce of all sublunary bodies amongst themselves will exercise your contemplation, which though oft times they seem to fight one against the other face to face, yet they agree in one, and from one the other, all and each of them borrow something. And if Animals and Plants be transmuted, why should that be denied to Metals? which thing, many genuine Minifters and legitimate helpers of Nature boast, and not without reason, that they can do it by Art: and that only by removing of impediments, and by a convenient application together of actives and passives; which being done, the Philosopher leaves the whole work.
The Epistle Dedicatory.

work to Nature only, which by a gentle outward heat, being helped without too much haste, doth raise up an internal fire; which is the Workmaster of the Elixir that must procure health and riches: that I may hifle our Asles, who triumphing in the Lions skin, erct a tumulous and confused furniture in their Laboratoris, and dig forth all things under ground from the very bottoms of Mines, and melt them in the fire, being desirous to make trial of their own dreams.

Their Patrimonies they together pack,
Plying their hidden work with Coles fall black,
When they have spent, and labour'd all in vain,
Nothing they finde, nothing they seek again.

But passing over these blowers of the Asles, if you be pleased to reason deeper concerning Insects; you shall finde what will exercise you in the Monarchical government of Bees, the Democratic of Ants, and the economical providence of them both: of that in gathering and laying up Wax and Hony: of this in replenishing her granaries, and biting aunder the grains of corn at that end where they spring forth, left the provision which is gathered with hard labour, and laid up for winter, by the force of an imbred heat in their work-house under ground (which is hot whilest the Winter lasts) should corrupt, being spoyled by a sudden production, and a plague arising, together with a famine overspreading, should destroy the whole neft. Nor can you lightly pass over the Architecture in filling the cells in the combs of wax, mathematically to an exact Hexagon, in the hollow places of a Waps neft; in the various chambers of the Ant-hill, and winding Meanders in the joyning together whereof he saw granaries, chambers, hospitals, places of burial, besides the innumerable endowments of these indefatigable creatures, their functions and labours, and he could not admire or praze them sufficiently, who had spent a long time in the contemplation of them, thinking it a work worth his pains, his whole life past being employed in this negligent and very idle busines. Silk-worms, Caterpillars, and Spiders, shew their art in spinning, making fnares for Flies, and pitching their nets to provide themselves victuals. The Wood-worms practize graving, with the raps of their mouths piercing into the timber: Ants and Bees, amongst other Insects, will teach men pietie toward old men, tired, sick men, and their own children: Oyl Beetles sacred to Apollo, will teach them to love their off-spring, who never cease for 34 days to row up and down a dung pil, (which is the receptacle of their feed) from East to West, following the Suns motion, until it be fit to hide in the ground for the production of their young, after the space of a Lunar moneth, which nature hath allotted for the forming, and excluding of this Wom, which shall at length become a Fly. Here take notice that the male hath a proflic feed without help of the female, and can generate by itself pithification of matter interceding in a convenient matrix, though it be not animal. But (that which crowns all the meditations of a Christian man, and carrieth him aloft) consider how the Silk-worm makes her self a tomb, that is unpassable, by reason of her woven work that is most compacted within, in which the Worm contracted into it self seems to die, and by a prodigious metamorphosis its born anew a Butterfly, a more noble creature, which by the weaving of its wings flies up into the air toward heaven, whereas before its burial it lived a base creeping creature fastned to the earth, and glued to the food of the ground. See whether a little beast that is obscure, of the kinde of Locusts, living among the stubble of the fields, when she is confumed with extreme leannes (which from the posture of one that is praying, the French men of Narbon call Pregaden) do not teach men to hold up their hands in prayer unto heaven, and admonish them to observe a convenient gesture in offering up their supplications unto God. What think you of the greater Beetle, the Indian Rhinoceros, which being bred without a female (as the rest of the like kindes are) dies, and riseth again out of her own corruption, like a Phoenix, after her chage, when she was supposed to be wholly dead. Lastly, what think you of Flies, which when they are drowned many hours in water, if you bury them in hot embers, you shall revive them again. Truly I doubt not but that amongst those feerious cogitations, (the object whereof will seem not fo serious in respect of other false appearances of men, that are illiterate and unreasonable) thy minde may rise to its original, and fastening thy eyes on heaven inspired by
The Epistle Dedicatory.

God, wilt cry out, O the depth! and with the divine Psalmist wilt return a Psalm of thanks to the Maker of Nature: How wonderful are thy works O Lord! In wisdom hast thou made them all, the earth is full with thy possession. So shall I have whereby I may rejoice; that however the whole course of thy age hath been but one continual act of Philosophy, yet that by the rare advantage of this Present which is curious with variety, I have given thee a new occasion of no lefs solid and profitable, than of pleasant and ingenious meditation. Suffer therefore that a friendly hand may convey into your Library the Offspring of the most learned Muniffet, which is now at last published and brought to light, and amongst so many volumes wherewith thy Study shelves are most excellently furnished, assign a place for it, whereby the Father and the Son. Besides the good things mentioned shall from hence accrue unto thee, and the very great increase thou shalt reap from the hours thou shalt spend in reading the Book, (if I may speak with thee) thy own profit shall not want its advantage, left thy proper benefit should here seem to be neglected. In these leaves thou shalt finde what will drive away the plague of thy delights, those beasts that are the greatest enemies to the Muses and their darlings. I mean the Moths that devour Books, which with a greedy belly and iron teeth (though their bodies be very small) prodigally waste and rend the lucubrations of whole ages. Let those evil beasts that are the most deadly mischiefs of angry nature be destroyed after an ill manner: to prevent the propagation whereof, and to kill their infamous progeny (whilest in the mean time learned writers of Books endeavour to abolish their kind utterly, or their sedulous Collectors do what they can) this Book (which I send to thee as a remembrance of my love, will teach thee in the Chapter that treats of it. But let it suffice, I began with a small pitcher, why should the wheel run till it fill an Amphora? The heat of good will and fruitfulness of the subject carry me away; I must now take off my hand, left my Epistle should proceed absurdly beyond the bounds, which already unawares hath increased into a volume. Believe that I am affectionated to thee, and how well I wist and desire to thee, these lines I have written may speak. What remains of thy daies which God hath appointed thee to run the race of thy life, before thou receive thy heavenly reward, I wish thou maift finith without any pain of minde or body, and that I may speak with Aristotle writing his last Testament, I pray from my heart, that thou maift live longer here, for it is well, but if any thing happen, that thou maift safely arrive and enter gloriously into the harbour of the blessed at the moment decreed. Farewell.

From my Study in the Ises of Mo, and the year of Muses Redemption, 1534.
A Preface upon the undertaking of this Argument;
and of the worth and use of it.

That the History of Insects is worthy of the chiefest Philosophers, the pains of great Aristotle, and Pliny, and of our Wotton in describing them doth sufficiently demonstrate. After their time Conradus Gersner laboured not unfruitfully, to perfect that work which they began, but by reason of his short life, he fainted in the beginning of the race, nor was he able to put an end to it. But when Pennius of blessed memory met with those papers by a better fate, for fifteen years together by infinite reading of all Authors, he enriched the History by the exceeding great help of Quickelbergius, Cluflus, Camerarius, Sir Thomas Knivet, and of his most learned brother Edmund, Jo. Jacob, Roger Broun, Brite, but chiefly of our Brother, and some courtesy of Peter Turner. That is so lamented, that he also was taken away by untimely death, before he had disposed of the matter and framed it to the dignity of this work, which he had heaped up together on all sides: Hence it was that his Letters were full of blots, and confused with doubtful Characters: and they had perished, had not I laid them apart, when they were ready to be cast out of doors, and with a great sum of money had redeemed all the torn pieces of it. For I had rather something should be taken off from my own estate, than from his glory, who had spent so much pains in the description of Insects, and so much money for the Plates engraving, wherefore this Mans and Gersners and Wottons fragments being disposed in order, adding to them the light of oratory which Pennius wanted, I forgot the History, and according to my abilities (which I know how small they are) I at last brought it to a period. At first I was deterred from it by the difficulty of the work, because I saw that Insects are hard to be explained, both in respect of the unusefulness of the subject, and also of the sublime or rather supine negligence of our Ancestors in this point: for they stood still in the very entrance, and they faluted them only by the way, or as the proverb is, at the threshold of the door. I also feared that (which fell out it may be) lest there should want dignity of oratory, for so exquisite a Narration, chiefly when as I oft observed Pennius to be gravelled here, and I seldom went to those that were Artists of words. Also for a time I was detained by examining the causes of Insects; which being unknown, the History can neither be well penned, nor rightly conceived. Moreover friends check me (and that barely) that I did but rough-cast another man's buildings, as though I were one who ought for the Garland in every business, and thirled after glory more than it was fit for me. They said moreover, that since some worthy benefit and profitable end must be proposed to every business that is rightly undertaken, yet none of these was to be found in these imperfect creatures, but I should lose my time, charge and labour exceedingly. By these hindrances I was so as it were made fast to an anchor, and left off for a short time to fail any farther: and sometimes taking up my pen, sometimes calling it away again, I was in divers minds, until that certain reasons averted these flotings of my thoughts, and did again kindle, as it were, a desire in me to hoije up fail again. I opposed against the difficulty of the work, the desire of attempting things that were very difficult; remembering that for nine years Troy seemed to be impregnable, but was taken in the tenth year it was beleaguered. As for the dignity of the style, I was perfuaded that men of a sound judgement would not consider how neatly, but how well I discovered the nature of Insects; for however some mens wain wits, desire much affected eloquence, yet those that esteem of things soberly, altogether reject it. I put off the ignorance of the cause, with the answer of Theophratus, who though he sunk under his too earnest enquiring after them in plants, yet did not conceal so profitable a History. It first sufficed us to have measured the causes by humane capacity and mete-yard; for as it is the part of
The Preface.

of an ambitious man to promise a certain knowledge of them which is only in God; so to have no knowledge of them at all, is the part of a beast. The example of Galen, took away from me the fourth fample I had; who though he added to Hippocrates but a few things, except the grace of Oratory, and did only open that way of Physick which he had set down, yet he is placed in the second rank among Physicians, that many think him worthy to have the first. Which thing I have not only done in this book, (I am willing to speak the truth concerning my own work) but I have inverted entire Histories, and above a hundred and fifty pictures, which Geffner and Pennius knew not; I have mended the method and language, and I have put out above a thousand tauntologies, trivial matters, and things unseasonably spoken: for I have had regard to the squemish stomachs of men of this nauseating age, that not only loose Coleworts twice sod, but even Ambrosia twice set upon the table. Notwithstanding how small forever this my pains may appear, (for it cannot be thought no pains) be that (all make trial in something of this nature, he will rightly perceive my labour, and will of his own accord take heed how he goes to repair old and decayed houses, with new matter; it had been better to have written a new History than to have mended this which was so tattered and confused. As for vain glory, I desire it may be as far from me, as I wish the light of this History may be near to you. I confess that not to love honour is contrary to mine, and all humane nature, yet so that I hold boasting to be among the greatest vices, and I equally reject foolish ostentation in small matters. Socrates, Plato, Hippocrates, have taught us better, who in their times both wrote many things, and were exceeding far from the ambition of glory. I know not whether they were to be numbed among men most desirous of honour, who publishing nothing of their own, make unlearned men to conceive of them, that they abound with hidden learning; as if they were like butterflies, that were so full, that they drop very slowly or not at all. I shall add this concerning the dignity of this History of Insects, (left we should think God made them in vain, or we describe them) that in the wonderful world there is nothing more divine than these, except Man. For however in how they are most object and absurd, yet if we look more nicely into them, they will appear far otherwise than they promise in the bare outside. It oft times comes into my minde (faith Gallifardus) to think of our Italians, who commonly admire vehemently things notable in magnitude, or new and unusual; but things obvious in all places, and that are very small they despise; yet if they look exactly to the matter, it will be easy to observe, that the divine force and power from themselves are effectually in mean things, and they are far more miraculous than those things the world with open mouth repeat so much and admire. If any man bring from far the wonderful Bittour, Elephant, Crocodile, there is no man but runs quickly to see that, because it is a new thing and unusual; and when they have leave to see them as much as they will, they only wonder at their greatness, colour, and such things as fall under the apprehension of their senses. But no man regards Hand-worms, Worms in Wine, Earwigs Fleas; because they are obvious to all men, and very small, as if they were but the parasites of luscious and drunken Nature, and that she had been sober only in making those huge and terrible beasts. Nor is this vice peculiar to the Italians only, but it is common to the English and to all mankind, who that they may see these large beasts that carry towers, the African Lion, the huge Whale, the Rhinoceros, the Bear and Bull, take sometimes a long journey to London, and pay money for their places on the scaffold, to behold them brought upon the stage; yet where is Nature more to be seen than in the smallest matters, where she is entirely all for in great bodies the workmanship is easy, the matter being difficult, but in these that are so small and deplorable, and almost nothing, what care? how great is the effect of it? how unaccountable is the perfection? as Pliny faith. Do you require Prudence? regard the Ant; Do you desire Justice? regard the Bee; Do you command Temperance? take advice of them both. Do you praise valor? see the whole generation of Grasshoppers. Also look upon the Gnat (a little Insect not worth speaking of) that with her slender hollow needle will penetrate so far into the thick skin of the Lion, that thou canst hardly or not at all thrust a sword or javelin in so far. A man hath need of steel to bore into oaks, which the Wood worm can hollow with her teeth as the found can stab, and as if he had Polycletus his graving instrument, she carves out seats. But if I would relate the skill of some of them in building, fighting, playing, working, perhaps I might be thought over-curious in these small things, (of which the Law takes no notice) and more
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more negligent in greater matters. Now I come to their use, and that manifold, and in respect unto God, to Nature, or to Man, very great. For if the Gentiles according to that saying of the Apostle Paul, Know God by the creatures: truly they may hence, as from a higher watch-tower behold his Omnipotence, Majesty, Providence. For some of them are so small, that like those little Callicrates drew, they cannot be seen but with good eyes, and when the Sun shines very bright: as I remember I once saw a Fly far smaller than a Worm in wine. Would you have a Musician? hearken to the Craftsmans, which is always filled with singing, and lives without meat; and by her most pleasant melody challenges the Nightingal. Would you hear a Trumpeter? hold your ear to the Beehive, hear the humming noise: hearken a little to the Goat, in whose small beat the great Master workman hath formed that horrid and clanging sound of the Trumpet. Do you despise a Louse? yet when the Egyptian Magicians deceived Pharaoh by producing the greater creatures, in the forming of this so contemptible a creature, they yielded the garland to Moses. Wherefore Galen (17. de fufu portium) breaks forth mightily into these words, after he had explained the wonderful generation of hairs, and the use of them: faith he, If there be so divine vertue in parts that are so fordid and nothing considerable, how great may we suppose the excellency of the same is which rules in the heart and brain? Truly if a man that is addicted to no feft, would freely enter into the consideration of things, considering the fabric of any even the smallest creature, and that in every part though never so bafe, so great vertue resides, he shall easily understand the excellency of the minde which is in man, and from the principles in physick shall ascend to Divinity, which is far better and more excellent than all Phyfick. I suppose that no nation nor society of men amongst whom there is any Religion of the gods, have any thing comparable to the Eleusinian or Samothracian Ceremonies; yet these do set forth but obscurely the minde of all things which they profess; which is plain enough in the fabric of all living creatures. For you must not think that in Man only the Art of the great Artificer is so great, as I have explained before, but what creature before you would defiect, you shall finde the like art and widdome to appear in it. And such creatures as you cannot possibly defiect, will make you to admire the more, the smaller they are. For if a certain Carver lately obtained exceeding great commendations, and that defervedly, because on a very small Ring he so curiously engraved Phaeton riding in his chariot with four horses, that you might fee their mouthes, bits, teeth, 16 feet, and all their parts exactly framed: truly since all that workmanship had nothing in it more excellent than the leg of a Flea, it is evident that God that made the Flea, hath more Art and Excellency in him, that not only made it, but that he did it without any labour, and when he had made it, doth continually feed and nourish it. Wherefore let us leave off to admire any longer the waft and huge Coloss, and with the chief Master of true wisdom, let us defend from the Cedar to the shrub, that is, from the most highest trees to the most contemptible weeds, or rather the most objeft of all vegetables. And if he thought that the history of the meanest plant was not unworthy of a King to contemplate and write of, how much more excellent are Animals than Plants, so much more doth this work defend the patronage of a King, and philosophical contemplation than that doth. When Heraclides had invited some of his friends to his poor Cottage, they stood only before the door, being afraid to come in because the place was so narrow, or the room so foul: to whom he spake thus: I pray come in, here are Gods also: thereby implying that the greatest God was in the smallest matters; and that there was a spirit in all things, though never so despicable. And truly, if the fabric of Insects were worthy so great and divine Artificer, how can the contemplation of them be unworthy of the understandings of poor contemptible men? Amongst the godfathers of Palestine, God raised great Goliath, a Giant amongst men; yet would he have him overthrown by the sling of one poor shepherd. Amongst the Spanish Pilots, how many tall Mariners there were yet they all submitted to one small Drake, and Neptune himself in a manner yielded up his Name to him. The Oke is great, and grows very large, but God destroys it by the slender Ily, that slings about it, that it might not grow proud of its force and might. Farewel then all those that so much esteem of creatures that are very large. I acknowledge God appears in their magnitude, yet I see more of God in the History of lesser Creatures. For here is more of prudence, sagacity, art, ingenuity, and of certain evident divine being. Wouldst thou praise Nature, Gods ordinary hand; from whence
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Whence wouldst thou take thy beginning better than from Insects & where hast he planted so many senses in a Great, where (how Pity) hath he set the eyes? where the smelling? with what curiosity hath he fashioned the wings? with what great art hath he extended the small legs? and disposed the hungry hollow belly, and hath made it thirsty after man's blood? and as the small beak it hath cannot be seen, he hath so made it double by a reciprocal art, that it should be sharp pointed to enter, and hollow to draw it forth. I let pass that admirable variety, commodines, and secundity that is in Insects, which commend the riches of quickening Nature in greater multitudes, and set forth unto us the great plenty of it, which cannot be exhausted. If you consider men, as they cure almost all the diseases of men's bodies, (as I shall declare more at large in their History) so they furnish their minds with variety of examples of virtues, whereby they may instruct their souls, and teach them, that otherwise would be very wicked. Wherefore Solomon the principal Master of true wisdom amongst men, sends sluggish to the Aعش hill, and simul- taneous people to the bands of Locusts, and incites mortal men to the contemplation of the Spiders in their houses, that from the School of Insects we may learn virtue, and may lift up our eyes unto the power of God, which are too much turned away from him. Go so, faith Tertullian, Om: thou relief upon thy own strength, and distrust God, yet consider that there is so great strength in the smallest creature he hath made, that thou canst not endure it, nor ever be able to do as much. Imitate if thou canst the Spiders curiosity, endure the sting of the Spider Phalangium, avoid the nastiness of Lice, take a Great out of thy breast, sleep when Fleas or Wiglice bite fiercely, keep thy trees safe from Cater- pillars, drive away Weevils, Trees-worms, Vine-worms, and Timber-worms: wherefore as God shows his power more in this more notable Article of Insects, so his great mercy is more apparent, because there is hardly any disease of the mind or body, but a remedy may be fetched from this store-house to cure both. If men should deny that they contribute very much to feed, and fat, and cure many other creatures, Birds and Fishes would plead for them, and the brute beasts that feed on grass would speak in their behalf: wherefore though with many every thing that is new, or hard to obtain, is most valued, and this is excelled by the perseverance of wicked men, and ignorance of unlearned men, to be a work of curiosity, ostentation, and of no profit,

Yet see the shape of things that are so small,
Nature, and Fate, and great original.

Wherefore I exhort these chief men, which I named at the beginning, who have deserved excellent well in the History of Insects, by communicating both the things themselves and their pictures, that with that humanity they have been asfisting to me, and to Pennius Historico, they would continually proceed in the same for the augmenting of this work: for so shall they be truly accounted, as they are, Physicians sons, and shall most amply set forth the glory of God and Nature. To which if I may appear to have had as much regard as I have had to the certain profit of men by this work, I shall not regard the envy of any man, for I never studied to please all men, and yet I always endeavoured to offer unto the Creator of all things, some part of thankfulness.
THE THEATER OF INSECTS:

OR,

Of lesser living Creatures.

CHAP. I.

Of the Names, Description, and Differences of Bees.

All Insects, Bees are the principal and are chiefly to be admired, being the only creature of that kind, framed for the nourishment of Man; but the rest are procured either to be useful in physick, or for delight of the eyes, the pleasure of the ears, or the compliment and ornament of the body; the Bee doth exceed them all in every one of these.

The Grecians give divers names to Bees according to the diversity of Nations, Countreys, and places; for divers nations do attribute divers names to them. But the most common and vulgar name is 

The Name.

Hellenes, 

Deborah. 

Arabians, 

albara Nabalea Zabar. 

Illyrians, 

Weskela. 

Ethiopians, 

api, api, una stichi, moscatella, api a scoppa, pecoly. 

Spaniards, 

Abeia. 

They are called by the

Hebrews, Deborah. 

Arabians, 

albara Nabalea Zabar. 

Illyrians, 

Weskela. 

Ethiopians, 

api, api, una stichi, moscatella, api a scoppa, pecoly. 

They are called by the

French, mouche a miel.

Germans, 

ein ymme lynte.

Flanders, 

Bir.

Polonians, 

Pezzara.

Irish, 

Canni.
The Theater of Insects: or, Book I.

The Bee is an Insect living creature, four-winged, bloudedeste, skilful in his artificial making of honey. For he that writ the Garden of Health, seemed to do much, by confidently affirming that Bees were four-footed beasts, for Nature only bestowed on them four feet that they might go upright, and more not, lest it might hinder their flying. But omitting this Author, let us more amply describe this most profitable and wise Insect.

Their eyes are honyey and made inwardly, and so is their flings, neither do they want tongues and teeth; they have four wings, which are dry (as those of all other insects) finnying, flattened or joined to their shoulders, the last whereof are the leafles, that they might not hinder their flying; two claws as it were growing forth of the ends of their little feet, between which in stormy weather they carry a stone to poise and balance their light bodies, left the impetuous violence of the wind should drive them from their houses; and therefore we need not give credit to Lucian, that they ought to be called Zon Andr. footedfeet creatures. They do not breath (by Pliny's favour) but pant, and are refreshed by tranpiration. Their flomach is framed of the most thin membrane, wherein they not only confere and keep their collected honey, but concoct, and purifie it; which is the reason that Bees honey may be kept longer: than any Manna or aerial body, or rather is altogether incontestable, as we will shew hereafter.

Aristotel, Hist. cap. 10. saith that there are nine kindes of Bees, six whereof are fociable, and do live together, as Bees, the Kings of Bees, Drones, Waifs, Horners, Moths. Also three solitary and infociable, the greater Siren, the lesser Siren, and the Bumble-Bee; of which kind Simius Albertus does reckon up nine, but gives them such harsh and barbarous names, that it seems he rather figned them, than knew them. Lib. 8. solid. 4. cap. 2.

But Bees do differ, and are distingushed in regard of their matter, form, wit, disposition, and office, and there are all their genuine, and natural differences, which I have collected out of infinite Authors, Concerning their matter (if we may credit the curious searchers into the works of nature) some of them are called meliponae, or the Lions brood; others seselae, the Bulls brood; and some berthulae, or the Ox brood; and some melipasea, or the Calves brood. But the best and noblest bee are generated and bred out of the Lion, and the Kings and Princes of them do derive their pedigree and descent from the brain of the Lion, being the most excellent part of his body: it is no wonder therefore if they proceeding and coming from so generous a flock, do affail the greatest beasts, and being endowed with a Lion-like courage, do fear nothing. The noblest Bees next unto these, are thoie that are generated out of the Bull, being also a strong and valiant beast, the excellency both of their disposition and bodies being equal to their flock and pedigree. The next are the Cow-Bees, or Oxe-Bees, which are indeed very industrious, laborious and profitable, but of a milder disposition, and leffe inclined to anger. The Calfes carkeLL doth generate more soft and tender Bees, excellent makers of honey, but not able to endure labour, in regard of their tendermell, and in regard of the weaknesse of their matter short lived. Some also do write, that Bees may be bred out of their own athes sprinkled with honey, and laid forth in the sun or some warm place, which for may be called in Greek ineffoama or Self-begetters. Bees of the bell flaps are small, variously coloured, round, and boding; the worser shaped are long. The difference of their forms and flapes arises from four causes; Nature, place, sex, and age. For some are domestick, or house Bees; others are wilde or wood Bees, to the delight in the familiaritie and company of men, but not the other, which do exercise themselves in making honey in trees, clefts and crannies of the earth, and in the rubbish of old houses and walls. Again, some of the tame and gentler sort of Bees do live in pleasant gardens, decked and beautified with all sorts of flowers; these are great, soft, fat, and large bellied; others are kept in villages, going far for their food, and feed on flowers; they light upon by chance. The latter more hairy, yet for their work, industri and skill, they exceed the other. Of both kindes some are bred with flings (as all true Bees are) and others without flings, as the bafldar Bees, which have a greater and fofter belly, throat and body, but not famous either for manners, or ingenuity. They call this kind of Bee the Drone, because they seem to
be laborious, and are not; or because under the colour of labour (for they sometimes carry wax and diligently fashion their combs) they devour the honey... And they are of black shining colour and larger bodied. Moreover some bees are descended from their Kings and Dukes, whereas Aristote makes two kindes. The yellow, which is the belt, and the black streaked, Others do reckon three Kings differing in colours, blacks, reds, and spotted or streaked. Morecruci doth report, that the divers coloured are an inferior sort of Bees; but these streaked and diversified with black, are the better. All of them are twice as big as other Bees. He that is elected, Monarch or King of the whole Swarm, is always of an excellent shape and twice as big as any of the rest; his wings are shorter, his chignis straight and strong, his gate loiterous, his aspect more stately and majestic, and on his forehead a white spot like a shining Diadem or Crown, differing much from vulgar Bees in regard of his shining colour. But the place doth alter, sometimes their form, and sometimes their nature, sex also and age do change them in both respects. For in the Malvoce Islands Bees are like to winged Ants, but somewhat lesser than the greater sort, as Maximiliana Transiliensis in his Epistle to the Bishop of Salisurgus eloquently relates: In America near the Rivers of Valters and Plats, the Bees are not like ours, being no bigger than those small flies which trouble us in summer; they build their nests in hollow trees, and they make far greater combs and fuller of holes; the end or tip of their wings (as Ovidius and Theophras relate) seem to be bitten or cut off, in the middle whereof they have a white spot, and they have no offensive fings. The wax which they make is of a dusky pitchy colour, and they are for the most part evil conditioned. Aristote lib. 5. hist. cap. 22. mentioned a certain kindes of Bee, that is of a soft indutrious nature, which maketh twice in a moneth, being of a gentle pleasing disposition, and bufted only in making of honey. Such there are also in the Country of Peru, which do make a soft and melting kindes of honey, which do flop their doors to close with wax, that they leave but a very small hole for their ingressie or egresse. But almost all our Bees in Europe are of a blackish colour, not so much in regard of the easy confection of thin substance, than that they seem to be of a groffer die, and of a thicker compouder; and therefore the thicker matter doth remain within the skins, which the Bees of Peru and Perus, by reason of their thin skins, and the fineness of their dewy nourishment, do easly thraught forth; unless be that the cawe, we must ascribe the variety of colour, to wanton nature: as we do for white bears, and white black-birds; which feing the her felf is various and of many shapes, it is no wonder, since the delights in variety of colours that the hath not made all Bees of one colour. The kindes of common Bees, (as Columella observes out of Aristote) are thus distinguished; some are great round black, hairy: others are leafe, round, of a dark colour, rough hair: these are yet others leafe than they, and not so round, but more fat, or of a flawe colour their fides: these are some falt of all, very flender, sharp, whole bellies are various coloured from yellow, and very small. But the blackfich are most to be approved of; that are very little, round, lively, shining, gentle, having (if we credit Virgil)

Their bodies fiove with equal spots of gold.

The greater Bees are, and fatter or longer, the worse they are: and if they be fierce and warful, they are worst of all. But their anger is pacified by the daily company of their keepers and of their minds they are made more tame with the only tinkling of bratle. The Bees called Chalcides in Crete, from the place, are of a brazen colour, and something long, and are said to be very implacable and given to fighting, exceeding all others in their fings, and pricking more fiercely: so that they have driven the Citizens out of the Towns by their fings. And Elian out of Antonius relates, that in the Mount Ida, the remainder of that race, dwell and make their combs. Such are also the Bees at Carthagea like to Muskritos. Paufanias writes in Atticus that Bees are so gentle in Halicarnassus, that they go forth to feed amongst men, and wander where they please, for they are shut up in no hives; wherefore they make their woods every where, and to that end, that you cannot part the honey from the wax. They are smooth, shining, of variable colours, and not unlike to our good Bees. Lully, since all Bees are by nature void of poiyon, yet the place caufeth the long Bees, and the diatice fashioned, about Carthagea in America, to make venomous honey; where they collect honey that is infected with the contagion of trees, winds, air, and earth it self; and be it what it will be, they lay it up in their cellars. Also Bees subcrestitial have another form and nature. For those that work in hives and trees, they are greater, longer, foffee, better wing'd, more yellow on their backs and bellies. But they are that under the earth build in little holes, form of the place, and are short compacted, with black heads and forefals, hairy almost on their whole body; a yellow down colour on their fides and nump, and that doth much adorn them. Of Bees, some finde themselves houies in woods, some are received into houses made of straw or horn; some civil and well nourished Bees, who will not refufe the care of the Bee-maftre who hath skill, but will much love and delight in it. The prince of Philosophers confounds the sex of Bees: but most writers distinguifh it; some fay the females are the greater, and without fings; others fay from their sex, they are leffe and have fings. The founder Philofohers, (whole opinion I fahow) acknowledge no male but their chief leaders, which are more strong, greater, more able, and alwayes fly at home for propagation, and feldome go forth but with the whole swarm; whom nature hath commanded to be frequent in Venus occasions, and ordained them to fly alwayes at home...
CHAP. II.

Of the Politick, Ethick, and Oeconomick virtues of Bees.

Bees are sway'd by Sovranity, not tyranny; neither do they admire of a King properly so called, by succession or by lot, but by the advice, and circumstances of their bodies, and though they willingly submit to regall authority; yet for as they retain their liberty, because they still keep their Protogative of Election; and when their King is once made, fight to them by oaths, they do in a principal manner love him. He as he doth excel all the rest in portines and feature of body (as is above said) so likewise (which is the chief thing in a Prince) in gentleleness of behaviour. For although he hath a dazing as others, yet he never ueth it to punish withall, information that some have thought that the King is without a dazing. For their Law is the law of nature, not written but imprinted in their manners; and they are yet more gentle in punishments because they have the greater power; and although they seem somewhat in revenging private wrongs, yet further, they have the refractory and rebels to go unpunished, but wound and stab them with their stings. So delicate they are of peace, neither with their wills nor against, do they offer any annoyance. Who would not then utterly abhorre the Diomyian Tyrants in Sicily. Clearchus in Heraclea, Apollodorus the Caffandrian Robber? Who would not detest the villainy of those false Parasites to Kings who affirm that Monarchy is no other, but the means how to accomplish or satisfy the will, and how to maintain lust that which ought to be far from a virtuous Prince. Left while he would seem to be a man, he betray himself to be worse than their little winged beings.

As their manner of life is not pedantic or according to the vulgar fort, so neither is their birth. For the royal Race is not begotten a little worm at the first, as the Bees are, but presently able to fly. And if he chance to finde amongst his young ones any one that is a fool, unhandsome, hairy of an angry disposition, ill shaped, or naturally ill conditioned, by the unusumus content of the rest, he gives order to put him to death, lest his sordidery should be disordered, and his subjets being drawn into faction, should be destroyed. He sets down a way to the rest, gives order what they shall do some commands to fetch water, others to make honey-combs within, to build them up, and garnish them; others to go and get in provision: those that are strik'd in years he cherisheth at home, the younger he exercise in labour and victuall of employments; and although he himself hath immaturity from mechanick labour, yet as caufe shall require, he also refiteth not to work, nor ever doth he go abroad but for healths sake or necessity. He be by reason of age in health, he marches as General in the Vanguard of his Army, and in person opposeth himself to all encounters; neither is he born by his attendants willingly, unless it be when he is so old and diseased that he cannot either go or fly. When night comes on the signal being given by the Trumpeter, the common fort are commanded to their lodge and the watch being set, every one betakes himself to his rest, as long as the King lives, all the swarm enjoyeth peace, and all things are in quiet; for the Drones keep themselves willingly in their own cells, the elder Bees are content with their own places, and do not the younger run out of their own into the elders lodgings. The King lives apart from the rest in a more eminent and large palace, with a waxen fence curiously made, compassed about as it were with a kind of wall. A little way from him dwell the Kings children, to whom if their father or mother do but hold up the finger (as they say) they are hunte.
more dark, black and various coloured; you will condemn their skill when you observe their habit.

Their Kings in face and person differ, one
Bright, as it were with golden splendours dress'd,
And gorgeous glittering scales, to look upon,

The other's a foul, forlorn, dusty beast,
Staggy, large pannocks, unmeaning of the Train.

And thus far of the Kings and Nobility, now let us proceed to speak of the vulgar sort or Commonality of the Bees.

Bees are neither wild nor tame creatures, but a middle kind of nature between both, but of all in a manner the most serviceable and most profitable. Their flying both keeps them alive and kills them; for if that be once lost, they cannot live, but being armed therewith, they guard the Swarm from all hostile invasion. There are none of them idle; although all do not, have not the skill to make honey: neither do they which can do nothing at all, become like Drones; for they do not, as they do, spoil the comb, nor steal the honey. But they themselves are nourished by the flowers, and flying abroad with others feed together with them. Albeit also there are some amongst them have not the industry to make and store up honey, yet every one hath his work, and his art wherein he doth employ himself. Some bear water to the King, and to such of the Bees that are spent with old age, and are decrepit.

The more ancient and greater sort of Bees are chosen to be of the Kings Life-guard, or Esquire's of the Kings Body; if they be any way in health, as being of known trust, and well seen in the right ordering and managing of State affairs. Others of them administer Physick, and undertake to cure such as are sick; and of the Annise-flower, Saffron, and Violet, collect together, compound, and give them to drink, a most medicinable and cordial Honey. If any of them chance to die by reason of Age or sickness, forthwith the Bearers meet together, which carry forth the Corps on their shoulders as on a Bear, out of doors; lest they should any way pollute or defile their clean and near Hives with any uncleanliness, filth or putrefaction.

Neither are the Bees without their commanders, Captains, Lieutenants, Trained bands, Cornets, Trumpeters, Files, Scouristers, Watchmen, and Soldiers, an Army which do (as if it were a little City) guard and defend their Honey: and do in condign manner punish and torment the Dors that fly thither, and Worms that undermine them.

Left they should be taken for Drones, as they fly they make a buzzing or humming noise, which accordingly as they begin to fly or cease to hear or not heard; which found whether it proceed from their mouth, or from the motion of their wings, Aristus and Hesychius do much concern about. Neither was I ever so quick sighted, as to determine of a matter to exceeding intricate and obscure. But the Fives, and Cornets, seem to make that found or noise which Hesychius calls (ταυτό), the English call it flogging; and that they make their signal or watch-word when they are to watch, when to sleep, when to go to work.

So great is their care of preserving their King, that they suffer him not to go abroad alone, but gathering close together on both sides, their company being divided, they hem him in and guard him as he goes along. But if perchance in their journey the King shall wander out of the way, or shall be gone out of sight, being driven by violence of stormy weather, then all make search after him, and do follow him by the scent as it were, till they know certainly what is become of him. And if he be tired with flying, or disconsolate of weather, the company bearing him up with strength of their wings as it were in a Chariot convey him home. If he die, all of them go their ways; or if they chance to stay some time after, they make only combs, but no Honey; and within a while after, being altogether idle, full of diseases, starved, wallowing at last in their own filth, they miserably end their lives.

Without a King they cannot be, against whom they make not the least resistance, much less do they put him to death, unless as tyrants are wont he make his lust the rule of his Government, or being negligent of the Common-wealth, takes no care of it: yea if he use often to remove from place to place (which he cannot do without great detriment to his subjets) they do not for which kill him, only crop his wings; and if he amend his manners, and demean himself as he ought to do, afterwards they love and respect him as well as ever they did before.

The fly away and leave the Swarm, they fend him back again, and if he fly out of the Kingdom, they follow him; and finding him out by his scent as it were by a track (for above all the rest, the King or Miller Bee hath a very curious smell) they bring him back unto his Royal palace. Not a Bee whatsoever dares go out of doors to feed any where, unless the King or Miller Bee go out first and challenge his privilege of precedence. For I am scarce of Aristus agrees that the King never goes abroad except it be with the whole Swarm, which is a very rare thing. But when the Swarm by reason of the tyranny of their Prince are forced to remove to some other place, changing their foil and habitation, as unwilling to do, then they make an unwonted noise, as it might be of a trumper some dutes before, and two or three dutes before, a few of them hover up and down about the Hive. But when all things are ready for flight, away they fly all together, and if the Tyrant whom they left behind pursues and follow them they kill him.

Ggge 3
But a good King they never defert, and if he die by any infections, ficknede, treachery, or old age, the Nobles together with the common people lament and bewail him; neither do they afterwards go abroad at all, or fetch in any provision, but fill all their hosees with a sorrowful murmur, and thronging about the Corps make most tragical lamentation. After wards privately conveying him from the common multitude, they carry him out of the Hive, and make a most doleful cry about the place. Nor doth a day put a period to; or abate their sorrow, but they continue it to long, till by reason of grief and hunger they all die. Take the King or Matter-Bee, and you take all the Swarms if you misle of him all the rest convey themselves away and go to others. They cannot endure more Kings then one, the house of the usurpers they throw down and destroy their family. But if it be so that there be two Kings or Matter-Bees in one Swarm, (as sometimes it falls out) one part adheres to one King, and the other to the other; whence it comes to passe that in one Hive divers forms of combs are found: where they to behave themselves, that the one doth not encroach upon the others bounds, or invade his Territories.

And as for their Oeconomick or household virtues, they live Parasimony as the chief stay of their family; and having in the summer season gathered a sufficient flock, or store of honey, they do not profily lavish it, but sustain themselves with it in the winter, and that very sparingly; and to feeding themselves with a sparing diet, and that of the beast and purest food, they gain that as a reward of their sobriety, thereby to lengthen their lives, and prolong their daies. Neither are they so glibble or prodigiously parsimonious, but that when they finde that they have gathered more honey then will serve the number of their family, they do freely impart and communicate some portion thereof to the Dors or Drones.

These also are arguments of their cleanliness, that they never lay the excrements of their bodies (unless ficknede, extremity of weather, or meer necessity compel them) in their Hives; as also that as soon as any of them dye they presently carry them forth, and quit the Hive of them; no fea or putrid matter, no withering herb, no fading or trickling weed do they touch or come near. They never kill their enemy in the Hives, they drink nothing but the purest running water they can get, they will by no means remain or dwell in an unclean, filthy, nasty house or room. The ordure of those that labour, and of those that are tick within them, they lay upon a heap together without doors, and as soon as they have any leisure, he bearers carry it away.

Neither are they altogether impatient of musical sounds, as other ruder sorts of creatures are, but are very much taken and delighted therewith; provided it be without variety, smpfe and unaffected. And although they cannot dance by measure or according to the just number of paces, as the Elephant is said to do; yet according as he that tinks on the brazen kettle, pleaseth, so they slack or quicken their flying; if he beat fast and swiftly, then they mend their motion, if dully and slowly, then they abate it. Neither hath nature only made them the most ingenious of all other creatures; but very tame, and tractable by discipline and education to the keeper of them; for they are all at both his beck and his call, and whatsoever he pleaseth to do none of them gainay or forbid. If he beat them, they complain not, and if he rob them and spoyle their combs, they make not the least murmuring, or shew the least discontent. Who would not say this were an argument of a most noble and generous disposition, to o ffer the rigid commands of their keeper; and yet by no means to obey of subject themselves unto the discipline of any stranger whatsoever?

It is wonderful what some do observe as touching the temperance and chastity of them; for whereas all other beasts, the Elephant only excepted, do couple in open view; and the Wasps not much differing in kind from them do the like, the Bee is never seen to generate openly, but either doth it within doors with modesty, or without when none shall be by to observe it.

Neither, as the report goes of them, are they leele valourous then they are chaste or temperate.

Whilst they expose their bodies in the war, And nobly die, receiving many a shot.

Their war is either insipte or civil, or foreign and with strangers. Of their Civil wars there are divers causes, as the multitude of the nobility treacherous to King and State, death of victuals, narrowness of place, when they are not able to live by one another; as also corruption of manners, and flaggishnede. Now if they superabound in Nobility (as sometimes it falls out) they put to death so many of them as seem to be superfluous; left their number still increasing they should force and over-power the King himself, or entice the common people into sedition. But they destroy them then chiefly when they have but a small issue, and have not where else to betiffow, those together with their combs (if at least they have gotten any) they throw down, and pluck to pieces. The Dors alio and Drones they kill, as often as they want room for their works (for they take up the innermost part of the Hive) and take away from them both their honey and their victuals. As alio when their honey fails, and there is a dearth, then they go to pull mells amongst themselves, and fight as it were for life and blood: the short Bees they fall upon long, the smaller sort set upon the Drones (as idle and unprofitable) with all their
Chap. II.

Of lesser living Creatures.

their skill and force they can use. In which conflict it do come to pass that the Short Bees have the better, they will prove an excellent Swarms; but if fortune give the longer the day, they will live ever after idly, and make no honey worth any thing. But that tale which overcomes is so mightily bent upon rapine and revenge, that it puts all to the sword, yielding no quarter or truce at all.

As concerning their war with foreign Enemies, there is no creature under heaven so bold and adventurous as they are, infomuch, that whatsoever, whether man or beast, or bird, or warp Inall molest them, yet and seek to destroy them, they sharply set themselves against, and accordingly as they are able wound them with their stings. Unleas persons or any that use sweet oils or perfumes about them, or those that wore culed or muffled locks, or red clothes (as resembling the colour of blood) they cannot in any wise endure; as also all base and vile companions. Whereas on the contrary their matters, keepers, governors, and thoes that make much of them they do most dearly love and affect; and sitting upon their hands in stead of slinging them, they seem rather to tickle, and as it were by way of sport to tick them without any the least harm at all. Yet they may have free leave when they are uncovered in the heat of summer, to gather their Swarms with their bare hands, to handle them, to dispose of them at pleasure, to toll them to and fro, or stand before the Hives mouth, and here and there to drive away the Dors, Drones, Wasps and Hornets with a wand. But if any of them have lost their sting in skirmishing, as a foullder having his arms taken from him, he is quite disheartened, and living not long after dies with grief.

When they go forth to battle, and are ready to give the onset, they hurry while the signal is given, and then they surround their King (if he be one they love) and in one battle determine the quarrel. But in the fight, what wonderful valour, strength and courage those little beasts do shew; both I myself have seen and know; but they far better who report that whole fields of armed men, have been conquered by the stinging of them, and Lions, and Bears and Horses flain with them. But yet (as fierce and warlike as the are) by daily converse with them they become tame; and unlese they be provoked they live very quietly, so that any man may stand before their Hives, if he not on purpose to disturb them, and they never offer to hurt him.

But if we should go about to set forth at large their ingenious disposition, cunning workmanship, industry and memory, we should not with Virgil the Poet yeild them only to be endured with a small portion of divine inspirations but even wholly to be proflett with a rational soul, and to one with Pythagoras to have the understanding of the most ingenious man infued into them by a μαρτυρίαν.

Foras soon as they are lodged in a clean and sweet Hive, they gather from those plants that diffil moisture and yeild Nature, (as from the Willow, Elm, and Reed) and even from horses themselves, a kind of Glue very thick and clammy, and with that (which the Latins call Commifus, the Greeks χάλας) they lay the first foundation of their work, and dawb it all over as with the first platter or rough-calf, the which afterwards they cover over again with a kind of wax moist with rofin and gum, last of all with Bee-glew. When this triple wall is artificially finished, they do not only deceive the most curious and unreet observer of theirs, but without any man taking notice, they do better and better arm and fence themselves against wind and weather, vertene, and all their enemies whatsoever. When this is done they frame their Honey combs with that skillful Architecture, as that they may seem to put down Arhitectus himself in his own Art. For first of all they build the cells of the King and Nobility in the upper or more eminent part of the comb, large, fair and fared, wrought with the most pure wax of all; which allo the better to secure and defend the Kings persons, they compose round about as it were with a certain fence or wall. And as their Bees are of a thousand sort or condition, so they make a thousand division of their cells. Those that are aged and sticken in years (being to be as counsellors of State, and inquircs of the Body) have their lodgings near the Kings Court; next of all to them, those of the first year, or young fry, those of ripere age, and lusty in body they place utmost of all, as those that should be able to fight for their Kings and the royal Hive. Notwithstanding Ari-fater writes that they first provide cells for themselves and their issue, afterwards for their Kings, and last of all for the Drones. And as in the making of their combs, they fashion them according to the largeness, and figure of the place; and those either round, or long, or square, or according as they please, and sometimes eight foot in length; so on the contrary their cells are tryed to a strict Geometrical form exactly, to wit, Sextangular, or with six corners, only just fit and no more for the bulk of the inhabitant.

But those cells where they make their Honey, and those which are for necessities for their young ones, are double from one side of the Honey comb to the other, separated one from the other with a thin partition o moud.

Those Figures whereby the Combs are fastened to the side of the Hives, are more frightful and are empty of honey, being allo much more firm and strong, that they may the better bear the rest of the weight which depends upon them. Those Combs likewise with which they cover the pluffer moul with waxe in those they use to flow a greater quantity of Honey, as in a more safe and secure repository.

Now the whole Honey Comb contains four ranks or divisions of cells, the first the Bees take up the next the Drones, the third the Gentles, and the fourth and last is set apart for a Porsauce for Honey.
There are that affirm that the Drones do make Combs in the same Hive with the Bees, but cannot make any Honey at all; whether it be by reason of unwieldiness, or corpulency of their bodies, or their natural inbred lillothis uncertain. But if their Combs begin by reason of the weight of the Honey to flog or to be ready to fall, they raise them up and under-prop them with arched Pilars; that they may go under them, for to every Comb there must of necessity be a ready passage, and whereby they may execute their several offices which are appointed them. In some places as in Pentas and the City Asinums, they make white Honey in trees without any Hives at all. But as for the others in making their Combs they beyond all humane Art, who would not acknowledge for truths, that of the Poets,

That the Bee hath in it a particle of divine understanding, and heavenly wisdom? Who I say will deny them to have fantastic, memory, and some kind of reason? But I will not argue the truth of this, neither will I affirm with Pythagoras, that the souls of other wise and ingenious creatures, or of men, do pass from them into the Bees. But yet notwithstanding he that shall hastily weigh and observe how they give out to every one his several task, some to make Combs, others to gather Honey, dresse up their rooms, cleanse their layfaltis, to prop up and repair their ruined houses, to cover their boxes, to draw out the spirit of the Honey, to conceal it, to bring it to their cells, to serve those that are at work with water, to give food at certain set hours to those that are bed-ridden, feeble, and aged, with so great care to defend their King or Matter-Bees, to drive away Spiders and all other their invaders or annoyers; to rid their Hives of their dead, (left their work should be marred with flesch or putrefaction) to be able every one to return to his particular cell: in a word, to seek their living as near home as they may; when they have sucked dry the neighbouring herbs or flowers, then to send out spies to see for pasture farther off, upon any night design or expedition, to lie under the leaves of the trees left their wings being wet with the dew, their speed home the next day should be hindered; in boisterous weather, to posse or ballance their light bodies with a little stone taken up into their mouths, and when the wind blowes hard, to recover the windy side of the hedge to shelter themselves; and the like: firstly he will confesse of his own accord that their Common-wealth is wonderful well ordered, and that there is very great discretion and understanding in them.

I had almost let passe that natural προσωπον, or affection, that great confiance seldom seen in Parents of this Age, wherewith they care for their young ones; in the Hive where they have led them they fit upon them as birds do, and never go abroad unless enforced with extreme hunger; and when they do, they presently return in again, as if they were afraid left the Spider if they tarried long (which many times happen) should cover the mouth of the cell with his web, or their little ones being benum'd with cold should be in danger to be starved. But yet neither are their children delicate, or nicely brought up, for at three days end (asoon as they have any wings) they let them to work, and have a strict care that they loyter not, or take a haunt of Idlenesse.

So much foreknowledge likewise have they, that they can precipitate rains or cold weather to come. And then (by instinct of nature) they never go far abroad, but hover about their stocks or Hives, and fit upon them as upon flowers. When they go forth to pasture (which is not at set times, but only when it is fair weather) then they labour and toyle so hard, and so lade themselves with Honey, that oftentimes through weariness they cease in their journey, being not able to reach home; and whereas some of them by reason of roughness and hairiness become unapt for labour, then they rub themselves against rugged stones or the like, till they be smooth again, and so buckle to their work at last as hard as they can drive.

The youth or middle aged Bees are employed abroad and bring home those things which the King or Matter-Bees gives them in charge; the elder sort take care of the family at home; and do order and dispose of the Honey which the middle aged Bees gather and make abroad. In the morning they are all still and silent till such time as the Matter-Beec gives three hums and raiseth them up, and then every one makes halfe out to his several employment. In the evening when they return home, they at the first make a great noyse and tumult, and within a while afterward by little and little caufe, till at length the Captain of the watch flies about and makes a buzzings, as it were commanding them to their rest; after which signal given, they are all so hush'd and still that if you lay your ear to the Hives mouth you cannot perceive the least noisie they make; fo subject are they to their rulers and governors, and at their beck and nod are presentlie quach't.
Of the Creation, Generation, and Propagation of Bees.

Of the first Generation of Bees Aristole hath a long discourse. The Philosophers following him have rightly determined in my opinion, that their Generation doth proceed from the corruption of some other body: as of a Bull, Ox, Cow, Calf, very excellent and profitable beasts; the which, not only worthy men, and without all exception so report: but even naturalists, and common experience doth confirm. They say that out of the brains of these beasts are bred the Kings and Nobility, and of their flesh the common sort of ordinary Bees. There are likewise Kings that are bred out of the marrow of the chine-bone, but then those that come of the brains do far exceed the other in feature or comeliness, in largeness; in piulence, and in strength of body. Now the first transformation of this kind into these Creatures as it were by a kind of conception you shall then perceive to be as in shole little imperfect creatures appear in great numbers about the Ox, Lion, &c., in a small white hollow, and as yet without motion, but increasing by degrees, and their wings by little and little growing out, they come to their proper colour, flying to and hovering about these King or Matter-Bees; but yet with short wings and trembling as unaccustomed to flight, and by reason of the weakness of their limbs. Now what counties do most conduct to the generation of Bees, and what are most suitable to them, we shall afterwards handle when we come to treat of Honey. In general there are very few places in the world to be found (unless it be in a very barren country, and unwholesome air, and where no food or for them can be had) in which Bees cannot breed and very well live. But where there is perpetual soil and snow (as in Scania) or where the country is barren of herbs and trees, (as in Thule) there they are neither able to breed nor live. As also for the poisonous condition of the air and nature of the soil some sort of Bees do not endure to live there, as in the Isle of Myrora it is reported, that if Bees be carried thither (it is said) they will believe them perfectly dye. But whereas Mynster, which of Ireland, and Salamis of Great Britain, that those Countreys are altogether without, and that they cannot live there, if they had not spake rather by hearsay, then of their own knowledge, they would have written that every village or town almost is full of them. And thus much may suffice to have spoken of the Generation of Bees, come we now to their Propagation; concerning which Authors have divers opinions.

Some say they never couple or bring forth, because no man ever yet saw or could tell whether they did so or no. Others say, that when they have fed their seed upon the flowers or leaves of trees, they carry it to their Hives by diligent and soft setting upon it, it comes to perfection. Pliny will have it gathered from the Flowers of the Honey-suckle, or Honey-wort. Aristole from the flower Calander, or called; Atheneum of the Reed-flower, some of the flower or berry of the Olive; taking that for an argument, that in those years wherein these flowers are most plentiful, there are great numbers of swarmers of Bees; but when there is scarcity, then few or none are to be seen: when as yet they do not consider or observe that even in very cold countries where none of these flowers grow, nor are so much as seen, there are plenty of Bees. Iam of opinion that they are propagated by copulation, and I am confident the male Bee is the greater; the female the lesser, who whether as Cocks do read their Hens, so they accordingly engender; let experience teach: yet certain it is, that the lesser Bees only, to wit, the females do sit upon the eggs, and the shells being broken (after the manner of Hens) they do by an admirable and natural midwifery put forth their young.

Aristole on the contrary affirms, that the Kings or Matter-Bees themselves do first bring forth, and afterwards all the rest, as those also do the Drones, but the Drones beget nothing, and so their generation ceases. And this it may be, without some reason, in regard that the Kings or Matter-Bees always remain within, as if they were ordained by nature only for propagation, neither ever appear abroad but when together with the whole Swarm they go to some other place to dwell. For the same reason also they are so extremely beloved of all the Bees, and live exempted from all necessary business and labour. These do also excelle the other Bees both in bulk of body and strength, as if their bodies were by nature made only for their Bees. But the great Drones keep a mean between both, and hold such a livery, and concordance with the Labouring Bees, as that they may nourish both the Drones their Nephews, and the Kings their Parents. But after this, the Philosopher adds, that Bees do not engender by way of copulation, because their young is so small; the same argument may be held of the Flies, of which some are bigger than Bees, who lay little worms, the which growing by little and little become like Bees without wings, and afterwards become Flies.
Others there are who think that Bees do spring from the Honey, or with the Honey; or at least of the moit pure and excellent part of it: and that without all purefation. But yet something whatever it be, serving to engender, and out of which Bees are engendred, without doubt is laid in the cells.

Scaliger thinks they lay Eggs, although the Bee-masters, with one consent, say that they lay little Worms, not Eggs.

Tasius is of opinion, that they do couple, and determines the Bees to be the males, the Kings the females; and that the Kings at a certain time do put forth little Worms all about the Hives, as the Flies do, and the Drones for upon them as the Serpent with to do, and by latching upon them for such a time doth cherish them. Then afterwards these little Worms called in Greek ἔχθραι, are fed with the petre, as it were with a mixture of wine and honey together, till at length they grow to be Nymphs, i.e. little Bees; but without wings; and then being wrapped up like to Anđeloi, they lye still in the cells, neither taking any food or making any excrement. Till at length by such a day the shell wherein they lay being broken-out come the Bees; and addrelle themselves to their several employments, their wings being not yet fully grown. All this time the Bees are much delighted with wine, especially of men, and therefore do frequent those places which are wet with it, but especially after rain.

To the CONSERVATION or keeping of Bees; many things are required, to wit, orderly diet, drink, sleep, watching, air, exercitation, habitation, convenience of place, as also moderation of minde, and phyfick fit to cure their Difcafe; of which we shall speak in particular. As touching their provision, they seek for nothing, but they themselves being mindful of the approaching winter, they take pains for in summer; and what they get store up accordingly. For they gather and cook or dribble their diet themselves, the prime or chief whereof is Honey, which being over nearly drawn from them, they become gusty, and lank, and transparent, that you may see through their bodies; and unleafe there be other means made to furnish their hunger, they all dye for want of food. They have also other meat to preserve themselves withal, as War-wort, Honey-wort, Bees-meat called Sandarac; but this is the worst, and rattle sweet like a fig: when their fail, the Bee-masters lay before their doors, figs, fugar, dried raisins, the drones brusted, the heads of gentilies, wool wet in fow or sweet wine, and also honey-water, left they should faint and dye for hunger.

Pliny would have raw flesh, if it be sweet and fresh, to be laid for them to feed upon. Generally all sweet things and of pleasant smell they cover, though at a great distance, not so much for the finnesakes but as being their natural food; as Flies feed upon wine. No odoriferous and fragrant flowers do they refuse; from whence they are in the Latine called Flôrîce, in the Greek Ἅρπανα, Ἀσβίλία, from the delight they take in them and their greediness in gathering them.

The Plants most acceptable to Bees, are the white and red Thyme, Melicor, the Myrtle, the Willow, the Broom, Lavandes, Beans, wide Thyme, Violets, Keses, Rosendyl, sweet Flæsband, Almonds, Heath, the Tamarisk, the Cytisus, Caia, Daffodil, Alphodil, but chiefly Balm: concerning which Maister fang their matcillent verses:

That herb the Grecians call Balm, the Bees approve,
And above other plants do highly love;
No flower or plant doth please them half so much.

Afto the Jvy, black Hellebore, Origandu, Savoury, wide Violet, sweet Marjoram, the Hyancynth, the Palm-tree, the wide Olive-tree, the Flower-de-luces, Saffron, Rose, Lilly, the Ju-niper-tree, Pear-tree, Peach-tree, Turpentine, Maffick, Cedar, Tiel-tree, the smaller Oak, goldylocks, wide Saffron, Camilla, flowers of Mutard, French Spondilium, Crowfoot, purging Thorn, all trees that bear Malt, Apple-trees which have no bitterness in their blossoms: moreover they feed greedily on the flowers of dead Netfles both white and yellow, whereupon this herb by the Helvetians is called (Bienfuge) as if you would say, fucked by Bees.

As for their drink, if there be but a river or running water hard by in which there are stones, or pieces of wood (upon which they may light conveniently, and bath or wash themselves) they go no farther to drink, if there be none, they fetch their draught other where and quench their thirst, and when they have done, they carry of the fame liquor to their King or Master-Bee, and to thofe that are at work within (as hath been said before).

Whatsoever they eat or drink, must be undefiled, pure, sweet, and without any fench or purfation whatsoever.

Yes, so cleanly do they live, that if a menfianous woman come near them; they are reported to forake their food and feed no longer, as alfo thofe that are sweet oyls or perfumes about their bodies, and thofe that are given to overmuch lechery they hate above measure; and can by no means endure: alfo all things that smell of oyl or smoke, and dunt and dust, they are very fliche of coming near, nor will they touch any thing that favours of any fuch matter. All hurtful herbs, all that have any bitter, purgative, unpleasant or poyonous quality in them; they to bear Wormwood, Rhabar, Senna, Svin, Tithymals, Hellebore, Wood-azure, Coccus gmian, etc., etc.
Chap. III.
Of lesser living Creatures.

Dius, Thaphia,indle Cucumers, Yeew, Rhododendros, Wolfs-bane; they will not once taste of.

When they have laboured hard all the day, and come home weary, a certain signal or token being given, (as is above mentioned) they take their rest. The which oftentimes is many wiles disturbed and hindered, and by this means the Swarm being almonified and over wak'd do die; sometimes the Gad-bee or Horse-fly molest them; sometimes the Bear making a noise wakes them, sometimes the approach of the enemy affrighteth them; viz. the Lizzard, Spider, or the land Toad; in which regard the Comet presently founds an alarm, and calls them all forth to arms in the night. If it happen to thunder or lighten by night, they are all presently in an uproar or tumult as if there should be a mutiny in the Army, or some fatal battel to be fought. And the reason of it is, in regard of the unwonted noise of the light at such a time, as also because they are strait, and that not without cause, lest their Hives being shaken, the combs should be disordered and displaced, or their little waxen vessels being melted, the Honey should run out. That this is true by experience, no man can better speak than Dr. Penny and my self, who in the moneth of Aug 1586, whilest we face up and watched by the Coun- trell of Somerfl they a widow lying dangerously sick, together with her two noble Daughters Mary and Elizabeth, a sudden (after a great clap of Thunder) under the next ceiling between the joyful, we heard a great noise, as it had been an alarm of war, and as we thought the floor did refuld with the noise; being altogether ignorant of that (which indeed was the matter) that Bees did harbour between the rafters and the ceiling; where it seems they had remained for 30 years altogether, and every year to have yielded two or three Swarms, as we understood after-wards by those which were eye witnesles of the same; and they of the chief Nobility, who affirmed it to be certain. The next day for want of sleep they flew about making a hoarse noise, trembling, and not knowing what they did; they did touch those things which naturally they could not endure, they did despatch themselves poor creatures against the windows, they did not spare to sting their friends and those that looked to them, even to the admiration of all that stood by and observed them. From whence we conclude without all doubt, that Bees are most patient of labour in the day time, but most impatient of being fared in the night, and of being disturbed of their rest.

From whence they seem to have gaine the name or Epithet of Soliagens, or Sun-followers; for with it they rise, and with it they rest, None of them take so much as a wink of sleep all the day long, and all of them in the night sleep very soundly.

Now their exercise is of two sorts, either they fly abroad for their pleasure, or carry at home and work for necessity. If that be denied them (the Crocodile, Swallow, Lizard, Spider, or other strange Bees intersecting them) either by reason of temperate weather, or long rain they become putref, unwieldy and numbed in their limbs, grow into disesies; and shortly after die, especially in the summer season, which is the only time they have to exercise themselves abroad in the open air. When they have refethed themselves with flying about; then they bath and wash themselves clean; and after wards they lightly rub themselves smooth with leaves. Moreover also sometimes they carry little stones, sometimes they carry water, and as little things as they are, will break through the wind though it fly against them; and they will in a bravado, yet they will venure their very lives also to fight with the greatest of beasts; Horses, Elephants, Dogs, yet and Men too (Arbileclus was of this opinion) if they offend them and quarrel with them they wound, and with their bums often and fiercely thrust into their bodies, they kill them. Sometimes they appoint duels one with another, not in earnest, but in jest, for exercise and recreation, nor with any intent to hurt one another. They will play together oftentimes, and tickle one another, and like Doves bill and kis each other; after which without doubt they couple together also, but at what time after, in what place, after what manner, let that all-eyed Argus rell, who alone fars by the Elephants and knowles when they engender, which no man ever saw but God.

Now as they perform the aforesaid exercises of flying, of pincing, of carrying of theses c. for their recreation, so necessary the mirth and tole of Arss hath inured them to domestick labour, to which they diligently, not lazily apply themselves, no day (if the weather let nor) is spent idly; but how long they work, that wholly depends upon the constitution of the Climate, or the air. For in cold Countries from the setting of the Pleiades or seven-stars, to the Vernal or Spring Equinoctial (or thereabout) they keep close within their Hives; but like Dormice without food, sleeping, and so they continue rouled up together like a ball, in a heap; nor do they flit a jot from the place where they are: for else how should such little creatures as they, be able to endure frost and snow, and the bleak gusts of the north wind? But if the temper of the year be more warm, and so continue for a great while together, 'tis longer ere they leave their works, and that Eebia proves by manifest experience, where through continual heat, and almost no cold that is there, the Bees work almost all the year long.

But in Europe they seldom go abroad before the beans begin to bloom or blosson, (as Pliny witnesseth) which they take of the first of all flowers or herbes whatsoever. Servius dreams that when winter drawes on, they flop their mouths with juice and flowers, and with these keeping in their Hive to fatten themselves. But in summer they never loyster at all, but exercise themselves in constant employment; and when they have gotten such a nuscent or off-spring that one house
house will not hold them, in the month of May they make a tolem expedition, and divide themselves into several Swarms hanging upon the boughs of trees like bunches of Grapes. The elder Bees afterwards making two or three rounds or circles in the air go to their food and return to their Hives: the young swarm or colony thus sent forth and left, unless they be entertain’d with fresh Hives, wander up and down the woods, until the publick overseers and hospitable Bees have found a fit place for the Swarm to settle in.

Now having spoken of their exercit, in the next place let us enter upon the description of the places or houses where they are to reside, which the Greeks call μνηστήρ, μνηστήριον, &c. The Latins, Alveus, Alveus, Alvearium, &c.

Now about the for the conservation of the Bees, three things are requisite or needfull. The fashion of form, preparation, position, and the fitnesse of the place where they are to be set. The belt receptacles for them, are made with bars, but especially with sticks which in the heat of Summer doth not scorche them; and in the Winter is very good to keep out the cold. The Ancients were wont to make them of an hollow tree, or of boards artificially joined together, also they were used to be very handomely made of Reeds, or of the Holm-tree wetherd or twistd together. Those of each are conned the world of all, as also those that are made of Brick, or Clay, because in Summer they are over hot, and in Winter as extreme cold. And yet (as I hear) in Hungary they have certain thick pots or vellts to hang up from the ground and there they hang up in Trees, for the Bees to make their Combs in; which when they have done, they at a certain time take away again. Some make them of Mud or dirt, but these likewise have their inconvenience and discommodities.

The English use to enclose them in Hives artificially wrought and built of straw; that in Winter they should not be harved, nor in the Summer wittered with heat. The Ancients were wont to make them of a kinde of transparent Stone, of Horn, and Glass, to the intent that they might look in upon them and fee how they wrought. But the Bees lay a fift, second, and third covering over their work within side (as I said before) whence they perceived they loyd their coft and labour in that contrivance, as being never the next by that way to gain their purpose.

Let the form of the Hives beafter the manner of an Egg, the yolk and the white being clean taken out, as when we eat it, a little of the end being pared off.

Moreover the Hives ought to consist of twelve rounds or wreaths of straw woven together after this manner:

The first lowermost must be of one size or bignesse, a foot and a half in breadth: The next above them are to be a little bigger and more capacious, that the combs may be the better fatterned, and may hang more freely: The other 5 circles or rounds are to be narrowed and made steep up to the top by degrees, in the like manner of a fquare or pyramide; but the whole Hive ought to be of that consist and bignesse that it may contain in it all about 20 l. weight. Let the mouths or pallets into the Hives (by which the Bees are to go out and in) be about three or four, and no bigger than that the Bees when laden with Honey may well go in; for by this means, the Lizards, or Beetle, venemous Spiders Moths, using to rob their Hives, are barred of their entrance; and the Hive will not be so obnoxious to frost, and the extremities of the winter season. Above these they use to make 4 doors to open the windows to let down with bolts, 2 in front, and 2 behinds, that they may the better take out the Combis, with leffe difturbance to the Bees in their making Honey.

The preparation or setting of the Hive after it is made, is reported to be divers. The English do take in new Swarms into new Hives, without pensioning or anointing them at all. The Ancients after they had made them very clean, did use to rub them all over with Balm, Thyme, Fennel; and did sprinkle them with some sweet thing made of honey sugred, or with sweet wine or meleghins that so they might the more willingly come into them, and the longer remain in them. Palladius was wont to anoint the inside of the Hive with the dung of the fift calf that the Cow hath; and this he accounted for a chief securt to retain Bees in the Hive. Moreover it is requisite that about the midst of the Hive there should three or four ficks be laid a croffe to hold up the Combis; and then they are not tincted with any light flaking of them to fall down; and are more easily if need be, taken away. Take heed also there be no chinks ortisins in them, whereby they may be annoyed with heat, cold, dust, vennine, the Cankerworm.

As for the Placing or setting of the Bees, it is convenient that the Hive should be mounted on forms or stands, that the be not dirty or moulty with standing on the ground; and that they may live more secure from noxious and hurtful beasts. Let their flandings be made of stones, chalk, elm, or oak; three foot high, covered over with flat tiles, or pargeting, or whirlines, and that very smooth and feel not that which Honey and Bee-devouring creatures may not be able to climb up. Let them also be well fencing or falling forwards, left the rain-water leaft upon them should soak and weare into their Hives: for which cause (as Cimonella winewether) they were wont to be placed in hollowed walls or poiches of Cities. Let there be two hands distance between every Hive; that one flappdng or flaking the next may not be troubled, as it is usual when they are set close together.

Now as for their Ranks or rows how many they should be; they are not to be above three at
at the most; of which, let the younger Bees have the first, the second son or middle-aged, the middlemost, and the elder Bees, the highest or uppermost place. But yet both the Hives and the forms whence they are fet must be conveniently placed for the benefit and advantage of the Swarm; in hot Countries, towards the North; in cold, towards the South; yet in Abi-
idna under Prefer John, the Bees live in the Tradefmen houfes, and flying up and down amongst them without fear, hang up their Combs, their hives being made faic to the beams or joyces of the fame, without any harm at all to thole that work in the place. Moreover in many places in England they have been known to have taken up their harbour of their own accord, and that for a long time together between the rafters and the ceiling of houses, and in the hollow trunks of trees, and from thence the old Bees have fent forth three or four SWarms of young ones in one year. And (what is worthy to be noted) they live here longer and more happily, than in their artificial woven Hives, with fo great diligence perfaimed, fo curiously set, ordered, diglized and placed. But yet I commend their industry who have freed the Bees from this trouble, and have no leffe ingeniously built them houfes to keep them from wind and weather. But they above all the reitdefere Commendation who have found out how to cure the difeafes of their bodies and minde, inward and outward, and have had the skill how to apply them accordingly. The palions or diletempers of their mindes with which they are moft troubled, are Anger, Grief, and Fear. For they very hardly digest Injuries, and they betray a great deal of choler and spleen to be in them, by their often fighting, even amongst themselves. For if they over abound with illnes, they are all in an uproar about their cells and lodgings, nor can the Quarter be composed, till many are slain on either party; or being divided into factions, they do of their own accord seek other places of habitation. More then this even thefoundiers of the fame Colony, when they (for some private grudge or jealoufie fall into a rage) they make war, and fall foul one upon the other, the which the wary Beemaster clipping, and cufing in duft or cold water by fquirits in the vent holes, where they go in and out, or making a terrible and hoarfe noise with the palms of his hands, doth before it be too late pacific. For if he should let them fight on, they would be fo mad and cruel one againlit the others, that they would never be quiet till they were all killed.

Sedbe and Melancholy also doth very much dillemper and disturb them, arising sometimes from the death of the King or Mutter Bee, sometime of their young ones, sometime of their keeper; neither will a day ceafee their conceived fowor, but they take it to heart, that their bodies pine away, and it confines them to skin and bone. Neither will the tingling or tinkling of the bratfe pan, or any harmony whatsoever delight them (which yet when they are mad, and dore so that they know not what they do, is wont to cure them) there is no plague or difeafe that can be named, that is more deadly to them than this.

They molt find in fear of the Spider, Lizard, Crocodile, Toad, Glow-worm, Gad-bee, Waft Hornet, the multitude of Dors or Drones, a little bird called a Houp, the Titmoufe, Swallow, the Woodpecker or Ear-bee, the Owle, and other the like destroyers and spoilers of the Hives. They are likewise very fearful of an Eecho, thunder and lightning, and the like sudden cracking noise; as on the contrary with a folt still whiffling, or murmuring noise; and tinkling of bratfe they are exceedingly taken and delighted. When fear takes hold on them, poor creatures, they wander up and down they know not whither, and when they go our in to their Hives, they seem to be giddy, as if they had a Vertigo in their brains whirling and turning round; as for their Honey, or their young ones, or for thole that are fick, they scarce regard them; and never leave trembling and quaking in their wings and flanks. The Bee-master therefore (when their provision fails) ought to destroy the Drones, and by putting raw flech into a pot to take the Hornets, and then burn them. To kill the Frogs, Butterflies, Wood-worms, and Canker-worms, to wipe away their webs, to entrap the Gnats and Flies, to flay through the Lizard, Crocodile, black fly or Bee-cle, and by putting in a Candle (to which they will come of their own accord) to burn the Glow-worms or Moths; to chafe the Frogs and hunt them from the standing waters and fenny places to throw down all the neits of Swallows, Middwals, Owle, or Woodpeckers (especially in all the neighbourhood or places hard by them) to destroy the Muskin or Titmoufe; and to defend them against all other beams that he in wait for them and all other strange Swarmes: In which fight
The Bees do as it were acknowledge their keeper, who after the victory ensuing, set upon the vanquished troops, but to their defender or champion offer not the least harm.

The Bees by their means thus quelled of their fears, only with the tinkling of the Pan, and sometimes with the Bee-masters voice only, are strengthened and brought to themselves again, and every one cheerfully returns to his several appointed employment as before. Some Bees also are caught wandering up and down, and flying away from their Hives, for they take pleasure in wandering delights and embraces, and never care at all for coming home to their own habitations: this ill habit and haunt, the Bee-masters with clapping of their hands, and with the found of the bralle (in which Bees are said extremely to delight) do presently remedy; although it is yet uncertain whether they do hear the sounds and are led by the pleasure of it; or whether or no rather being affrighted and terrified with the trembling and reverberation of the air (as when it thunders) they return to their Hives; and I see no reason why Phiny and Niphus should here make a doubt. Others left the swarm should fly away and so be gone, do crop off half the wings of the King or Master-Bee. As also others do beat near or dawb the vent holes out of which they come, with the dung of a calf newly calved. Moreover if you set their pillages with the leaves of the Olive-tree boyled, they will not depart: also Wine and water is very good, but above all, the juice of the herb Balm wherewith (as it were with a kind of philtre or love-potion) they are most powerfully retained, as the Poet Maureris.

Phiny faith, if some of the dust over which the serpent hath gone, be cast upon the Bees, they will return to their Hives. Others yet advise to sow Goldlocks near where they are, as if they delighted most in that flower above all others, and would never forsake those places where their flowers abound, and Authors report that the wilde Bee is allure and tamed therewith.

The bodies of Bees likewise are subject to divers diseases, viz. repletion, inanimation, growth, moistness, cold, and unnatural heat. Repletion, or abounding of humours is cautious when the Bee-master néglècts to gather the Honey in good time; for then they do fill and gorge themselves, till being grown over with fat and scurf, and fowl in their throats, they become sickly; there follows upon these flagelliflæse, fevers, longings, loathing of their food, watching or wakefulness; with which the miserable poor owen Bees, uniflee they have some timely remedy, do die; wherefore of necessity they must have their Honey gathered from them. In dong of which two things are to be observed, viz. the time when, and the quantity how much, the which according to the quality and custom of Countreys, are divers. For in England they gather the Honey every year, viz. either in the latter end of July or in the beginning of August. In hotter Countreys they observe three times in the year to gather in this Honey harvest, viz. at the rising of the Pleiades, when their are at they Zenith or Vertical point, and presently after their setting. Didymus in his Geoponicks, writes that this time of the Pleiades is the best. The Romans did use to unbowel their Hives, the full time in the month of May, and then again when Summer was almost done, and thirdly about the Ides of October. From whence it was called Spring Honey, Summer Honey, Autumnal Honey, or Honey gathered in Autumn. Aristofene adieth the first taking Honey, to be when the wide Fig-tree begins to be green; the second he commends to be done about Autumn. Generally it is very necessary that the Honey should be taken when the Hives do over abound with Honey; the which is certainly understood by the shrill or squeaking noise that the Bees make. For if they be empty, they give out a more clear and loud found, as being more full of air then men: but most certainly it is known by looking in at those doors placed on both sides of the Hive, being open (faith Columella) of which we have made mention before in the building or structure of the Hives.

The manner of taking them is thus; Betimes in the morning while they are half asleep and drowsie, is the time the work is to be affected, and their Combs taken away; it being not convenient to exasperate them in the heat of the day. Columella prefers for this use two Iron instruments of a foot and an half long and somewhat longer; the one must be a long knife with a broad edge on both sides, but dull, with a crooked head and sharp teeth to take out the Combs withal, the other plain with two sharp edges, to cut down the Combs. With these the vessel being opened, the honeycomb will very well be effected. In England as also in other Countreys in Helvetia, Germany, and the Low Countreys, they do not set upon them with these iron instruments, but with fire and fumes, and water, with which they chase the elder Bees from Hive to Hive and keep the Swarms entire at their pleasure.

Moreover in taking away the Combs, there ought a mean to be observed, according to the greatness of the Swarm and number of Bees. For with overmuch plenty of Honey they grow idle, and both defraud their Masters and themselves; for when the abounds with Honey, they feed not on Bee-breads, but glut themselves with the very purest of the Honey: on the other side if there be not enough Honey left them to feed on, languishing for want of sustenance, they grow heartflee, and live carelessly, and becoming so thin that you may see through them, being starved and feeble, they miserably perish.
Moreover, the old and rotten Combs ought to be taken away (but not those wherein po
terity is concerned), and those which are whole and which contain the young spaw or fly of the
Bees, unless you see that there is not so much Honey left as may serve for the satisfaction
of the Parents or elder Bees. Keep such a proportion, that in the abundance of Honey you
take two parts and leave a third; if there be but indifferent stores, take the half; if the Combs be
in a manner empty, take nothing at all out of them. But this proportion is not to be observed
in all places, because in regard of multitude of flowers, hope of pasture, and goodness of the
air, together with the condition of the Country, you may take away more or less as you shall see
suit. For in Ethiopia, Syria, and edftrina, they commonly take all the Honey out of Hives:
which by reason of the barrenness of the pasture, and continual dews, are filled again in very
few days.

But if there chance to be famine, and scarcity, you must not only depriv the Hives, but take
away part of the Bees also; and chose the greater part of them, with the smoke of Tows, Reed,
Turpentine, or Brimstone, or Galbanum, or else drown them in water; by which means, the ho-
ney will become sweeter and purer.

Famine is caused especially two manner of ways; either by scarcity of provision, or the
badness of it by reason of corruption: when there is great want you should supply them with
Honey, sprinkled in a liquor made of wine and honey boyled together, give grapes or
figs bruised or pounded together, and sugar-tops. Pliny would have them fleth given to them, al-
though he saith that Bees will not touch any fleth whatsoever. Now the corruption and un-
soundness of this meat, doth procure first of all, longings, scowtings, barrennesses, and consum-
tions; from whence, and by the fSmooth of dung and dead corpses, ill fLavours, plague and pur-
fication, with other dysenteries doarife. In their longings desire of what they fancy, they grow so
nice and peevish, that disliking all things, they are ready to fly away, unless with the perfume
or vapour of things of a very pleasant and grateful odor, with exquisite playing upon the hum-
ble pan, and exceeding next handling of them, they be retained. Also they are taken with a lask
or lossiness in their bellies, both in regard of the sugarmife of the juice it self; as also in regard
they feed on those herbs and leaves that are purgative, as Helloebores, Spurges, both kinds of Elder.
For being greedy of food after their fafting all the Winter, aslon as the Spring comes, catching
more greedily, than in way to their health, every herb that they light on, without putting any
difference, having gathered unwholsome honey, they are taken with a cacomity, or ill humour
or habit of body, and afterwards very suddenly fall into that lask or lossiness, afore spoken of.
Against this diftife (faith Pliny) let them services with honey, or wet with man or oxe pife.
Alfo Pomegranat kernels moflylened, with wine of wilde Briony; Pallasius much commends
the kernels of Pomegranates or Raisins boyled and pilled, with Manna or sharp wine bee before them
in wooden gutters; alfo he bids quicke in Honey boyled in wares, with the powder of Galls, dried
Roffes, or Rofmary, or fet it in with little fawcers.
Moreover, care is to be had, that they do not bring home any food gathered in the woods,
where for the most part do grow harth and lowre herbs, with the actimony thereof the bellies of
the Bees are moved, and are scarce stayd but by the presence and accurate endeavours of their
keeper. From whence proceeds barrenness, because by that means for want of feed they do not generate, or cleat (by reason of barrenness) they are not able to hatch their young, or
constantly to fly upon them; or to avoid the snares of the Spiders which are drawn over the mouths
of their cells. This consumption and bellcock fever increasing yet more and more, Higinus bids
that flowers be brought, fooked in dew or a sweet liquor made of wine and honey, and to lyeed,
to the holes or vents of the Hive. Alfo he commends for that purpoze Violets and Buglofe
flowers hebfplinked with new wine boyled halfe away, after that their Hives being very well
cleaned, and the vermire and dead Bees rid out of them, they are to be perfumed with one
or calves dung; because that takes away purification and infection; and doth infill a new life
or foul (if Calonemlia fay true) into the almost expiring Bees. They are alfo full of lice (as
Florentius relates) the which he cures with the shavings of the Pomegranate and wilde Fig-tree
burnt to ashes. The fame Authors cure the dunnefe or purblindnefe of their eyes with the
powder of wilde Marjoram. They themfelves are able to take away their fcurf and dandrif,
with a gentle rubbing of their bodies against the herb Celandine, and against walls tained
with urine; their dunnefe they cure with baths, and their throat with drinking mineral
waters.

The diseases that come of moiture, are swellings in the neck, tumours in the head, droplies,
which the Ancients used to cure with dry herbs, and shaking off the dew from them betimes in
the morning, and our country people do somewhat abate it, by keeping them from common
water, for they keep them three daies together in their Hives, by which it comes to paffe that
not only the superfluity of the bad humour is dried up, but the natural moiture is in some mea-
Sure regained. Haschius writes of a diftife very common to Bee which he calls Kesper, but what
it is he doth not tell us, neither could I learn from any other Author, what or what manner of
diffete it should be.

The diftifes proceeding of cold are congelation, nummednefe, fitinesfe, and other of that fort,
for you shall see them sometime so nummed and liffe with cold, that you would not think
they had the least motion, much liffe breath. On the other fide, through extremity of heat, they
are driven into madness, exceed of thirt, Feaven, Vertigo, and swimming in their heads; yet they grow dark mad, at which time they know no man, nor their keepers, and will strike their friends with somewhat venomed stings. In such sort therefore ought their Hives to be placed in both fessions of the year, that in the winter they be not too much oppressed with cold; and in the summer, that the shade of the trees do not keep the heat from them. Bees do fall also sometimes for want of illue, as in the plenty of patience it happens to come to pale, at which time they set upon their work in making of Honey, that the care of copulation and propagation is quite laid aside; and so the separation of illue being omitted, the whole Swarm being spent with labour, is extinguished. But when they fly away in storm and anger, by reason of their Hives being not kept sweet, or for some pellentif disease that reigns amongst them; you must follow after them, and with that Art (Palladia hath taught) being found again, entertain them in clean Hives, and remove them from the place where they were before into fresh dwellings. Moreover, Pliny saith it doth very much conduce to the keeping of Bees, that they be lawfully and honestly come by, that is, that they are either given or bought, for if they be stolen they fell doves thrive and come to good; as it is with Rue or Herb of Grace; if stolen it very hardly grows.

Now if we shall have removed from Bees all creatures that annoy them, what we shall yet further add to the conservation of their health, and the cure of their diseases, I do not see. First, therefore remove from them all filthy Ledges, menagery persons, those that have the running of the reins; baths, smoke, dunghills, layilals, all those that sinfull of great or kitchingflutes, or having nothing else to do, or on purpose to offend them, stand before their Hives mouth. The air being infected with the breath of Toads or Serpents, purge with Balm, Gentle, Thyme, or Fennel burned. See that they live neatly and daintily; kill all preatory or devouring venom, and the signs or symptomes of their diseases being perceived and known, apply the cure of them. Now the signs of Bees, as of other creatures also, being not well, are gathered from three things, that is to say, from their refraining to be in action, from the external garb of their bodies, and from their excrements. For the loile of mirth, lymph melancholy, vertiginous or whirling gate or motion, their frequent and take flanding at the door, their fainting in their work, their disfain of flowers and honey, their more then ordinary either sleeping or waking, unwonted hummings, are an argument that the Bees are ill at ease. As also when their bodies are unhandsome, not trim, rough, not sleek or smooth, fierce or faid, nor thinning or glistening, lean and transparent, not well liking, or well fed. Moreover, if their combs have an ill favour, or if their dung or ordure turn to ware, or be full of worms, and when they carry out every day their dead, not at all regarding their Hives; these are infallible signs of sickness, and some epidemicical disease that reigns amongst them, some part of which Virgil in 4. Geo. hath elegantly, though somewhat confusedly touched in these verses following.

If Bees be sick (for all that live must dye) That may be known by signes most certainly. Their body is discoloured, and their face Looks wan, whose flowers that death comes on space. They carry forth their dead, and do lament: Hanging by th' door, or in their hives are post. Hunger and cold consumes them, you shall find They bese, as doth 'twas woods the Southern winds. Or doth the sea when that the waves return, Or fire clea'd up in vauls with wise doth burn.

And thus their distempers being understood and cured, they live to extreme age; which Aristotle, Theophrastus, Pliny, Virgil, Varro, Columella, Cardan, and all Authors whatsoever, do conclude not to extend it self to nine years. Although I saw it by experience, and with no leeff delight to be otherwise at Hanworth in the Countesse of Somertes Bees (before spoken of) (there are yet present wizircles, who are worthy of belief which will attest it) that there they have lived in the same place above the space of thirty years; and almost four times a year, have made our fresh flights or twarms of young ones. Which reason doth induce me to believe that Bees in their own natuer constitution are long lived, and I do with Albinus alone make a question, whether they may not live to long till they dye of old age. Well I know they may be taken away by diseases or incursion of their enemies; but if they have alwayes all those necessaries for their life and health by them, and those things which should be delitiously kept from thime, I should easily grant that they would live to a very extending great age, if I did not altogether say they were immortal. For they alone, of all other creatures, are fed with Honey that immortal Nepet, drop down from heaven, and with that divine dew (which is the soul and spirit of all herbs, trees, and plants) gathered together into one body or maffe; of whose nature, use, and excellent vertue, we shall speak in the following Chapter.
Of lesser living Creatures.

CHAP. IV.

Of the use of Bees.

Whereas the most high God did create all other creatures for our use; so especially the Bees, not only that as midriffers they might hold forth to us a pattern of Politick and Oeconomick virtues, and inform our understanding; but that they might be able as extraordinary foretellers, to foreknow the success and event of things to come; for in the years 90, 98, 113, 208, before the birth of Christ, when as mighty huge Swarms of Bees did settle in the chief Market-place, and in the Beast-market upon private Citizens houses, and on the Temple of Mars there were at that time stratagems of enemies against Rome, wherewith the whole State was like to be surprized and destroyed. In the reign of Severus, the Bees made Combes in his military Ensigns, and especially in the camp of Niger. Divers wars upon this ensued between both the parties of Severus and Niger, and barrettes of doubtful event, while at length the Severian faction prevailed. The Statues also of Antoninus Pius placed here and there all over Paguriae, were all covered with swarms of Bees; and after that felled in the Camp of Caisius; where great commotions after followed Julius Capitolinus relates in his History. At what time also through the treachery of the Germans in Germany, there was a mighty slaughter and overthrow of the Romans. P. Fabius and Q. Elia being Consuls in the camp of Drusus in the tent of Hesilius Rututius Swarm of Bees is reputed to have fate fo thick, that they covered the rope and the spear that held up the Tent. M. Lepidus and Minus Plancus being Consuls, as also in the Consulship of L. Paulus, and C. Metellus Swarms of Bees flying to Rome (as the Angors very well conjectured) did foretell the near approach of the enemy. Pompey likewise making war against Caesar, when he had called his allies together, he left his Army in order as he went out of Dyrrhachium, Bees met him and fate so thick upon his Ensigns that they could not be seen what they were. Philoemen and Eria relate, that while Dionysius the Tyrant did in vain imp his horse that stuck in the mire, and there at length left him, the horse quitting himself by his own strength, did follow after his Master the same way he went with a Swarm of Bees sticking on his mane; intimating by that prodigy that tyrannical government which Dionysius affected over the Country. In the Helvetic History we read, that in the then year 138, when Leopoldus of Anesia began to march towards Sempachum with his Army, a Swarm of Bees flew to the Town and there fate upon the rye, whereby the common people rightly foretold that some foreign force was marching towards them. So Virgil in 7. Ennius.

The Bees flew buzzing through the liquid air And pitch'd upon the top o'th' Laurel tree, When the Southfayers saw this sight full rare, They did foretell th'approach of th' enemy.

That which Herodotus, Pausanias, Dio Cassius, Plutarch, Julius Caesar, Julius Capitolinus, and other Historians with greater observation than reason have confirmed. See Acrephonius, when he could by no means find the Oracle Trophonius; Pausanias in his Boeticks faith he was led thither by a Swarm of Bees. Moreover, Plutarch, Pausanias, Eliaus Alex. Alexandrinus Theocritus and Tertor are Authors that Jupiter Militans, Hero of Syracuse, Plato, Pindar, Apis Cato, Xenophon, and laft of all Ambrose, when their nunes were abvnt, had Honey drop into their mouths by Bees, and so were preferred. Xenophon also in his Oeconomicks calls making of Honey, the job of Vertue, and to it would have matrons and mothers of families: go be instructed. The Poets willingly yeeld themselves to be compared with Bees, who following nature as their only Mitleafs, use no Art at all. And so Plato affirms that Poets were never able by Art to finifh any maffe piece. Intomuch that Pindar doth vaunt himself in this to be superior, or to go beyond Bacchides and Simonides, in that he was taught by nature, not by Art, Bees unless provoked are harmless, but being vex they will sting and that most shrewdly. Such is the condition of Poets; from whence are ocassioned these verses of Archilocheus.

He that doth move me, quickly finds my sting I'll make him cry, and through the City ring.

Wherefore Plato in his Minos gives it as a rule to those that desire peace and quiet, that they be very well advised how they intermeddle with Poets and Bees. To conclude, so many are their virtues worthy our imitation, that the Egyptians, Greeks, and Chaldeans took divers Hieroglyphicks from them; as when they would express subjects obedient to their Prince, they set it forth in figure of a Bee very singular in that virtue; when a King loving to his subjects, they portray it likewise, and set it forth by a Swarm of Bees. Other the like emblems are to be found in Parius Hieroglyphicks worth the labour of searching for. From them the Country people learned their skill of prognostication of the weather. For they perceive wind or rain before.
it comes, and foretell storms and howres that are at hand: when they are ready to come, they retire not to fly far from their Hives, but will feed themselves with their own moisture. All these things being as they are, 'tis no wonder that Aristarchus Philostratus, Aristomachus, Selenus, Menuis Summner, and six hundred others that have wrote of Bees, have left the pleasures and delights of the City, and for 58 years to have lived in the woods, that they might be the more perfectly acquainted with their conditions and manner of life, and be the better enabled to commend them for an example to polity. Neither was Virgil's the worse for being so well seen in their History, the which he hath most elegantly set down in the fourth of his Georgicks.

But what their bodies and their labours do work upon our bodies, it is now worth the pains to relate; whereby we may alluredly know, that there is nothing in Bees but what doth serve for our health and welfare.

First of all, their bodies, as ison as they are taken out of the Hive, and pounded and drank with some distick, or wine and milk; do strongly cure the dropsie, dissipate the stone or gravel, open all the passagges of the urine, cure the stopping of the bladder. Bees that die in the honey, cure impometimes, and help the dulness of sight or hearing. Also being pounded together they cure the griping or winging of the belly or guts, being applied to them. If powdered honey be drank they themselves being drank down after, do expel it: they soften hard ulcers in the lips; being bound to a carbuncle or running sore, they heal it; they cure the bloody flux. Honey being strained with them, helps the crudities of the stomagh, or specks or red pimples in the face, as you may see in Helerus, Alexander Beach, and especially in Pliny. Take Bees dead in the comb, and when they are through dry make them into powder, as Galen in Epist. writes, mingle them with the Honey in which they died, and anoint the parts of the head that are bald and thin haired, and you shall see them grow again. Pliny in like manner teaches to burn a great company of Bees together, and mingle the ashes with oil, and anoint the part; only with this caution, that the adjacent parts be not touched therewith; yea, Honey creeped of Bees that are dead, he affirms to be very sovereign in all distastes, and very useful. Erotis in his 61, chap. de Morb. muliebr. tells us that their Athes better with oil, is good to make the hair white.

Moreover, Bees are very profitable and useful in regard they serve for food to other creatures; as to the Bear, Lizard, Frog, Serpents, Waps, Swallows, Houp, Robin-red-bres, Turnquotes or Myskin; as Bellonius hath observed.

Palladins faith, that some men are wont to take great delight in hunting after them; and he tells you how you shall finde them out in these words, In the moneth of April, in sunny places, if the Bees do frequented retfort theither, either for food or waters then certaint it is, that their nest or Honey-shop is not far off, but if there come thither but a few in a company, then 'tis a sign that they harbour farther off. But when they come very thick, by this trick you shall finde out their Swarms, take a little wet Oake and mark them on the back, and there remain, while those that were marked return back thither again, if they make a speedy return, then they make their abode not far off; but if they carry more then ordinary, then they reside farther off. Now by this means those that are hard by may easilie be found out; but to come at them that are more remote and farther off, do thus: take a piece of a Cane and cut it off at either end at the joints, and make a hole in the midst of it; there put in a little honey; or sweet wine boiled half away, and lay it by the side of the fountain or water: where they return, when the Bees come thither, and are drawn in by the scent of the honey, hold your thumb close upon the hole, and suffer but one Bee to go out at once, follow that as far as you can well discern him, when that is out of sight let go another, and by this conduct at length you will easilie finde the place where the Swarm is. If it be in some hole or cavern of the earth, make but a smoke upon the mouth of it, and all the swarm will hurry out, and when they come forth, being a little scared, with the turning of a brass pin, they will hang themselves upon a little bough as it were a bunch of grapes, from whence having a willow to put them in, you may take them away. If they chance to make their nest in the orn of a tree, then take a sharp twand and saw off the bough above and below them, and cover the middle part where they are, with a clean cover, then carry them where you please, and put them in a Hive...

By this Art you may finde their Swarms where they use in woods, dens, or hollow places, flax or cragggy rocks, or any place whatsoever; only see that you begin your sport betime in the morning, left the night over-take you, and you lose your game. Neither only are they delightfull sport to them that hunt them in the day time; but also (if Fabritius and Arscemdon do not deceive us) if a man light upon them in his dream when he is a sleep; if he be a poor man, it foretells he shall be rich; if a King or a great man, that his benefactors, of those that are under him will be loving and obedient. But he that dreams he had a flock of Bees, but in plenty hath them not, 'tis a sign of a decaying estate, and of some imminent approaching dissalter to follow. Of greatest use are Bees: and to variously hath done Nature the contrive of all things, spoiled her self, or rather taken great pains indeed in furnishing them with such rare qualities of all forces as where with you have heard them to be endowed.

But to what purpose is (will you say) that which poyson and venome Play himself knew no remedy? Icones, and experience teacheth as much, that Bees' wings are somet
times venomous; but it is only on those Bees which are raving mad, or burning with some fever, anger, or hunger. Otherwise they do little or no harm at all; and therefore Dr. Syston did not deign so much as to mention the symptoms of the stinging of Bees, supposing it a childish thing for any man so much as to complain of the sting of a poor little Bee: latter where he observes that the sting is accompanied with redness and tumour, especially if the sting do yet stick in the flesh, which it doth in very deep sometimes, as Nicander writes in his Theriac. The Ancients (that we may prove the sting of Bees to be converted to some good use) as Strabo reports, were wont to punish cheaters with them in this manner; They dip the malefactor's dark naked, and befetter his body all over with Honey, which does, and his hands and feet being bound, they exposed him to the heat of the scorching Sun, that what with the piercing taints, stinging upon his body, what with the stinging of the Bees and flies, and their often stabbing and wounding him, he did at length suffer a death answerable to his life. But if you would indeed resolve to go sting-free, or at least heal your feet being stung; expel out of your mind, idleness, impertinency, malice; for those that are detested with those vices, set upon to chace as it were, and out of natural instinct, Beware also in especial manner, you wear not red garments, which might represent you to them, to be a murtherer, or man of blood; as also that you be not taken by them for an unchaste or unclean person, which it seems they naturally and abundantly know and abominate (as hath been said before) They which carry the bill of a Wood-pecker in their hands when they come near them, although they do somewhat disturb their Swarms, yet (as Pliny says) the Bees will not hurt them. Nemeus reports, that if you rub and beat to powder the herb called Balm, or Balm-gende, their stings will not be able to hurt you. Florensus gives in charge, that he that is to gather the honey should annoint himself with the oil of juice of Mistle-mallows; whereby he may take away the combs without danger. But the juice of any Mallowes whatsoever will do the like; and the better if they be rubbed with oil; for it doth both preserve from stinging, and is a remedy to those that are stung. But be it granted that diseases be contracted by their stings; yet let us but take a few of these Bees that are found dead in the Honey, and let them be carefully applied, and they presently cure them; and take away all the venom and aching of them.

What shall I say? God never created a creature less chargeable, and more profitable. They are bought for a very little money, they will live in all places whatsoever, even in muddy and montaneous Countreys. The poor as well, as the rich gain a great return or revenue by keeping of them, and yet need they not put more in the pot, or keep a servant the more for them, Mervius reports that Varro rented at his Gloues of Bees, for 5000 l. of Honey; and in Spain, out of a little Village containing not above an acre in moit, that he gained of the Honey there gathered 10000 Seletries, i.e. 50 l. of our English money in one year. Besides all this, we have from their shops or hote-houses, Wax, Bee-bred, Bee-glews, Robin, Honey-combs such as no Common wealth can well be without; not to repeat their virtues, which are no less wholesome for the minde, then those are profitable for the body and maintenance of life. And first of all we will treat of Honey; that immortal, neerlasting, pleasant, wholesome juice, and principal of all works and operations.

**Of the Name, Difference and Use of Honey.**

A

The first Honey had but one name, called in the Hebrew, דּבש; but since that Strange and confudted Polyglotology, or speaking with divers tongues, it was called of the inhabitants of Arabia, Chob Harw, of the French, Miel; of the Italians, Miele; of the Dutch, Honick; of the Germans, Honig; of the English, Honey: the Greeks called it, ὄξυς, as the admirable care and industry of the bee, in making of it, as Euclides notes; from whence comes Melissa, Meletemia, ἔλεσις, in Porphyry. This for the Name: But what it is yet after all is much controverted among the learned. Some there are that fondly conceive it to be the fiddle of the Planets, or the golden falling from the Stars; others, the purging of the Air, or the Sweat of the Heavens; but in my judgement it may more properly be termed the Chymus of the Bees, gathered from some sweet matter, but having its perfection and consummation from their ventricles; and afterwards by expirations or vomits cast out into the cells or Honey-combs. Aristotles, Pliny, Avicenna would have the Bees not be makers of the Honey, but only gatherers of it: for thus they write: The Bees, (say they,) do gather the Honey from the dew of the air, especially at the rising of certain Stars, and from the conjunction of the Rain-bow; for they make no Honey, but Honey-combs only. Gaius also lib. 3. de Alimentis hath these words: I remember (faith he) upon one time, in Summer we gathered a great quantity of Honey from the leaves of the trees, and then the Coward in way of sport sung, *Hephaestus* raiseth Honey. But then the night before had not been exceeding cold; as it could be in Summer; for the strength whereof the sweetest stimulations, and vapours being drawn up by the Sun were congealed together. Now with us this is a very rare accident; but in Mount Libanus it happens every year; and therefore they spread skins upon the ground
The Theater of Insects: or, Book I.

The best Honey known.

The best Honey is more or less sweet and pleasant, and has a pleasant smell. It is different from other honeys in that it is not thick and sticky like the honey of bees, but it is a thin, clear liquid that is easily spreadable.

Accidental properties of Honey.

In what countries the best Honey is to be found.

The best Honey is found in countries where the climate is mild, the air is pure, and the soil is fertile. It is also found in countries where the flowers are abundant and varied, and where the bees can easily collect nectar from them.

The Accidents or accidental properties of honey, are likewise some good, some bad, both of them are taken from the season, place, quality. If you respect the time or season, the newer the honey the better it is accounted, and the Spring or Summer honey far beyond that is gathered in Autumn. The first of these is gathered from flowers only, and those very tender and newly budded (thence called Anthymum or Flower honey). The second is collected of nothing but herbs, and ripe flowers, thence called Aegnor, or Summer honey. The third, last and worst, is had after the first Autumnal flowers; and that very sandy or gritty and woody, gathered only of Heath or Ivie (which are then the only things green that are left) and thence is called Ericum, Heath honey or Ivie honey: all which (as I said before) have their greatest commendation from their freshness or newness, because with long keeping and concocting, they wax bitter; from whence the Proverb, He that will make a good mixture of wine and honey, must mingle with new Hymetrian Honey, old Falerian Wine, It is also better or worse in regard of the place where propert or common. If you respect the propert place, or the vell el wherein it is contained; the best honey is still found in the bottom, for the droes which is contrasted either by foul of herbs, or by the air whilst it falls from so high a place, is call up to the top as froth: and in the bottom it is found to be more glutinous, pondeous, luscious, and better com pacited.

If you would attend the common place or region wherein it is gathered, according to the nature of the Countries, so is the value of it.

In the first place and above all other, the Attick, Athenian, Hymetick, especially when made in the silver Mines, hath been hitherto adjudged the best honey, both in regard of the excellent nature of the Bees themselves, as also for that those Countries do abound with Thyme and other choice plants and herbs, and likewise in regard of the goodness of the where the combes are made. Disporides gives the next place, to the Islands of the Cyclades, or the Aegean Islands (which is very luscious and pleasant, and weighin as good as the Attick) And the third and last place to the Hybemans and Sicilian.

Johan Bammius a very learned Physician, and surprasingly well seen in the knowledge of simples, said that he saw of this Attick honey in Verona in an Apothecaries shop, which he found put up in the bladder of an Elephant, very thick, and weighing 21 pounds, of the length of two cubits, of the breadth of a cubit and a half. I suppose it was brought thither out of Attick for how should an Elephants bladder be had in Athens? In the judgement of Cardusman, that honey which comes from Cephalicis, an Island in the Ionion sea is the best; next to that in Europe, is the Spania and that but without reason; in regard the dew for the most part in those better regions is better concocted: and (in all Countries) where the purest air is, there is the virgine Honey (i.e.) pure pale, and is made up as it is, having no need of fire to purifie it. The Therzi-
The honey is also commended, as Strabo reports, about Tagodes, Melita, Hes, Hacora, the iron Mountain Rhabinos Echeteveuse; yea, so faith there is very excellent African honey made, Ludovici Cadommatius prefers the honey of Sinjeron. Andreas Corfilius the Mombarten, Eduardus Barbous the Ethiopian, Thomas Lopius the Catholic, Franciscus Albertus the Tigromeumhenian, Sebastianus Baro the Somagittick, Enryan the Lituanian. Eunias Stella the Rustian, Thuer the American. P. Livius is exceeding much in the commendation of Majoey honey, but not so advi-
sely, in as much as our Merchants and Sebaft. Baro a very impartial writer of those things which are seen and done there, do very seriously affirm that in all the Dukedom of Majoey, there are
neither Bees nor honey, Alberti Campeprus in his history of Myfia is which is called Brixia, faith
that even in the Hesitan woods, there is extraordinary good honey to be found, and that alto-
gether as good as the Cteopatian or Attick honey may be. A Fustus affirms that in snowy and
icy Scythia there is Country honey very prate-worthy; and that it is carried to Myfia (where it is
fold at a very dear rate). But if the heat of the Countrey doth add to the honey, purereness
and goodness, how is it possible such excellent honey should be had in Scythia, and Samogitiana?
Is it because the flowers there growing and receiving the dew are better then in other places,
and by that means cause it to be clearer and pure? Or is it because of the North winds which are
most frequent in those parts, which do purge the air? Or is it because as well Bees as men there
are of more strong constitutions, and therefore are better able and do take more pains to refine
and work the honey in their ventricles? which is the more likely, seeing they were not able
to live at all in that cold region, nor could not arrive at such an Age (for those they live very
long) if they were not very healthy and lusty of body.

Now whereas Cardan denies that there is any exquisite honey made in moist Countreys; let
England and Ireland challenge him for their right; which being obnoxious to flowers and very
much rain, a thing toall fatal to this, do yeefd such extraordinary pure honey, that it hath not the
least mixture of venome, and doth last a long time before it be corrupted or purifed; that we
do not speak of its excellent whiteness, hardeness, sweetness, shining well together, vicinity and
ponderousness; and other principal signs of the goodness of it; but let us leave off to commend
our own Country wherein good is to be found; and let forth those Countreys which are in-
famous for the badness of it. For the extreme bitterness the Cholchian honey, and next the Corfican
and in some places the Hungarian, and the Sardinian hath an ill name. For in Sardinia Woodworm,
in Corsica Rose-lawrel, in Colchis the venomous Yew, and all of them in Hungary. Also the ho-
necy is venomous in Heracles of Pontus; and in the flowers of Goats-bane fading with the wet-
ness of the spring; for then the flowers contain that hurtfull venome; which doth presently
infect the honey-dew that falls upon them. There is also another kind of venomous honey
made, which from the madnes that it causeth, is termed Mald-honey; which Piny conceiveth
to be contracted from the flower of a certain shrub, very frequently growing there in the woods,
Discoeris and Actiga do not amiss impure this poyson to be caufed of great pleye of the veno-
use herb called Libbardus, or Wolf-woot which groweth there; in that it is cured with the very
same remedies as the venom of that herb is. In Carina, Persia, Mauritania and Getulia,
bordering to Mothesania, either by reason of vapours of the earth, or by reason of the virulent
and poyzonous juice of the plants, poysoned honey-combs are produced; but are defcried by
their diskike or blackish colour. In Trapaecantum in the Countrey of Pontus, Pliny reports of a
certain honey that is gathered of the flowers of the Box-tree, which as it doth make those that
are well sick with the notyome smell of it, so those that are not well it retiores to health. On
the trees of the Hectocountaros, a people near unto Colchis, there grows a kind of infectious
honey. Which poyson being drank makes men stupid, and out of their wits. This was sent
by the enmy to the three Legions of Pompey with a token for the desire of peace, they drinking
very freely of it, were put both besides their wits, and their lives too (as Strabo faith). Ovid
makes mention of the Corfick honey very infamous, being extracted from the flower of Hem-
lock, speaking thus:

I think it's Corfick Honey, and the Bee
From the cold Hemlocks flowers gathered thee.

But yet it may seem to be not so much for Dame Nature's honour, that she should bring forth a
thing to defraud of all men, as honey is, and so ordinarilie to temper it with poyson. Nay but in
so doing the did not amiss so to permit it to be; that thereby she might make men more caut-
ious and lefe greedy, and to exercise them not only to use that which shoud be wholesome, but to
seek out for Antidos against the unwholomeines of it, And for that cause the hath hedged the
Rose about with prickles; given the Bees a stings hath infected the Sage with Toad-spit; mixed
poyson (and that very deadly too) with Honey, Sugar, and Mamm.

The signs of poysoned honey are these, it stains the honey-comb with a kinde of Lead-colours,
The sight of doth not become thick, it looks of a bright shining glittering hew sharp or bitter in taste, and hath
a strange and uncomely smell; it is far more ponderous, than the other; as soon as it is taken
cauteth neceth, and a loouness of the belly accompanied with excess of sweating. They which
have drunk it do tumble themselves up and down upon the cold earth, very desirous of refrigera-
tion. The Heraclean poyson'd honey hath the same symptomes with the poyson of Wolfs-bane,
and hath the same way of cure. Galen reports that two Physicians in Rome tafted but a very small quantity of poiyioned honey, and fell down dead in the open Market-place.

Against madness from eating honey, *Dioscorides* prescribes Rue to be eaten, and falt fish, and honey and water to be drank, but being taken they must be vomited up again; and he promises the fame remedy against this disease, as he doth against Woe old banes, and Rofe-laurel: and *Pliny* agrees with him; also he adds one singular antidote, to eat a fish called a Gilt-head, which alfo wonderfully corrects the loathing of good honey. *Galenius Placentius* bids to take venitc abundantly, with Synup of Violets, aconite simplex, and warm water, eating falt fish before vomiting. Afterwards he gives Theriac with hot vinegar. *Christophanus de bonfigo* prescribes vomiting, and to set cold water under the nothriils, with the flowers of Violcs, Wafcuties, and Fleavort. But his Bezoar stone, are Quince kernels bruited, and given with hot water, as *Sanctus Arduinus* relates. *Avicenna* hath prescribed nothing worth speaking of, but what he had from others: for I understand not what he means by his *Amuleti*. But what if a youth and an English man, after so many grave and experienced Physicians should affi¢ this for a certain Antidote, viz. to take nothing down, but the Bees themselves. The likelihood of the conjecture doth perfwade, and reason it well doth somewhat seem to favour it. For unless that Dame Nature had in them Bees, a very marvellous power against poiyoned honey (as amongst men to the Puli against Serpents, to Storks and Pelecocks amongst the Birds) without all doubt with gathering of it, inwallowing of it, and for some time keeping of it in their bodies, yet concocting of it there, they would be grievously pains, and the poison running and diffpering it felt through all the parts would kill them. Now the Terrestrial honey, although it be not alyways poyfonous, yet by reason of the blackness and clamminess of it, 'tis not much to be commendcd: also it is often found to be subject to be infected by the venemous breath of Serpents, Toads, red Toads, and therefore is carefully to be avoided. Now let us come to the Qualities of Honey; whereof some are fuft or primary, others derived from them; some fomel, some fpecifical, which we defervedly call Energetic, or operative. In refpect of the first Crafts or temper, Honey is thought to be hot and dry in the fcond degree, for which cause Galen did forbid thofe that are in Heftick Fevers, and in all Fevers, young men, or thofe that have the yellow Jaundies to use it; whereas in cold diltempers he doth very much commend it, and did prcfcribe it to thofe that were troubled with a raw and watryfor- mach; whom if you gently anoint therewith, it doth very much nourifh, and caufeth a good colour and confitution of body. If you defire to know the fcond qualities of honey, (viz. the smellings, faining, visible, tacftle) the beft honey ought not to have the eminent quality of any herb, or other thing whatsoever: and therefore the honey that doth strongly defmell of Thyme, Galen rejects; and yet is of itelf a molt sweet and fragrant smell, and not without a certain spirituous fragranfly; fuch is that which in the middle of the fpring, is perceived to be in the air about break of day. But if it have an ill flavour, it is purified not being well kept. If it smell strongly, it hath con tradled some conufion from Hemlock: if it fting as it was and prick the nose with its fcent, it is an argument of some poyfon, or too much acimony couched in it. If it fmmell not at all, it is ftrongly dead, no spirit in it. If it fmmell of Thyme, Linden, or Teif-trees, Rosemary, Balm, Wormwood, eft. it fheefs that it is degenerated into its nature. The like is to be faid of the fale of honey, which is known either by the herbs, age of it, or by the colour of it to be mixt, or adulterate, or natural, that is to fay, striking, and filling the tongue with a certain fine and lively sweetness, fo that it may seem to fome to be a little tart. As for what concerns the colour of the beft honey; in the Tigremanhick and Tageldeick Region, that of a milky colour is preferred in hotter Countries, that which is white and tranfparent, but commonly that which carries away the garland and is esteemed above the rest is yellow, and of the colour of Gold. And in the fcond rank is that which is white and transparent, which I with *Aristotle* fhould put in the first place. For that it is a fign of pure honey and not infected with any tincture of herb: The bright fhining is alfo by him commend'd if it be not fummer honey, for the honey that is gathered at that feafon of the year (like wax or butter) either by reafon of the abundance of yellow flowers, or the fcorching heat of the air, it comes to be of a deep and full yellow, yea almoft quite red. But if the Erycra or Anthine appear red-flift, it is not without caufe accounted unwholfome, because it is not in its feafon. Suspected of and ill name, are the black, duskie, bright red, and above all the lead colours, which whether they appear in the comb, or in the honey, fometimes are evident figns of corruption and purfaftion, and fometimes of poyfon. That honey is belt in touch that is fat, clammy, gluttonious, heavy, and molt like to the clear liquor of Turpentine eyew here like it fells, that is pure without any con, or with very few dregs, that is melted with a very foft fire, and with the leaf cold as it were congealed into little fomes. The Energetical or operative qualities of honey are feen in the use of it; the which is of divers forts, whether you turn to the Apothecaries shop, or to the Kitchen, for it may both doth it nourifh, and peferve health entire, and men long-lived; the which the Greeks thought the *Cyrenians* by reason of their constant using of it, lived long, being old men, as *Herodotus* , *Athenaeus*, and *Diotorus Sicinus* reliefe. *Pollis* indeed being asked how it came to pass that he lived to be fo old as he was, made anfwer, Because from his youth he used Oyl without his body, and Wine mingled with
Honey within. More then this all flowers, fruits, simples, and compounded medicaments, or concoctions by mingling them with honey are preferred entire from purgation; in which faculty or virtue it so excels, that even the Babylonians were wont to bury the dead corpuses of their noble men in it; as Herodotus witnesseth, Thalia. Vintners also and such as deal in Wines that will play the knaves, when they observe a piece of Wine decaying, and at its leaf almost then they put honey to it, to bring it to the health again; by which means the sippificate wine appears more, and refilishes very well upon the palate, though never so critical and curious. It is not subject to putrefaction. Fruits and all other bodies are kept in it very long. Yet if it be but touched by its enemies, breaks it putrefies. They therefore that sell honey, are very wary, lest children as they put by should dip their bread in it: for so it will presently corrupt, and turn into Ants or such like creatures; if we will believe Paracelsus, for his natural skill, in the nature of things, a most famous Philosopher. With admission of honey also Galen amended the naughtiness of sweet meats when they begin to fail. Honey mingled with other things, does both nourish and cause a good colour; but taken by it self without any other thing, it doth rather make the body lean than nourish it; because it doth cause urine, and purge the belly beyond all measure. Hippocrates, if you take the seeds of Cucumbers, or the seeds of any other plant, and keep them for some time in honey, and afterwards sow or set them, the fruit that growth of them will taste the sweeter.

As for the medicinal and Physical virtues of Honey; it causeth heat, cleanseth sorens and ulcers excellently, warmeth them away, and removes them in what part of the body (as you gathered;) virtues of Honey.

As Galen, Avicen, Celsius, and Pliny have observed. It perfectly cureth the disease which causeth the hair of the head or beard to come off by the roots, called the Foxes evil, and other filthy ulcers of the head. Plin. To regain hair lost by the disease aforesaid, and for long Agues, it is very effectual, if the party be anointed with it raw as it is; or with the honey-comb newly dried or emptied, Galen. But above and beyond all, the Oyl of honey distilld doth effect it. The ware; that dropeth from the honey, doth excellently cleane the skin, provoke urine, extinguish the burning heat of Fevers, open the obstructions of the bowels, quench thirst. The chalk or salt of it, as it is of all corrosives, the least painful, so it is most energetic and operative, and therefore is very much commended by Chymicks, and Chirurgeons, for to cure that kernel or tumour of flesh which growtheth upon the yard. But how many, and how ample virtues that quintessence of Honey (as they call it) hath attained against the strength of all diseases whatsoever, is excellently described by Iulius Belgas, the predecessor of Paracelsus. Nay without doubt, if we take the Oyl to be, and raw, were able to prolong the health and life of Democrats, Pelio, John the Baptist, in a word, of the Pythagoreans, and Cynrians (as aforementioned) how much more will it do being refined, and heightened to the highest degree of nutrition? The Epicureans who took the best way they could to provide for their health and their pleasures, fed all ways upon Ambrosia, as Titus reports, which did consist of a tenth part of honey; as if they meant by the use of it, to starve off all pains and griefs, and live free from all diseases and maladies. It doth wonderfully help the ulcers in the ears if be powered warm into them, and especially if an ill temper be joined with them. Moreover in their hilling, noyces, inflamationes, Galen commands to infill Artick Honey, Buttres, oyl of Roses, and as much warm water Maccullus Empyrion to infill into the ears that was pained. The same also very much commends honey mingled or kneaded with the oordure of a young Infant, to cure the dulnes of the fight, and the white spots in the eye. Vegeta by this means cures the watery eyes and dropping of the eyes caused by rheume or dilatition. First of all a little below the eye he drawes blood and anointeth them with the purifyd honey till it be whole. But yet care must be had (as Columella very well hints) that as often as the eyes are anointed with honey, they be besmeared round about with melted pitch and oyl, left the Wafps and Bees infest and hurt them. Hear also what Macellus saith, touching the clearing up the eyes, and he prescribeth this: The honey pure and neat wherein the Bees are dead, let that drop into the eyes; or honey mixt with the ashes of the heads of Bees, makes the eyes very clear. And again mingle Artick honey with the first oordure the Infant makes, together with the milk of the Nurse; and with that anoint the eyes that are so dulle whatsoever the cause of it be; but if at all you must binde the patient to a form or ladder; for otherwise such is the strength of the medicine, that he will not be able to endure it, Which is such as a perfect remedy, that in three daies, it will fully restore the sight, and take away every blennith of the eye. The Gall of a Vulture mingled with the juice of Horchoud (twice as much in weight as the gall is) and two parts of honey cures the suffusion of the eyes. Gal. in Every. Otherwhere he mingleth one part of the gall of the Sea-Toaful, and four times as much honey, and anointeth the eyes with it, Serenus prescribes such a receipt to cause one to be quick sighted.

Mingle Hyblean honey with the gall
Of Goats, to good to make one fee withall.

Give Infants butter and honey, for nothing is better for their breeding teeth, and for sore mouths. Galen bids us rub their gums with nothing but honey. For it wonderfully helpful to their breeding of teeth, preferring, cleansing and beautifying of them. Alfo against the pain of the jaws. If with Arabian honey you joyn field-poppy, it cures it. And sometimes pure honey
is mingled with clear water: and this, as *Serenus* and *Pliny* testify, doth notably cure the dinites of the tongue in Fevers, the Qui�es, and the diseats of the Lungs, Throat, Jaws, of the Tongue; against difficulty of breathing, and to cause one to expectorate, either by it itself, or mingled with other things: it is highly commended by *Hippocrates*. And for the convulsion of the lungs (which is often to be a deadly disease) the drinking of cold water, and of that where in a honeycomb is steeped is very effectual. Also, if the stomack be not hot, cholericke, bitter, nauseating or feverish, it makes it strong and vigorous, and nourisheth it much, not suffering milk to curdle in it: it cleanseth the reins, boileth with water and butter it is good against the Cite.

*Articenn.*

It easeth the pain of the spleen, but it must be outwardly applied with the bead Bees; for taken inwardly it hurts both the liver and the spleen, saith *Galen*. When it is raw it looseth the belly, but boiled with the Bees, or with new cheese, it bindeth the belly so much, that *Galen* holds it to be a secret against the Dyfentery and collick pestilions: so both *Celus* also and *Pliny*, *Hippocrates* mingled honey with all Medicaments that were to soften the belly. Honey mingled with royn, is a cure for the cold Tificioles, as *Pliny* saith, who also affirmineth that the ashes of Ox-leather mingled with honey, cures all running sores and bitches. Nitre with honey and Cowes milk, cures ulcers of the face; and the froth of honey with oyl of Walnuts, amendeth the burning of the skin: it is excellent for old people, and such as have cold stomachs: and being boilèd it diffuseth wind, and moves urine mightily. *Galen*. *Helleriius* reckoneth honey amongst Diaphoreticks, because it openeth and maketh the paflages clear: *Galen* placeth it amongst Diuretisks. It layeth down its acrmony by being mingled with water, or being boiled: and therefore *Galen* prescribeth boyled honey, to close up ulcers that are hollow. Salt with meat and honey taketh away the pain of a joynt that is dislocateth, diffuseth the dwellings, and makes it more apt to be reduced. I might here set down the paiter of *Attius* and *Agina* of *Dinummellum*, the *Tapiemel* of *Arden*, and all syrops that were anciently made of honey. In whose place the Neotericles have put sugars, but I know not by what reason. For if honey of Aethen or some be good, be at hand, and doth not want its due preparation, do not use sugars that is earthly, reedy and so full of dregs, not comparable either for use, original, or any way whatsoever with this heavenly dew honey. But to let this pass, let us reckon up the kinds of drinks and meats made of honey. Six kinds of honey—drink the Ancients made principally. Honey and water, honey and wine, honey and vinegar, the washing of the combs, juice of some grapes and honey, mead and honey.

The first is called by *Pollux* and *Nicander*, *Hydromel*, or *le[m]en*. *Galen*, *Pliny*, *Agginis* and *Dioscorides* have set down the making of it. *Hydromel* of *Galen*. Take sweet pure clean fountain water 8, pounds; the belt honey 1, pound, boyle them at a soft fire in an earthen vesell, take off the skim a top off times; and boil it to its thickness. If it must be drunk presently, it must be made thin as water, if it must be set up to keep, boil it longer, till it be thick as a julep: if it be kept long it pierceth deeper into the parts far off, and is sooner converted into choler. Also boyling acquires to it many more faculties; for being little boyled it inflates more, it purges more, and nourisheth lefe. Longer boyled, it diffuseth wind, nourisheth lefe and purges lefe. It is fpaced at pleasures with Ginger, Saffron, *Cagationis*, *Walnuts*, *Gallia Moriaca*, etc. It is made in another way, of honey 1, pound, water 8, pound, leaven 3, ounces; put all in a wooden vesell, leaving three or four fingers empty that it may work the better: when it hath done working, stop the vesell and let it be well hooped; and after three months it will be fit to drink. *Hydromel of Pliny*. Take of pure rain-water that hath been kept five years, 12, pound; boil it to thirds, add to it a third part of old honey, and in the dog—dais set it in the sun for 40 days, and letting it so stand, on the tenth day stop the vesell, this is called *Hydromel*: that with age will taste like wine, made no where better than in Phygia. It was given to ficks that desired wine, but now it hath been forbidden many years. *Hydromel of Agginis*. Take the juice of bruised Quinces 4, pounds; fountain water *Sexta*ri, boil them till they grow soft, take them out of the fire, let them cool, then strain them, and crusth out the Quinces and cast them away, add to this water half honey, boil it, cum it, till an eighth part be consumed: some make it of sweet Apples or Pears the same way. *Hydromel of Dioscorides*. is made of two parts of old rain-water, and one part of honey mingled, and set in the Sun. Some call it *Hydromel*, because it is wont to be made of the washing of the honey combs with water, but it must not be made stronger, because it will hurt ficks people by too much matter proceeding from the wax. *Hydromel* after it hath been long kepy, is as strong as small wines, or *Lora*, being but half so old. Wherefore it is preferred before them in abating inflammations. The use of old *Methelun* is condemned, for such as are inflamed or coffive, but it is good for weak stomacks, and such as loath their meat, or fick people that Swath much, or for those that are thirsty, or after a burning feaver hath waffed a man. *Attius* describes a Clyster only of honey and water to move the belly, and with the same he cleanseth hollow ulcers. *Galen* commends, and ues Melicrate (wherein some *Hylop*, *Origenum*, or *Thyme*, or *Penroyal* hath been boyled) to prepare and purge grotz humours in an acute disease, but he commends it not for the want of a stomack. Lately the English found out a new composition of *Hydromel*, (they call it *Fari*) and serves better for ships than any Wine. The preparation is this. Take Barley tostrefied after the steeping in water, what you please, boil it long in 5, quarts of fountain water, till it taste well of the malt: 1 pound of this boyled with 8, pounds of honey, and 20 pounds of water, makes a drinck that tasteth so well, sweet,
tweer; and is most healthfull for use. It nourisheth well, is hardly corrupted, and keeps very long.

Hydromel of the Melissaers. Take of the decoction with Hops 2 pounds, purified honey squumed 1 pound and half, rolled bread trothed with the flour of malt, one piece; put all into a wooden vessel well covered, and place it near a floos, take away the froth that riseth, twice a day, with a wooden skimmer that hath holes in it; after 10 daies let it up in your cellar, after 14 daies drink it: They make it the same way in summer with fair waters, and made this way they drink it in winter, and when they desire to be drink. In Rus and English they call it Mede.

Dioecrius, it is called honeyed Wine. Puliux calls it Melicracion; Plantus, honeyed Wine, others call it Mullum. Arifinus was the first that brought this into Thracia, being taken with the incredible sweetness of Honey and Wine mingled together. Mullum made of honey of Heleneis, when it grows old, cannot be hurtful. Pliny. The new writers describe this potion thus; Take 1 gallon of the best Honey, 6 gallons of old Wine, Silt 3 ounces; it must then be skimed as it works, then put in the Salt, and seafon it with Amnific-feed, and roots of Elecampane let down into the vessel with a bag. The Egyptianis make it otherwise, namely of Raisins and Honeys which they call Melica, because it is of a very sweet taste. Oenomeli spiced. Take Pepper, paffh and dries, 8 copulles, Athenian Honey 1 sextarius, and 5 sextarii of old white Wine, mingl them, Celsus (as I remembre) and Cedins speak of it. Arridius is in the cure of the Sciatics. Also there is a kinde of Mullum which the Greeks call Kifth Kips, consisting of 36 ingredients, Gravus. May it be the same which Atheniuncas call was words. For woode is a drink made of Wine and Honey, and divers herbs mingled. Such as our Welsh men call Merfthin. The Irifh prepare a distilled Oenomeli made with Honey Wine and some herbs, which they call Ulphrebuch not unfit for a nation that feeds on flesh raw, or but half fed. Mullum made of sweet new Wine the Greek call Nectar; to new Wine aged, they add a tenth part of Honey, but this kinde is offensive to the stomach; and caufeth windines; it is given to purge the belly, Hippocrates calls it Melikedia, and Melichromas Galen notes. Athenius writes that another kinde, which was tame Nectar indeed, was wont to be made about Olympus a Mountain of Lydias, of Wine, Bees-combs, and sweet flowers. I take notice that Alexandrides did not think Nectar to be drink, but the meat of the gods. For he faith eat Nectar, chewing and mifling it, I drink Ambrosia. Yet Homer and the greatest part of the Poers took Nectar for drink. Dioscorides made Oenomeli thus, Take old Wine 2 Sextariis, the best Honey 1 Sextarius. Some that may drink it the sooner, boil honey with wine and strain it. Some for profit take to 6 sextariis of new wine working, add one of Honey, and when it hath works, they put it up in syell; for it remains sweet. The use of honied Wine is this: It is given in long. Fieavers that have weakened the stomach with crudities collected in it. It lootheth the belly gently, it provoketh urine, it cleanlefth the stomach, it is good for the diatase of the joyners, faults of the reins, a weak head, and to women that drink no wine, for it is pleasant in smell, and nourisheth the body. It moveth vomit drunk with oyle, and it is proficily given to them that have drunk poison; as also for such as are weak, and their phile is feeble; for such as are troubled with a cough, and a short breath, or impollute in the Lungs, and those that are walled with extreme sweating. But then it is for to mingle it with Hydromel. Alfo Galen prescribes to them Melicracion qualified with water, that have had a shaking fit not above a week, and nature being yet strong. Some there are that utterly condemn this in Feavers, but that must be understood of some times in Feavers, Romanus, a certain guest of Cesars, being asked how he had preferred the natural visage of his body and mind so long, (for he was above a hundred years old) he answered. Without oyle, with honey and wine sodden together, as Pulus did: That we may the more wonder at the use of Mullum, which the Ancients esteemed very much, for that they were persuaded that all acrmony of the minde, was pacified with sweet liquors, and the spirits made peaticle, the passages made softer and fater for transpiration, and that it was also phisick for manner. Plinus.

3. Oxynels, or honeyed Vignear is thus made, as Pulus thinks. Take honey 6 pound, old Vignear 5 Heminas Sea-falt 1 pound, rain-water (which Galen likes not of) 5 sextarii. It must all be made in cold the hot ten times, and then set in the Sun, till it grow itale, and Oxynel is made. But it lasts not above one year. All these, as also all made Wines are condemned by Themifon a chief writer. Galen prepares it thus. Let the beet honey be clarified, and add so much wine-vignear to it, that it may please the sick mans palate, boyle them till they are well mingled; and when you will use it, mingle as much water as you please: it is boiled enough when it needs more scum. Some there are perhaps that deliver these compositions somewhat otherwise, and Dioscorides he differs from Mifius, and Nicolius from them both. In Mifius you shall finde ten several forts of it; in Nicolius I have seen fourteen; some simple, some compound with Squills, Thyme, Flower de lace, and other herbs and roots.

Alfo Geyer brought in an Oxynel with Hellebore, which he commendes not a little in his Greek Epitile to Adolphus Otto. To make thin, thick and clammy humours, and to root them out; but especially to make way for intenfible tranflation, that is to draw forth from the centre to the superficies of the body. But you shall finde every where scattered in the Book of his Epitile, what force it hath against Melancholy, Cachetis, Dropitis, Epipetis, and Feavers, where also you have the Oxynels made with Hellebore, the great and the small.
4. Apomeli of Phlegreans in Aegina. Take white combs full of honey 1 pound, fountain water 3 pound and half; break the combs and press out the honey, boil this water and honey together, until the froth of it, and that which as it were the wax part, is taken off, and be by degrees taken off, when it is cool put it into a vessel. It cools lightly, as Galen saith, wherefore in Phlegreans and weariness in a Feavers it is very good. Avenius his Synop of Honey, seems to be the same with this, in Nicobucus you find there three kinds of Apomeli and in Actius Oros. Nourris Almarius yet more; for they are changed according to the nature of the diseases and th' sick patient, that is the reason that we had rather only touch upon them, then to describe them at large. It is drank all the summer to cool the body, at which time any man may drink of it, (especially when it grows too hot) it is held to be of a middle nature between a Mulsum and an Oxymel. Galen. It is also useful to expectorate with, to move urine, to purge the belly, and to cut thick humours. Aegintas Rustian.

5. Omphacemelis (which Graplicrius did not well translate Bitter honey) it is made of the juice of unripe grapes, 3 farrs, and 2 farrsiris of honey, boiled together, or till a running for 40 days; when it hath done working, put it in a vessel and stop it close, and keep it for your use. The same way almost is Melonemelis of Quinces made, Rhodonemelis of roses, honey of Myrtis, Rhoites, Rhodolacte, etc. you may finde there descriptions and use in Actius.

6. Thalassiumelis. is made of equal parts of sea-waters, rain-waters, and honey purified and see in the fun in a pitched vessel in the Dog-days; some to two parts of sea-waters add one part of honey, and so run it up. They both purge, but this hath far the left, Curatens: It is pleasant in taste and smell, it purgeth gently, without troubling the stomach at all. Pliny. And thus much of Honey drinks.

It would be too long for me, and tedious to the Reader, should I set down all kinde of Meats which the Athenians provided with honey, and other ingredients; therefore it shall not needfull to rehearse them; and it may be it is impossible: for divers Nations did variably mingle honey with other things, as with milk, meat, flour, wheat, cheeses, and with Salums, whence are these meats made of honey called 

- Avgos, Avgos, Avgos, Avgos, Avgos, Avgos. Juncates or honey-meats, and waters, they have divers names as the things is made. Athenians. They sacrified to Ceres this bread of felicity, as the Scholast upon Nicander theweth, we call it honey-bread. Also the Scripture teacheth, that the nations offered wafers made with honey to the Sun and Moon, and to the Queen of heaven: wherefore Moses forbid the Israelites to offer honey in their offerings unto God, Leviticus the 2. But it may be that was rather forbid the Jews because honey hath a power of fermenting. Also they made it with flax, fresh cheeses, oil and rufins; also to cause sleep, the Anciens made a kinde of meat of honey and poppy-seed, very pleasant, which they called Coecus, as Flitus reports. Also Amboyna which was held to be the meat of the gods, had that exceeding sweetness, whereby it was thought to be so healthful from honey, to make men immortal; of which Athenians and Bellonius write at large. But the Indians have the most and the moit wholesome juncates, who were held to be Barbarians, but the truth is, they may for their wit be compared with any in Europe, and for what I can see, to be preferred before them.

But before honey be used it must be clarified: which is thus performed: Take honey and fountain water distilled of each 2 pound, or as much as you please, boil them and skim off all that swims a top, till all the water be consumed. Then clarify it with 32 whites of Eggs. Abjomor. But if you make it hard pure, and faft together, mingle half a pound of the boil wine to one pound of honey thus clarified, boil them, skimming them till they grow hard, put it in a vial, and let it in boiling water, and it will grow clear, and flowy like sugar-candy. If honey be but mean, it will grow better by boiling: whether honey be sophiticate or pure, you shall know by burning it: for what is not sophiticate will burn purely, The Author of the GEnonion. But if you would separate the quinteulence of honey, oil, salt, water, vinegar, etc I face Belgis, the treasure of Encymynus and other Chymists, we will not venture into this ocean, being already plunged in the hubour. Now I shall shew you its first inventers.

Saturn was the first inventor of honey as Macrobeius and they of Cyrene boast. Calins and Pliny say that Arisbas first invented honey-works. But Diocles Nicolus writes, that the Creator of Cretes first found out the use and way of honey. Some ascribe this to the Thessalians. Others to Melius the most ancient King of the Greeks. Some to Bacchus, as Ovid testifieth. The Greeks feign, that a Nymph called Melitta first found out honey, and the use of it, and thence she had her Name given her from Bees, Who found it, or when, it is not much matter. It is a heavenly gift, and very profitable for men, if they use it well and wary.
Concerning Wax, Bee-glew, dregs of Wax, Pissoceros, Bees-bread, and of their Nature and Use.

WAX in Hebrew, Donagh; in Arabick, Mam, Examach, Zamach, Abers; in Greek, nuxem, neks, and µυκτης; in High Dutch, Wach; in English, Wax; in Brabant, Waf; in French, Cir; in Italian, Cera; in Spanish, Cera; it is either natural or artificial. Simple and natural Wax is the thickest part of the combs that contains the honey; and it is either virgin wax, or of a second sort; virgin wax is that the younger swarms of Bees make from the young branches of flowers. (That is the first Swarm put into a new Hive.) For, as Aristotle and Hel-lerius tell us, the Bee-masters call it, which they diligently separate from the first and new combs, as being by nature the most perfect of all: the second sort, though they reject not, yet is it short of the other for eeltem and worth. The way they make wax is this: They creep upon the flowers first with their fore-feet, and they touch them but lightly, then they wipe and rub themselves in the middle of them; then they nimbly and artificially lay down the tincture of the flowers which they have wrought with their water or moisture, and compacted between the legs of their hinder feet, and having gathered as much in quantity, and in form like a lentil, when they have this burden they carry it home to their houfes. That matter is of divers colours for the nature of the flowers, as yellow, red, pale, faffron coloured, white, black: which is the cause that the wax is of so many colours: they make wax, faith Pliny, of all flowers and plants, except forrebn and arach. Artificial wax, is that to which our labour and art must be used. Divers Authors use divers waxes to make wax. Palladins in the month of July, takes out the natural wax which he first prepares softly in a brafs vessel full of boiling water; cutting the combs small, and after that in other vellies he makes it up into forms, being melted, Pliny takes another way. The wax is made when the honey is prefit forth, but first they are cleansed with water, (that no reliques of honey remain) and they dries them three daies in the dark or in the shade. The fourth day, they melts them at the fire in a new earthen pot, the water covering them, and then he strains them through a basket; again the wax is boiled in the same pot and in the same water, and other cold water is put to it, so often as you see the vessels firened about with honey. Columella goes this way. After that the remainders of the combs are diligently washed with clear water, the honey having been firit well drained out, they are cast into a brafl'e pan, then he put water to them, and melted them at the fire, then he powed the wax through fihaw or nufnes to strain it, and then he boyled it again as he did before, and then putting water to it, he made it of what form he pleased, and when it grew hard it was easy to take it forth, because the wax hath water under it that will not let the wax flick to the forms. Now wax differs two waxes, for goodness and for use. The beet wax is collected by the principal Bees, and is fo wrought by the beet anthill; that it may appear white, tender, handsome, all like it felt, pure, somewhat fat, well firmed, without nerves or skins, brittle or any superfluous matter. Such as Nymus Marsullus describes out of Versa for Tarentine wax made by the Bees of Milicu. Wax is so much the nutr'de depraved, the farther it is from these good signs. The use of wax is twofold, for physicke or for other matters what concerns physicke: Wax is a mean between hot and moit, cold and dry, and emollient. It hath some gross parts, and that foop, it not only dries, but seems by accident tomoisten by hindering transpiration. Hence it is the matter of other medicaments. But by it self it digests lightly, being laid outwardly, for it hath a little delicious hot facutly, of which it partakes as much as honey doth. In drink it cures the dyfenterie, ten grains of wax swallowed fo big as millet seeds, will not suffer milk to clodder in Nuries breasts, Disferid, Aetius bids to give it in the bignest of three Tares. A certain Anonymus prescribes this remedy against pains of the head and malignant humours arising from a Fever or any other cause. Take virgin wax what you please, soften it at the fire that you may work it at your pleasure: lay it as a cap on the thorn head of the patient, and upon that put a linen cap that it fall not off. After three daies lay it off, or use it fo long till you finde the pain gone. Put wax into the hollow tooth that akes, and with a hot probc touch it, Archigenes. Wax applied to the nerves and tendons being bare, will cover them with flesh and cure them. Aetius. For the cold pain of the joysys, Take a cold dipt in melted wax, lay it handsonely and as closely on as the sick can endure it for one night, and it will cure it, Galenus. Moreover it is good to moisten the ears with Bees greese, and Bulls tallow, and melted wax, Marsullus. You may dipt combs in the eyelids with a fomerten of white wax, Gal. en Archigen. No man that is not an enemy of truth, will deny that oyl of wax is of principal use to cure pains of the Gout, to soften hard swellings, and to heal wounds and ulcers, Allo it is mingled as Galen with neffeth to the medicament of Afcopis against an Ozen, and it is a certain cure for the Jaundies. A certain Lady of most bleeded memory, wonderfully recommended the same pills to Gensyr. Take the yolk of an egg boiled hard, and as much wax, with some grains of faffron and a cup of worm-wood. Make pills to take morning and evening. They cure thrist exceedingly, but being continued by degrees without drink, they root out the diseafe. Allo a ball is made of wax to keep up the
womb subject to fall down; and medicaments made up with it will last the longer. Clesius the follower of \textit{Aeglepius}. The Greeks were wont to give the Cyrenian juice wrap it up in wax, to swell the bater. \textit{Celsius Aurel}. It is also the ground of all Ceers and Pluyfiers. \textit{Myritis} was the first that made a pluter without wax. It not only preserves the living, but it keeps the dead also from putrefaction, for which cause, as now it is used by us, to wrap up potatoes of great fortunes in wax (as Strabo reports the Persians were wont to do.). By a waxen probe hollow ulcers are best to be searched. The \textit{Carthaginiann} wax is the belt for medicaments; the next is the \textit{Ponwick}, which is very yellow, and smells like honey, being very pure. \textit{Pliny}. Which thing I wonder at amongst honey that is venomous: the third in extent is from \textit{Corice}, which is from abounding Bee-glew: the latter is the \textit{Corwick} wax, because it is collected from box, it is thought to have a proper quality.

Now follows the use of \textit{Wax} otherwise. They that are rich, or sick, or great men desire their candles to be made of it; by reason of the sweet smell. Also the use of wax is not small in stuffing the chinks in vessels; for rents in the camp to keep our rain; for bed-ricks that the teachers not out; to join pipes made of reeds as \textit{Oval} fan concerning the shepherds of old.

And with the Reed will waxed they play'd and sang.

Also the most excellent Painters painted with waxes as \textit{Pliny} reports, and they adorned ships with it. This kind of painting though it were not hurt by fire; nor by the wind yet it was lost we know not how; when \textit{Aetius Primogenius} and \textit{Zenusa} died. Also the \textit{Apennines} were wont to inter over their writing tables with wax before they were interred, as \textit{Josephus} describes it.

And \textit{Bee-glew} in his Epitile to \textit{Trogus}. I like by the bees, there was no hunting pale or hence by me, but a style and writing tables; I did meditate and let down some things that though I should have my hands empty, my writing tables might be full. Hence proceeded those old forms of speaking. In the fifth, second, third, or last wax. \textit{For Sestius} proves that the Romans write their Testaments in wax; in the life of \textit{Cesare} in these words. He made \textit{Petric} his heir to the last thing, the rest be placed in the bottom of the wax, that is in the last part of his will. Nor is the use of sealing wax little, whereby we seal letters and instruments. Of this there are four principal kinds the \textit{Ponwick} or white, the red of \textit{Indians}, the black of \textit{Americans} the yellow or \textit{European}. The \textit{Ponwick} is made thus. The yellow wax is often laid in the open air, then they boil it in fresh water, adding Nitre to it: then with skimmers they take off the flower of the wax and they pour it into a vessel that hath a little cold water in it; then they boil it apart in fresh water, then they cool the vessel. This is done thrice and they then dry it on a run-dry hurdle by day and by night in the open air, for this makes it white, the honey being drawn forth by the Sun, and the yellow colour breathed forth: when it is dried they melt it, when it is melted they cover it with a thin cloth, and let it in the sun, after it hath stood in the sun it becomes exceeding white, being boiled once more. Wax is made white otherwise, but this is the most proper for medicaments. \textit{Pliny}. I see that the Greeks speak of it no other than which \textit{Pliny} calls the \textit{Ponwick wax}. \textit{Attius} speaks of white wax in the \textit{Unguent Maritimus} and \textit{Panus} speaks of it also. Black wax is either natural as in the \textit{Molucca} Islands, and many parts of America it is gathered by the Bees themselves (as we read in \textit{Thesis} and in the Centuries of \textit{Navigations}) or artificial, adding the ashes of paper. \textit{Red wax} or like Minum of \textit{India} is made with mingling Anchusa or Cinnabar. There is another kind of red wax, hardly like a stone, but effe to break, the Merchants think their letters sealed with this to be very sure: yet there are some knaves so cunning that they will open them and that them again not hurting them, that no man can possibly discern it; which art, though a chief Impoctor pleased to \textit{Ponus} when he was at \textit{Paris}; yet he was too honest to reveal it to this mischievous age. The \textit{European} honey is of the natural colour, that is, yellow. But the colour and variety of things hath to bewitch us, that we are not content with natural colours, but we must imitate the \textit{Ponwick}, \textit{Indians} and \textit{American} waxes and above those we must have green, dark lights, blocks of wax of Holland casting on the same and some Turpentine.

\textit{Propolis} the Aramians call \textit{Kar}, the Greeks call it \textit{opismus}, \textit{oxiphum}, \textit{xylophum}, \textit{Dyphum}, the Germans \textit{Vorflughe} with the Dutch \textit{Vorflughe} with the Dutch; the Hevelrians, (as I mistake not) \textit{Bet}, and \textit{Binnentrost}; the English \textit{Hive-drofs}; the Spaniards \textit{El vinum de los colonnes}. \textit{Scribinius} takes it for \textit{Virgin wax}: \textit{Sylvanien} call it for the dregs of the Hives. \textit{Arendus} call it the forke of the walls, and fayes that some abuse it for \textit{Bedellium}. Some maintain that \textit{Propolis} drops from trees, othe say it is the first comb. It is indeed a thicker yellow wax with firmness sweeter tasted, like to \textit{Nestor} and distill like Maltick, like to wax but not yet made wax whereby all pottage are fill against cold and rain. The third force is that black matter and it is called \textit{Cocium} which \textit{Majalis} calls \textit{Mincus} and \textit{Pliny} call it \textit{Cocinum}, the dregs of wax: the second is called \textit{Pissocereus} as you would say, it is a matter of pitch and wax. The third \textit{Propolis} is a middle nature between these two supporters and wax, laid very thick at the mouthes of the Hives, chiefly in summer; and therefore it is called \textit{Propolis} as you would say belonging to the sun-shine. Because the Bees build with it at the doors before the Hive. \textit{Propolis} (from \textit{Hipers out of \textit{Pliny}}) perhaps is some resin gum growing upon the budding places of trees, which Bees gather and hang about the entrances of their Hives, to stop all chinks in winter against the cold. There are four sorts of it. The first is collected only out of the black Poppy, which they call \textit{Argyricum}, that is, yellow; it
is full to be touched, and sticks like bird-lime; it stings sweet, and comfortable to the head, caueth
rems, and is like Storax, it taints like Poplar buds. The second is gathered from the Birch-trees, and is
of a colour between a yellow, sith, and green, it is full and dextrous in handling. The third the
Bees make out of the gum of the Poplar tree, called Alpins, but it is but foreign, and only in
those places, where no other Poplar tree or Birch abounds, but only that is called Alpins. The
fourth or mingled, is gathered and confounded from all these trees, so that he hath a mixt colour
fent, savour, and content. Cardus faith almost so much; now let us hear Pliny. Pliny says, Propolis
is a kinde of middle substance between honey and wax; gather between wax and Philocreos, and
it seems to be gum collected by the Bees to stop up their hives. Rondeletius faith, it hath a
thick substance, and the smell of leaven. Pliny faith, it stims so strong that some use it for Gal-
banum. But in the spring gathering time of honey, this part that thrusts their cells may be separated,
which Politian writes thus: That the Bee lays a white foundation of his various coloured wax,
so that Propolis seems to be a thick foundation for the wax. But it is now out of use, nor
can any man finde pure Propolis. For most Bee-masters taking out the Hives, when all the hon-
ney is run out; whatsoever is in the combs they mingle together, and keep none pure by itself;
but that wax which Avien calls black Mum, any thing but the dregs of the combs, or effe of
sediment that sinks to the bottom of the water after the wax is boiled, and this is now Propo-
lis: but Propolis is not pure, but some mingled matter. The nature of Propolis, is to dissolve
in oil as wax, but it is more ponderous and thick, and sinks to the bottom of it being melted,
when wax swains on the top. Choose the sweeter, purest, not so sophisticated with wax, which you
may easily part by pouring it into water. The best Propolis is said to be pure, most fragrant,
without wax. That of Cretes and Paphis is the most effectual, the Bees collect the greatest part
of it from the uncouthy of Storax and Libdanum; they collect it questionless out of other
plants: for they make Propolis where neither the Poplar tree, nor Birch, nor any of the forestal
plants grow. Great is the virtue of pure Propolis, upon the gross spirits, and it draws faulty mat-
er out from the depth. Holleriis. It is of the nature of wax; but it powerfully draws forth Dio-
ferid Cells placed it in the number of biting remedies, saying that it digests and moves mat-
er out. Actius fays that it heats, diffuses, ripens, cleanses, attracts. The cleansing force is not very strong, the attracting is strong enough, it is of thin parts, it papers in the heart.
the depth quite, or in the beginning of the third: you must first often it with your hands be-
fore you mingle it with other medicaments, and then taking the reft from the fire, it heats it in
and boil it, for it will not well endure any boiling at the fire. It draws out thorns and all splinters
that are within. Actius. Varro faiths, that for its manifold uses it was fold dearer in the marke
than honey. May be therefore Propolis was called holy wax, because of Via Beer, where they
fold it at Rome, as Longus writes in the cures of hard swellings. They draw forth thorns and such
bodies lurking in the Heels, with runnels, (especially of a Hair) powder of Frankincense, and Propo-
lis. Pliny. It helps an old cough with its smell. It cures the rowe with waters and roots our ring-
worms by anointing them. Dioscorid. It cures Oczana: Scraio. Pliny l. 11. 6. 7. tells of more
of its Physical uses.

Arifatole calls Eristhaca Senderuzza, others call it Cerintherum, and Smirion. l. 2. Arifet, de Planit.
The learned call it Venulage, some from the time of the year, Vereux; this Glen, faith Nephus
the country Lombards call Capvina, but ours Taranum. It is the meet the Bees make, which they
lay in the void spaces of their combs; it calls bitter, it is made of spring dew, the heart of trees,
and sometimes of gum. That of Africa is fullest little; that from the South parts is blacker; from
the North is better and redder; there is much from the Greater Nuts. Vercules faith it is a
flower, that thovers the future harvett. Plin. Varro faith, it is not nearly but glee, whereby the
Bees fillen their combs at the ends togethe. It forcibly calls forth the swarms: where they
would have the warme lights, they anoint a bough with Erithaw, or any other place, adding balm,
Virgili, I think, following Varros, calls it glew. Mytisscommothes (Stephanus calls it souse) and Pif-
tes, cures stokes and ulcers. Arifote. What use it hath in the hives, we saide enough before.

CHAP. VII.

Of Drones and Theevies.

The Drone called in Latin, Fucus, is called in Greek, λαυόνος and ἱππόλαυς in the Illyrian
tongue, Cuspa; in English, a Drone; in High Dutch, Tros; in Low Dutch, Belonder
straal; in Spanish, Zangano; in Italian, Acbe non fa melo; in French, Bourdon and Fouillon; in the
Hungarian tongue, Her; in the Polonian, Cszew. The word Fucus a Drone, is derived as
some think from Fury, which signifies a thief, because privily and by stealth he makes prey upon
the honey: although with more probability the word fucus may be so used, because he doth cheat
and conten the Bees; and under colour of keeping the Hives warm, (which is his office to do) he
ranstick the combs. And for that reason, some with too much confidence, perhaps, derive the La-
tine word fucus from the Greek word ἱππόλαυς signifying to eat or devour; others will have it
come a favendo, in regard of their sitting upon, and murtling up the young swarm.

Some
Some make the Drone to be a fourth sort of Bees, but not so well as others think, because he neither gathers honey himself, nor doth any way help in the working or making of it up. He is almost twice as big as the ordinary Bees, and somewhat bigger also than the Thief; he is as big likewise as the King, and somewhat bigger. Although they do not arrive at this copulency by the dispensation of nature, but by their course of life that they take. For when the Bee does not set apart cells for the Drones to breed in, they make them lefser then their own, And the little Scha- dows or worms whereof they come are far lefser than those of the Bees (who are sprung of the noble race, and of the flock of the Bees) in their first birth; which at length become a great deal bigger than the Bees, both by reason they never take any pains whereby to spend their natural furnitures; and also in regard that they do nothing night and day but (like even at the fall) never leave gazing and gorging themselves with honey, which afterwards they deadly pay for, when provision happens to be short, and there falls out a death. They have a bright flour, but mixt with more black than that of the Bees, in bulk they exceed them all, but yet without sting and idle. They both breed and live amongt the Bees, and when they go abroad, they presently tread all abroad aloft in the air, as if driven by violence, where for a while they behin, and afterwards set upon the Bees with good stomachs, falling greedily to the honey. But why the Drone should equalize the chief Bees in dignities, and the Bees also in having flings as well as they, let us hear Aristotes reason. Nature did before faith he, to put a difference between them, that they should not be all of one kind, which is impossible; for so the whole Stock would be either Kings or Drones. The Bees therefore are like unto the Kings, the Master-Bees in strength, and in the faculty of generation; and the Drones only in bulk or bigness of body, to whom if you should give a sting also, they would be nothing inferior to the Kings themselves, 1. 3. c. 10.

They are called also of the Greeks νήσοί, because they hide their stings. From hence Hesiod, hath these words, ἱππος ἀνάρχον τῆς μακραίης ἀλότριος, who lives idly, having strength like the Drone that never wethers his stings; certainly either they have no stings, or never use it to revenge themselves withal. Pleasurably plain they have none, and terms them no other then in a manner imperfect Bees, and therefore Virgil calleth them ignavum pecus a sluggish kind of creature.

Solids calls them νήσοι, μεγάλοι ἡς ἡ ἐνὶ σφων ἠγείρει, from hiding their stings. Columnella, a sort of creatures of a greater growth, very like the Bees, and accordingly he placeth them in the rank of herding or swarming creatures. They suffer egregiously of the whole swarm many times, not only for their floth and rapacity; but for that wanting a sting they seem effeminate, and not able to make any opposition. Plin. l. 11. c. 17. describeth them thus: The Drone is an imperfect Bee without a sting; and begat then after all when the Bee is decayed with labours, not being able to labour any longer. Like as men part their labours, and thriken in age, beger of women when they have well-nigh left reeming through age and weaknes, feeble children, incapable of procreation, little better then eunuchs: to it may not seem strange, how these Drones are too weak and impotent, being begotten of the Bees when they are exhausted with age and labour, in whom they are not either to propagate their one species, nor to take pains as the other do. Which is the reason why the Bees so lord it over them, for they put them first forth to work, & if they loyter, they punish them without mercy. For in the moneth of June, two or three (especially the younger fry) drop out one Drone by himself alone, buffer him with their wings, goe him with their stings, if he resist them, they call him down from the form upon the ground, and at length when they have made him weary of his life for anguish, they make an end of him and kill him; thus beheld with mine eyes, nor without exceeding admiration and delight. Sometimes the Drones being banished from the Hive, are fain to remain without doors, not daring to enter. Now for these reasons especially thereunto moving, the Bees do that out the Drones: either when their number is above measure increased; or when there is not room enough left for the Bees to work in, or else when their honey fails, and they are straitened for want of provision.

And as they bear a deadly hatred against the Drones, so neither will they hurt any man if with his naked hands he shall take the Drones and cast them forth, no although they be in fight. The Drones, if the King be alive, (as some affirm) are begotten in a place by themselves. But if the King be dead, they are begotten of the Bees in their cells, and those are a great deal luster than the other, in which regard they are said to have a sting in their souls, although they are allowed none in their bodies by nature. Thus Aelian. lib. 1. de Animal. Hist. c. 10. The Drone which is bred amongst the Bees, lies hid all day between the honey cells; but in the night when he observes that the Bees are gone to their rest and are fast asleep, he feets upon their works and presys upon their Hives. This afoon as they understand (for that most of the Bees being weary with labour fall asleep, and some few watch) when they espie the thief, they moderately and gently chastifie him, crop his wings, thrust him out from thence and banish him. But not content with this punishment, whereby to amend his fault, being naturally poftfet with two ill qualities, idlenefs and luxury, he hides himself amongst the combs. But afoon as the Bees are gone forth to pasture, presently he falls upon the works, doth as much as in him lies, gives himself with honey, and utterly ransacks the sweet treasury of the Bees. They coming home again from feeding, as soon as they meet with him, no more favour him as before, with saife frites; or as if they were about only to banish him again, but feting upon him with their stings they wound the felon,
felon, and no more satisfy themselves with chiding of him, but then he pays for his voracity and glutony with no less than his life. This the Bee-masters lay and persuade me that it is true.

Drones come forth without a King, the Bees never. For they always descend from Kings. There are that affirm that the young Drones are brought thither from other places from the flowers of honey-tuckles, or of the olive or reed: But this opinion is in thin, and doth not stand with reason. Aristotle affirms that the great store both of Drones and Theeves are sprung of the longer and slender kinds of Bees, which doublely he was informed of by the ancient Philosopher, or by Bee-keepers, and Honey-masters of his time. Some likewise say they are ingendred of pure affection; as of Mules to Jactrata; of Alces to Cardiunt; of Hones, to Plutarch and Servius. Others will have them to be the issue of Bees by a certain degeneration, when they have lost their wings, for then they become Drones, nor are observed to gather any honey, and being as it were gelt of their natural strength, they neither do harm or good. Others on the contrary say, that the Bees are bred of the Drones, because long experience hath taught, that as the number of Drones aboundeth, so much every year is the number of the Swarms greater. But that in my apprehension is rather a reason than a solid reason: for therefore are there not (as some reasonable years it comes to pass) more Swarms of Bees, because more Drones are bred; but rather on the contrary, because the increase of Bees is more in regard of the clemency of the heavens, and the plenty of mellowish dews, from the abundance of superfluous moisture proceed the greater store of Drones; as the Philosopher hath well collected. Or if we grant them this, that the more the Drones are every year, to the more Bees; yet notwithstanding we ought not to conclude from thence, that the Bees should derive their original of being to the Drones, but rather be HOLDING and indebted to them for their conservation, while they at the time of sitting and incubation, by their company do much further the procreation of the Bees; the throng of them (to use the words of Pliny) exceedingly encouraging the vegetative heat, by which they are sooner hatched up.

There are that divide the Drones into Male and Female, and will have them to propagate their species by way of copulation, although (as Athenæus writes) neither Drone nor Bee were ever seen to couple together. Yet forasmuch as Wasps and Bumble Bees, and all other Hverigeus, are seen sometime (though very seldom) to couple: I see no reason why the modesty of the Bee and of the Drone, whereby they abandon publick unction and venery, should debar them of the private use of copulation. For they, as the chaffier sort of men are wont, do it privately, and do naturally deduce the impudence of those that publickly prostitute themselves in the day time, and when all eyes are upon them.

We have told you before in the generation of Bees, that some would make the Bees the male, and the Drones the female.

But when as (about the time of making their honey) they do so sharply punish them after they have call them out of their Hives, and kill them (such violence which if used to their mothers, would much blenish the virtues of the Bees) I r barely think they are females.

Of what use then are they of the Hives? Is the Drone altogether unprofitable, good for no thing, idle, without things fit for no service, no way helpful to the publick? More than that, Virgil himself chants it to that effect:

Immunifig sedens aliena ad publca mucus.

The Drone sits free feeding on others food.

Where Pollux takes the word in that sense for a slothful, idle, unprofitable creature, void of all employment, unless it be that of thieves and robbers, who take such a course that either they will live by the sweat of others' browses, or else they will disturb the whole Kingdom. Such like Hesiod makes women to be, when he compares them to Drones.

*Omen* est facile invenire, in omnibus libris.

*Anno* invenitur, scilicet in sale et in aqua.

Which is, I interpret it in Latin thus:

 Qui segetes suscitat contrectia adibus attet;
Sudaem altius prope putatur in aereum.

Or in English thus:

Who sit at home, and to work have no will,
With others sweat they do their bellies fill.

But more creditable Authors propound divers uses of Drones: for if there be but a few of them amongst the Bees, they make them more diligent and careful in their businesse, nor by their example, (for they live perpetually idle) but because they take the more pains in making honey, that they may be able to continue their liberality to strangers. They discover also signs whereby to know when the honey is come to maturity: for when they have perfected their honey,
The Theater of Insects: or, Book I.

Chapter 1

The Drone, when he perceives that the Bees are in their dead sleep, he sets upon their works and destroys their comb.

But yet (if Earth-humane deceive us not) they are not unbusied neither; but they build houses for the Kings, large and magnificent in the top and middle part of the Hive very finely covered over. They are therefore idle (to say fly with Aristotile) in regard of making honey or gathering dew; but in regard of their Architecture 'tis they are workmen. For as the Bees make the combs of the Drones hard by the Kings Courts, so under the same consideration the Drones build the Kings houses, which is the reason why they and their young ones (if they have any) are sustained by the Bees. The cells of the Drones now grown up according to the bulk of their bodies are larger, but their combs lette; for the Bees built these, but tho' they made themselves; because it is not fitting that the same proportion of food should be allowed to hinder and hibernate as to the child en or matters of the family.

Tzetze in his elegant Poem, and other of the Greek Poets, make them to be the Bees carlanor water-bearers, and do align unto them a moist kindly heat whereby they are said to hatch the young Bees and make them thrive. In like manner Columella: the Drones do very much help to breed the young Bees, by setting upon those feeds out of which they are made. And the wise they are more familiarly admitted to the nursery to bring up and cherish the young brood, when they have done, afterwards they are shut out of doors. And Pliny also in his 11. Book. They do not affit the Bees in their Architecture only, but also in cherishing their young, the multitude of them cauing heat and warmth, which the greater it is (unless the honey chance to fail in the mean time) the more the swarmes of Bees are increased. To conclude, unlike they had been for some great use for the Bees, Almighty God had never houled them under one roof, nor made them, as it were, free Deniomes of the same City. Neither would the Bees lay hands on them at all as enemies of the State, but when their service multitude doth increase and they take up offensive arms; or scanty of provision were to be suddenly expected: in which rempelt of affairs who would not rather judge that the Carpenter should be dilluted than the Ploughman? especially when without him by reason of want of victuals, we may hazard our lives, but the other we may be without for a time; without prejudice to our lives, and our selves (if need require) are able to build habitations every one for himself. Now as thebe, being but a competent number of them, are very profitable to the Bees, so if they be over many, Plato not without cause terms them morbus alveariaum, the Pest or Plague of the Hive, in the 8. book of the Common-wealth (where you may see a molt elegant companion between Aristotle and the Drone) both because they will the provision of the labouring Bees, as also with their too much heat ruffle them. This inconvenience the Author of the Gepoponics doth thus remedy; take the covers of the Hives and sprinkle them on the inside over night with water, and you shall finde them benrises in the morning when you take off the cover of the Hives again, all over covered with the Drones; for when their bellies are full of honey, they are very thirsty all day, and perspire with an intolerable desire of water; so that the thing left to the lid of the Hive; and it is an ease matter to put them all to death, or if you will rather to take away the greatest part of them. But if you take away the young ones and all, that are not yet come to have wings, and pluck off their heads, casting the bodies in again to the other Bees, you shall offer to them a very dainty dish.

Moreover also if you shall take the Drone and crop off his wings and cast it back into the Hive, he will if we may credit Pliny pull off all the wings of the rest lib. 27. c. 11. or rather the Bees themselves will devour the wings of the rest of the Drones that are left. For so faith Aristote, πόνος scivere το κτήνος αὐτοχρόνος δομής, ἀλλ' ἀσωτήτης τούτῳ τούτῳ ἐπημένω. For it is not probable that either: the Bees should crop one the others wings; or that the Drones should so far adventure, or be able to offer such violence to the Bees: so that as Pliny was mistaken in reading for ἀριστέας, so also they do not a little speak by gueffe, who refer the words ἀριστέας, the refi. to the Bees and not to the Drones.

But what the dreaming of Drones doth pottend, what use they may be of in the way of Hieroglyphicks: let Apomafarius out of the Schools of the Persians and Egyptians declare. It shall abundantly satisfy for what we intended to speak of them, to shew their true use, true nature, generation, degeneration, description and name. But as for what belongs to Emblemes and Hieroglyphicks, and precepts for Manners; every mean capacity may furnish himself with a world of useful rules by oberving their course of life; without any need of confuting with those abfinre Egyptian Priefs.

The Theeves are thought to be amongst the Bees of a kinde by themselves that are very big and black, bigger in belly than the profitable Bees and leffer than the Drone. So called because they devour the honey by theft. Bees admit of the Drone into their company, and are glad of it as being helpful to them, for their benefit sometimes. But the Theeves being naturally odious to the Bees, lay upon their labours when they are abroad, waiting and spoiling their provision of honey. Yea they do to glut themselves in the mean while, that they are not able many times to get our again they are so full, or to stand in their own defence; whereupon the Bees at their return without any more ado, severely punish them, and according to their just demerits kill
Chap. VIII.

Of Wasps.

The Wasp is called in Hebrew, Teṛyna; in Chaldean, Dihrane; in Syriack, Gnargnisha; in Arabick, Zambr; in English, a Wasp; in Dutch, Harselt; in Italian, Vespa, Werep, Moscone; in French, Guefpe; in Spanish, Vespa and Abispa; Gothick, Boulgringle; in Slavonica, Vola; Ulyrick, Ofa; Hungarick, Dara; in Latin, Vespa.

They are called Vespas, as Caius writes, for that in the evening they seek about for flies to feed on.

The Greeks also have several names for them; commonly they are called φασμα, Eustathius derives φασμα ἐκ τῆς φασάς, because you may perceive them to be divided in the middle that they seem to gape, as you may observe in the figure set down. The Scholiast of Nicander calls them οὐονοζοντες, of Sunaes, Abislas, and Abislas; Hesychius terms them διάβαλλος and ανθτός Ψαλικα, (but abusively) θαθονα, for they ought to be called rather Crabrons.

Now the Wasp is a winged Insect, grecial or hurstound round like a ring, long, having four wings (of which the two former are the bigger) having a wing within, fix rooted, they have no blood, they are of a yellow golden colour upon black spots placed trianually, the whole body is garnished with divers colours athwary; when it may be folt, it is called Seuraphy.

I think they all in general are armed with stings, (what ever Authors write that their Females are without stings) because when I was at Ham, a village town in the West, about the year 1587, having found an entire Wasp net, I poured hot water upon all the females and killed them, and yet could find none that had not a sting either within their bodies, or sticking out.

The body of the Wasp is bound in the middle, but the breast with a certain exceeding thin thred, that they seem to have no lungs at all, and to be quite through open; whereupon that Greek Comick Poet calls those of the Mayexternal, (which Terence by way of elegance calls Butttnes) for their slenderesse, in the words sponaw, waftpy or like Wasps. They make a buzzing noise also like the Bee, but more loud and hoarse, especially when they are angry; upon which came that proverb made by Theocritus in Hadespolis, in comparaison of a bowling idiot, or man of learning and parts, who may thus waris i.e. The buzzing Wasp against the Golf hopper.

If you will have the endowments of his minde described, he is a political and flocking of great creature, subject to Monarchy, laborious, a lover of his young, and a lover of his neighbours; his minde and of a very quireseome disposition, and very proper to choler. It is a sign that their life is Political, because they live not solitary, but do build themselves a city eminent for structure, in which they are subject to their set laws, and do yield to them as well in their external actions, as in affectiones. Whereupon he Philosopher doth rightly reckon them in the number of the City. This is Political form of Insects, they are governed also by Kingsy power, not tyranny (as Ed Tunis) although by nature very fierce, making his Argument, because Captains of the Wasp, want stings; if they have any, they never put them forth or strike with them. And although they be twice as big and hard above all the rest, yet are they not without gentleness, and graceful demeanour, with which also sometimes they refrain, and appear their rebellious and mutinous subjects.

But of their mutual love one towards another, every man is able to give a testimony; who ever he be that shall offer injury to any one of them near home, for with his buzzing and making
making a noyse, all the swarm being terrified issue out to the succour of their neighbour; and will cause the troublesome stranger, although armed, to run away (as they did the Phædrites of old) of whom Achilles reports that by the multitude and fierceness of the Wasps they were quite beaten out of the City.

As for unnatural affeil to their young, that it is a vice which is very far from their disposition and nature, as many things do evince, to that above all, that with more than Herodick undauntedness of courage, they let upon those that would surprize them; neither do they stand in fear of either Neoptolemus, or Hellen or Achilles or Agamemnon, the General of all the Grecian Forces; yet that divine Poet Homer in the 13. of his Iliads, when he would expell the generous spirits of the Grecian Commanders, he compares them to a speckled Wasp, and endow'd with the Wasps animosity and часто heartedness, when they are put upon it to fight for their house and family. They do moreover care for their children large firms; (as it were like those Manes of the Egyptians) of a round form, flooted, and standing one on the top of the other. One of these fabrics most curiously built, was brought to Pirius when he was at Belium out of a certain solitary grove. There were seven stories of building one on the top of the other two fingers space between each of them, disposed by the putting of certain columns or pillars between them, that there might be a convenient space left to paffe in and out of their lodgings. The diameter of the orbs up to the fifth story about twelve fingers over all the other from the fifth are narrowed up to the top by degrees, so that the left is about five or six fingers broad. The greater round contains the fifth room, fenced to the bough of an old tree, very well fenced above with a certain rough-calf to keep off all wind and weather. Within are six square cells standing very thick together; but the middle concamcations the multitude of wasps had filled, a very thin leaf being laid over every hole for a covering; some of which when Pirius had taken away he observed all those chambers to be full of Wasps creeping with their heads to the bottom of them. Those in the rooms below were certain imperfect things like Embryons or little worms, which were covered over with the same covering, as it were a winter. Ofter, in expectation of the more milde season of the spring. Which building although it seemed a very sharp winter did remain entire, and no way decayed; at length Pirius expediting what should be done with those little worms when the spring came, he perceived nature to make no further progress in her work with them.

But still the fabric was kept by him, not without the great admiration of those that saw it, wondering much to see so much art and cunning in those little creatures, and that they were able to hold out to finish such an elaborate edifice. This reluates Pirius. I also have seen many fuch, but of a different fashion, some like a Harp, some like a Cup, some like a Pear, some like a Toadstool, some like a Botte.

The matter of their Combs is said to be confused, heaped up together, like bark or cobwebs, transparent, gummy, and made into very thin places like leaf-gold; but I found it alway light like paper, dry, easily put with faint and thither by the wind, and for the most part growing up from the bottom like a Turban. As for the place where they use to build, it is thought to be divers. If their chieftain be desirous they make their nests aloft in the hollow places of trees or walls, and in thefe as some affirm (though I never could finde any) they make wax also. But if they have their matfer Wasp, they build under ground in fix square cells according to the number of their families, and after the fashion of the Bees. Their combs are made in the form of a large Toadstool, round, out of which there comes out in the middle or center as it were a little foot by which the cell is fastened to the tree, or to the earth, or to another cell.

But so tender are they over their mates or females, that they will neither suffer them to take any pains, nor to seek after any provision; but they themselves bring in all necessaries to them, and do as it were enjoin them to keep at home.

All which things, and each particular being considered by any man, he must needs confess the pain, industriousness, sweat, and labour of the Wasp. As for their choler and frowndielle of the Wasps, not only poultery that scrape in their nests and trouble them, but in like manner all that provokes them do know them to be implacable: from whence arose the proverb of the speech of the Greeks, and is ever since, to wit, to be a relation, as the other says, to be a relation, i. e. to contrast with a Wasp's nest. Of which sort something to that purpose was written on the Tomb of Hippocrates and the words "Wasp's nest in mine ear," i. e. Do not raise a steeping Wasp. And to Aristophanes in Veipsi; when he would express a cruel, morose, fretful, quarrelsome sort of people, calls them Wasp's nests, &c. Clem. Alexander also, when he would set forth the acerbity and bitterness of those vices that Ivo in wait for the souls of men, faith, vespæ parvis habitant, i. e. These specially pleasure, are hardly Olympick Antagonists, and more than Wasp's nest. To which may be added a certain speech of Themistius discourting of the speeches of many malevolent adversaries, ἢ κατά (fate he) ἢ κατά τοῦτον καὶ ἐπὶ τὸν ἄνθρωπον: they raised upon me as it had been a swarm of stinging Wasp. Which oftentimes proves mortal, as Phrynius knew by experience from the Milephas and the Phædrites were sufficiently inflicted by their own great miseries; yes, whoever he be that shall challenge this generous and redoubled Champion into the field (so use Nicander's words) shall obtain but Cadmus conquest, he shall firely be worsted and flain; for they do not fight to much with their stings as with the strength of their bodies; and more than that, when they fight they will never give over being not only strong but resolute.
Notwithstanding they differ in their original, kind, sex, age, place, diet, and labour.

Ibidem affirms that Wafps come out of the purified carcasses of Flies, although he may be mistaken for all agree that the Scarabees are procreated from them: rather am I of opinion with Pliny I. 13. c. 20, and the Greek Authors, that they are sprung from the dead bodies of Horses; for a Horse is a valuable and warlike creature, hence is that verse frequently, and commonly used amongst the Greeks.

Whips come of Horses: Bees from Bulls are bred.

And indeed their more then ordinary swiftness, and their sagacity in flight, are sufficient arguments that they can take their original from no other creature (much less lice from an Aflse, Hair, or Oxe) since Nature never granted to any creatures else, to excell both in swiftness, and valor, and surely that I may give another sense of that of Proverb of Aristoph. Xan. 22. and Num. 23. 7. and 8.

Hail the daughters of the wing-footed seed: this would I suppose fit to be spoken in way of jest and scorn to looking women, which do imitate the haininess and rowdward disposition of the Wasp. Other sorts of them are produced out of the pured corps of the Crocodiles, if Horses and the Egyptians be to be believed: for which reason when they mean a Wasp they let it forth by an Horie or Crocodile, Nicander gives them the name Butonans, because they sometimes come from the dead carcasses of Wolves.

Helenaeus & Vincentius lay that Wafps come out of the putrefaction of an old Deers head, flying sometimmes out at the eyes sometimes out of the nostrils. From Lib. 2. as Hericus seems to have collected this observation: that out of the corruption of every creature, there is another sort produced, which would be very absurd; For by this means Generation would be infinite, and likewise daily experience doth teach the contrary.

For that little beast which I term Tainwan Alberts, doth naturally produce nothing at all, as I have tried a thousand times.

There are those also, that affirm that Wafps are begotten of the earth and rottenness of some kinds of fruits; as Alcmenus, and the Aristobulus Scholiast: but for the most part they are begotten by copulation, and the mutual embraces of the male and female; which although Aristobulus I. 8. dito: affirms, he seems as fabulous, yet when as the Philosopher affirms that he saw it with his eyes (as I. 1. de gen. anim. c. 10 & 9, Hipp. c. 41. it is evident) I am wholly of his opinion, and do give full suffrage to his attention. But how after copulation, they grow and come to maturity, we may know of Arist. Hipp. 9. c. 41. and Pliny his interpreter. The mate Wafps, when they have chosen them a convenient place, under grounds in the chinks of walls or (which I have often seen) in the thachat of bowles; in the beginning of Summer they make their nefts and they contrive their little nefts or cells (which the Greeks call Thanares) with 4 doors or passages in which are begotten worms only, not Wafps which when they are grown up then they make larger cells, and when they come to have young ones then they make more nefts so that at the latter end of Autumn, you have many and large nefts builded; in which the chiefest or master Wasp (which is called the Matrix) procreates no more Waps, but those of her own sex; which also are begotten alof in the uppermost part of the neft, in the likeness of mowants. But when they are in four or more cells continued, or penned one to another, thewske of wafers would be no difference in their breeding, between the Master or mother part, and the ordinary Wasp. They let fall their sperm at the Bee doth at the sides of the cells of the comb, and on these close to the walls or outmost part. It is not at all alike in all cells, nor of equal dints, in the same place, 11. c. 11. and 12. equall and frangis (fayth Pliny.) In some so big that they are able to fly: in others only Nymphs, covered with a thin membrane like an Aurelia; some also have them yet in the worm. The Worms only have excretion in like manner as the Bees have. Their sperm or spawn doth not stir at all whiles it is in the Nymph, and is covered with a membrane. In the same time of the year, and the same very day you shall observe them to be of unequal growth, one flies abroad, another is only a Nymph; one is able to vole or tumble, another not able to stir, a third is a little worm. All these things happen in the Autumn, not in the Spring. They must increase at the time of the full Moon. Hee then is to be noted, that the Waps have no winges and that all the Summer they are goved ned by their Matters or male Waps; but in the Winter by their females. Afterwards the multitude of their illue being renewed, the government such as it is, of short continuance and weak, however, upheld with molt juft lawes, returns to the male. But yet notwithstanding their young seemes not to be brought forth by way of Birth, [sich Arist.] because it prevetly comes bigger then a Wasp should be able to bring forth. A very little and empty conceit of so renowned a Philosopher. For what should hinder that Nature should not be able as quickly to perfect and increase that which is produced by a legitimate birth, as that which is generated of putrefaction? Let us but call to minde the young ones of fowles, which in a very short time when they are once out of the shell-do get feathers on their backs; how soon do they go, feed, grow, and come to maturity? and then we shall easily see the weakness and improbability of the Philosopher's Argument. The Matter Waps are greatly increased in numbers, especially if there were great store of Waps, and a wet year the year before.
they have layed their young fry, they cover the cell with a kind of a little thin skin as it were, which when they come to perfection they break, and two days after fly about with wings. Aride

fate mentions but two kindes of Wafps, one milde, the other fierce; the fierce kindes is very rare, and breed in mountains and woods; and breeds not under the ground, but in an oak, being greater, more stretched out, blacker, longer, having a stronger sting, and thinfeth more fiercely than the milder do, and is armed with a greater sting than his body seems to be able to carry, Aride faith that they live till they be two years old, and when the tree is lost in the winter they are seen to fly away. They lye close all the winter, and most commonly live in old walls or trees.

A fort of these I found once in a wood in Essex, not without great peril of my life, at such time as by chance I carelessly wandered here and there a sampling, with my friend Penny and one servant attending us. I would needs be prying into their nest: with which they being offended, all the swarm flew out upon us with all the force they had, and but (as God would have it) we had carried in our hands some sprigs of Broom, (with which we used to catch those Insects) for our safeguard and defence, we had payed for our folly, not only with the hazard of safety but of our lives; for the followed us hard to the very middle of the wood, and a great while it was before they would leave pursuing us.

In the year 1681, on the top of Chartmell hills amongst the flones I saw two forts of Wafps very eagerly fighting with one another no difference there was but in bignefs. The greater they stood upon their strength, the les trifled in their faction and multitude; for six of the leftr fought with one of the greater, not in the air, but in the grasse. From whence I gather that the greater did use to rob the leftr of their honey or young ones, or perchance offer them some other injury. Long and sharp was the fight, till that scarce after two or three whole hours was over, and the Sun very vehemently shining and torturing them, did give over. For they are very hot upon revenge, and long ere they take up the quartc: so boldly and furiously charging the enemy, that even Mars himselfe were not able to answer them, or march their valour; such a strong undaunted nature hath God infilled into them, and such spiritlike courage hath Nature planted in them. I once received from Vienna and Hungry two kindes of Wafps, such as you see in the Figure, their backs were variously coloured, with a shining yellow black colour, the one had rough horns, the other smooth; both of them almost three times as big as the ordinary fort of Wafps.

The Wafps called Ichneumones are lessthen the rest: they kill Spiders called Phalangia, and after they have done they carry them into their nests, and dab them over with dirt, and so sitting upon them do procreate their own species, Aride. Therefore they are called Ichneumones faith Niphus from their fragrants and flendemants.

This kind of Wasp I make to be all one with that spoken of before, building her nest in mudwalls, and such like places; before the entry or going into her hole she makes a porche of dirt, the length of it about the breadth of two fingers, which within is embattled over; with smooth platter of the same dirt. Pseudophexa leemeth also to be a kind of Wasp having no stings, with a blackhead horse, having two cornicles or little short horns, great eyes, black, standing out of its head, a long forked mouth, a bulky breast fluttering out, to which on either side are three feet softened, the shoulders thick and bunching out, the body long, slender, confiling of many joynts, two dusky coloured wings, rough feet, and of the same colour with the wings. There is a kind of Wasp called Liest, because it stings deadly, like the Pifmire to called. Paramera are a kind of Wasp tho' called, (as Aride faiths) with earth grapes, (as Aride faiths) and serves for a prey to the Owls and Sceetche-owls, as Aride faith.

Of the Wafps as well wilde as tame, some have no stings, (or at least make use of none) others have; the leftr and more feeble are those that want, which neither are able to offend or dash. On the other side, they that have stings, are bigger, stronger, and able to fight. These, some would have to be the Males, the other that have no stings Females. Also very many of them that have stings are conceived to lose them upon the approach of winter. But this as yet hath not been my chance to see (faith the Philosopher). If you take a Wasp and hold him up and make him busy, those that have not stings do presently flock to him, which those that have do not; which is the argument whereby some are to prove, the one to be male, the other female. Of both forts some are observed to couple together as the fly doth. Moreover, (according to their sex) both kindes of them are divided into two forts, either they are male Wafps, or drudges and labouring Wafps; the one is greater and more gentile, the other less and more pettif. The drudge or labouring Wasp doth not live out a whole year.
Chap. 9. Of lesser living Creatures.

year; for in the midst of winter they all die, which is seen, because soon as winter comes they grow fluid, and in winter there are none to be seen: the others, that is to say, the Lady Wafps, are observed to hide themselves all the winter long underground. For divers men when they have gone to plow or dig in the winter, have seen them, though no man ever saw the other.

Now the Female Wasp is broader, weightier, thicker and bigger than the Male Wafps; and but a flow of flight; for by reason of the weight of her body she is not able to fly far; by which it comes to pass that they for the most part stay at home, making of a certain glutinous material which the labouring Wafps bring to them, combs and cells.

No man ever observed these creatures to live long, for the longest lived, which are the Mar- trices; female of Lady Wafps, live not above two years at the most, the other die every Autumn. Now whether no the Female Wafps of the former year, after they have brought forth another brood of males: Wafps die together with the young Wafps, or whether it always fall out to be so, or whether or no they can possibly live any longer time; many Authors leave undetermined. But the wild Wasp is accounted to be longer lived than the tame, the reason is because those making their nests commonly by the highway side (from whence they are called by Hom. i. e. Highway dwellers) are necessarily exposed to divers injuries, which hasten them to their death. And yet that little time that they live, is made up in the strength of it. For if you take them off the head, and to again at the breast, they will continue a great while after, and putting forth their wings, will as steadily hurt any man that shall touch them as if they never had been pulled in sundry, or were alive as before. Guilerinus in his book of Shell-fish, writes very confidentially that they put off their shells and renew their old age every year: certainly (unless he dreams waking what he would have to be) this must needs be discovered sometime or other: in their Nests.

Apollinaris calls them oculos, Aris. l. 11. c. 52. 20000, although they feed not Their Food, on raw flesh only and ripe Apples, but upon Pears, Prunes, Grapes, Flowers, and sundry sorts of fruits; also on the sap of Elms, Sugars, Honey, and almost whatever. They feed on flesh of Serpents, and then they fling mortally. They hunt after the greater Flyers, and fare not the harmless Bees, who do so well deserve of the Common-wealth of mankind.

According to the nature of the place they live in, they differ both in shape of body and diet. The places of position of minde; the trivial and ordinary Wasp being accounted to the company of men and Wafps, cartel, do seem to be more milde of nature; but those that live in woods and solitudes are more fierce; yes, in much that Narcissus in one word calls them. *sagacious, i.e. pernicilus, pere- nichus, and destructive. There are also, as Ovidius affirms in hotter Regions, those that are more hurtful then others, as in the West-Indies, whereas they differ from those of these both in big noses and shape, so also in their venome. For to are they reported to be far more deadly then the English, French, or Spanish or Barbary Wafps: such as these also, Olus Magnus in his 22 Book, faiths, are very frequent in some very cold countries.

The use of benefit of Wafps is observed to be divers; for besides that they serve for food for The use of the Catheters, Martins, Swallows, Owls, Badgers, Chameleons, they are also many wares profitable Wafps, to men; for they kill Phalangium the most venomous kind of Spider, and they themselves are a platter for their own stings. The Pseudophyic or wild Wasp (especially that which is taken in the beginning of that year) being taken into the left hand and there held fast, Pliny commendeth for an excellent remedy against the Cholera; and obser- ver, in the comest water of common Wafps, or decocted, for raising a tumor in the place that is with it; applied to the belly it makes it swell as if it had the Dropis, by which trick whereunto use to persuade their sweethearts that they are with child by them; and by this way also they deceive many times very cunning and expert midwives. Mirradi. Mem. cent. 7. from which it may be concluded that their venome is exceeding hot and inflamative.

The Fox also (a subtile creature) is said to prey upon the Wafps, on this manner; he purs his tail into the Wafps nest so long till it be all covered with Wafps, which he eying, pulls it out and bears them against the next stone or tree he meets withall till they be all dead, this being done again and again till all the Wafps be destroyed, he feares upon their combs and devours them. Astan.

But men harass and destroy them with other cunning. As thus, in the mean time that the labouring or working Wafps flee to the Elm, which is said to be in the Solstice or at Midsummer, to gather some gums material to work withall: the matter Wafps remain in the Nest and sit up on their young, thoe they smother with the flaming vapour of Sulphur, Garlick, Reed, or such like; and throwing down their combs kill them with hunger. Now when they would preserve their Bees from being surplied by the Wafps, they set by the Hives side a pot with some little pieces of flesh in it: into which when the Wafps in hope of prey are entered, they swallow the lid of the pot upon them and kill them; or else putting hot water in at a hole fced them to death. Others hang a net before their Nests over a small Menow. Now the Wafps being drawn by a natural and strange sympathy to the Menow (for no food more takes them than that) they are presently involved in the net, and会计 caught, and with casting on hot water are killed.

Astan. As also they lightly spur out of their mouths oy, upon the grapes, fruits, sugars, honey,
honey, etc. which causeth them either to fly away, or rafting the oyl, to die; sometimes they mingle corrosives with honey (as Mercury sublimed, Vitriol, Opiomines etc.) which when they take, eates out their bowels, and so they pay well for their glutony and incontinence.

Now if at any time by reason of the stinging of Wasps, there arise pain, perturbation, swelling, redness, heat, nauceoufnes, and thirst; and not long after swelling (which happens when they have poifoned their wings with feeding on venemous herbs, and Serpenes ftry) Physicians have found out a prefervative and remedy whereby to repel their wings and easily cure them. The virtue of Mallowes, and Marfe-mallowes is excellent againft the stinging of Wasps. Thus the most foft and tender hec becomes a remedy against the moft warlike and injurious creature, with whom whole juice and a little oyl mingled with it, and the part anointed, doth either mitigate the rage of the Wasp, or doth not fuffer the stinging to enter, Plin. l. 22. c. 179. So Aetim the Wasp, faith he, will not come near any man that is anointed with Mallowes; for as a foft aniverfity appeareth with it, and as the Greeks use to apply ιοκείον ογκον οιράν γας, etc. A mild reply is the bell alay or auger: to alfo in phyficks we fee fothe things that are moft suffe and myeyling, to be reixed and beaten off with the moft foft things, as the Iron with lead, the Admift with blowds, the flings of Wasps, Hornets, Bees, with oyl and the juice of Mallowes. What is more foft than the eilk-worm? which yer Aetim affirmed being beaten together with oyl and the party anointed with it, is a prefervative against the stinging of Wasps, the fame doth the Locust and the herb Balm beaten together with oyl, if the Greeks may be credite. The flone Comarides if it be the true, although dawbed over with honey, and bred about doth fray away all Flyes and Wasps whatsoever; as Sylvaticus out of Albertus doth conjecture. The like virtue doth Marisbuls adscribe superstitiously and too confidently, to the Iron that hath the figure of the shell-fish Strombus graven in it.

The symptoms that follow upon the stinging of Wasps, are faid to be thefe; they fuffer all alike as thofe that are flung with Bees, to wit, pain, pittif, swelling, but the pain is more grievous and of longer continuance, especially if they chance to be flung by the citron coloured greater Wasps, in afeinwy and tender place, for then follows the cramp, weakness of knees, swelling, and sometimes death.

Physicians have found out many remedies against the stinging of Wasps; we shall first speak of thofe we have tried and which may challenge your acceptance, being confirmed by long experience. We finde that Wasps applied to the wound they make do exceedingly help them, being perfidiously to use them by Gilbert an English man. It may be that not the Scorpion only hath this virtue, but the greatest part of Insects have it alfo, if we should make trial diligently. But if any man be flung by venomed Wasps, (which is easily known by the wound of the part, by raving and swelling, and coldness of the extreme parts) then give antidoares against venome, and open the place with a knife, or rather lay on a cautick; when it is laid open and dilated ftruck it forcibly, and taking some of the earth of the Wafps neft, make a plaifer with vinegar, and lay it on the fore. Alfo a Cataplain made of Mallowes, Willowes and Wafps combs helps wonderfully, as we proved by the counsel of Halyabbas. The North English man make a good plaifer againft the stinging of Wafps, of the earth of furnaces, vinegar and flyes heads; it is worth its weight in gold. Rub the place with juice of Citrals, and let the patient drink Marjoram fecd 2 drams: or take juice of Marjoram 2 ounces, bole Armoniack 2 drams, with juice of Owre Grapes what may fuffice, make a plaifer. Another; anoint the place with the juice of Purflain or Bees, or with sweet Wine and oyl of Rofes, or Cowes bloud, alfo with feed of Wilde Ceterneys bruifed with Wine. Galen. Barley meal with Virgare is good; mixt of the Pig-tree dropt into the wound. Wine or aru-water to foment the wound; give in drink 4 drams, or the tender leaves of the Bay-tree in fharp Wine, which alfo will do much goold in a fomentation. Alfo drink the decoction of Marfe-mallowes with Pofca: apply Salt and Calves fat. Mallowes with Pofca is a principal remedy. Dise-ved. l. 2. c. 42. Arminjons an earth named Gominola to thefe, and Clay, and One-dump, and Sefum, and many other things with Pofca. Oyl of Bayes draws out the poftion of the fling of a Wasp. Leaves of Marfe-mallowes bruifed and rubbing oncure the veneome of Wafps. Drink a little meafeure of the juice of Ruc or of Balm, with Wine: and the leaves eaten, and applied with Salt and Honey, or boyled with Virgare and Picry, are very good. Water-mints, Rofermartys with Barley-meal and Pofca juice of Ivy-leaves, Golden flowers, and Owles bloud, are excellent againit the stings of Wafps. Pliny l. 32. c. 9. Galen praifeth Water-mints, and if it is drank, and Cerarvum, if at the fame time you lay on Oxone dung for a plaifer. Lib. de fmpicibus ad Partheniam, & lib. de Centaur. ad Papium. A branch of the wilde Palmuets, Endoove roots, and all wilde Betony, laid on for a plaifer, profit very much. Alfo drink wilde Betony 2 drams with Oymel. First, fuck out the poftion, then hold the part hurt in hot water for an hour, then feep it suddenly in Vinegar and Hif pickle, to the pain is prefently gone, and the swelling finks away, and the veneome is pacified. One half dram of Marjoram feed applied fills the pain, or 3 poglobs of dry Coriander feed or cool juice drank. Avicenna. Leaves of Nightshade or Houfelerick laid on are good. Alfo bole Armoniack with Camphire and Vinagar, Nuts bruifed with a little Vinegar and Caftoreum: apply a honey comb, and prefently hold the part affected to the fire, or put hot afhes under it, and the pain will ceafe forthwith. It is good to lay on green Coriander, or oyl and afhes mingled. Rhap. Savoyr or Water-mints applied, and the feed of them drank; or the juice of the lefle Centory drank in Wine is excellent, So are the leaves of river Beafs Mercury.
**CHAP. IX.**

**Of Hornets and the Tentbredo.**


The Greeks call them *δειπνος καὶ δειπνός* because with their sting they raise a Carbuncle. They are called in Late *Crabrones*, perchance from the Village *Craba* in the Country of *Tucfum*, (where there are great stores of them) or from the word *Caballius*; i.e. a Horse, who is said to be their father. According to that of *Ouid. Met. 15.*

The warlike Horse, if buried under ground, shortly a brood of Hornets will be found.

*Albertus* calls it a yellow Bee. *Cardanus* will needs have them to arise from the dead Mule. *Plutarch* in the life of *Cleomenes*, saith they come out of Horfe flesh, as the Bees do out of the Oxe his paunch. Now whereas they are more melancholy and fullen then the Wafps, why should I not with *Virgil* say that they are produced of the Afe? whom we have seen not only to fight with the Horfe, (when as the female or the Afe would be back) but also to chafe and overcome him often times. I conceive that those are produced of the harder flesh of the Horfe, and the Wafps of the more tender flesh.

The Hornet is twice as big as the Wasp, and very like it in shape; they have four wings. Their De-whereof the two undermoft are twice as little as the upper or outermoft, the which are fattered with fibres to the shoulders, being of a dark brown and Cheature colour, and with which they fly very swiftly. Six feet they have of the same colour with their breaste and shoulders, their head long, of a yellow hewe; their eyes hanging out in fashion like a half Moon, between which grow two horns like a fickle or reaping-hook of the same colour with the feet. The belly is made fat to the shoulders with a small thread; of which the one half is of a duskie colour, and begin with a girdle of Saffron colour: the other half seems to be all Saffron colour, set with five dark colour specks, together with a small triangle, laying moreover on both sides of them certain joynts, by which they can contract or extend themselves at pleasure. On both sides of the belly they have four black spots, and their tayle is armed with a long, stiff, and exceeding venomous sting. As they fly they make a murmuring and humming noise, far more horrie than the Wasp. Who notwithstanding they are great hearing creatures, are fierce and choleric, and alwayes of a wilde nature; nor (like wilde plants) do they admit of any coming: of such malignity are they that with
twenty seven strokes they will kill a Man, or a Horse, especially in the Dog-days, at which time their nature is more hot; and men are more weak by reason of the abundant exhalation of the spirits. No wonder then that in sacred Writ they are compared to most cruel enemies, Exod. 23, 28, So Ovid. Metamorph. 11, Spicula Crabream: argentam the fiery darts of the Wasp. And Virgil in the 4 of his Georgics calls them afterimma very sharp. Terence in his Phormio: Plantus in his Amphitryon says that Proverbs. Iritari Crabrems, I have fluttered up a Hornet, to shew the nature of women when they are angry, the more you strive with them, the more you provoke them, and at length go by the worst. Now as amongst Bees both the Drones and the Kings or Master-bees have no stings, and also some Wasps, (as we have said before) so amongst the Hornets there is not one but hath, both those that are in trees and those that are in the ground; not so much as the Captain or Master Hornet but hath one. For the Hornets as well as the Bees and Wasps have their Commanders or Master Hornets, what ever Pliny l. 21, c. 11, dreamt to the contrary; only they are bigger than the rest according to the proportion of Hornets to Hornets, then Wasps are to Wasps, or Bees to Bees. They do also remain within doors as the Wasps do, but they never breed but one Master Hornet of them in a Nest, for fear of tumults and taking of parties; but as they are very troublesome, and fatal to those that from without annoy them and seek to spoil them, so they are very strict in preserving domelick peace and quiet, and in keeping of mutual society one with another, and in providing for their young they do even outstrip the Bees themselves; for they never quarrel about priority of place, nor distract them with diversity of employments, nor make a stir or tumult about the election of their Chieftain or Master Hornet, but all have one and the same employment, and they all diet together, whatsoever prey they take, or small creature they kill abroad, they carry part of it home to theirfellows, and young ones.

Neither do they every year send out and expose to the wide world their young ones as the Bees do (and for which they are cenured as in that respect unnatural) to finde out an harbour where they can for themselves to dwell in: but all their new brood they nourish and bring up in their own bosome, and as need shall require build more and bigger nests to keep them in. As for their King or Master Hornet (whom also they dearly love and respect) such a one they have that doth appear not to want power to command, but occasion to exercise it. Only he excels the rest in courage and minde and bigness of body (as it is usual for Princes to do) for he is more fierce than any of the rest when he is to encounter with forien enemies; as he is on the other hand most mild and gentle to his subiects at home.

The Hornets make their nests under ground: casting up the mould as the Pismires do. For neither they nor the Wasps send out young swarms as the Bees do (as is before said) but as the young are bred there they remain, and so they dig their nests bigger and bigger, as the family grows greater and greater. They make their nests exceeding large; we took 3 or 4 baskets full of combs of the latter brood: they have very little or no honey in their cells; a drop or so of what their young are.

If any of them chance to wander from their nests they gather themselves together into some tree, and there make their combs in the top, which oftentimes are caife to be seen, in which they procreate one or more Hornets, when he is grown up, leads away the whole troop and provides them a nest with himself.

The wood or wilder Hornet (as Pliny) live in hollow trees all the winter, like other Insects they lie hid, they live not above two years. Their stinging is feldom without a fever, causat carcinoma tumors, and exceeding great pain. They build their Nests far more artificially than either the Bee or Wasp, sometimes in the hollow trunks of trees, or else under their roots in the ground, which they make bigger and bigger according to their family increaseth, and curiously plaster over with a kinde of flimy spittle gathered from gummy leaves. The mouths or pabbage of their cells are never upward, but altogether downward, and they very providently place the bottom of their cells upwards, that the rain may not pierce through them, or left otherwise they should be expoed to the extremity of wind and weather were the head above. All their nests in a manner are exctly 6 square, the front or outside whereof is beter with white and rusty iron coloured segments; the maker of them is membranous, much like pieces of Beech-bark, when it is roll'd together and shrivel'd up with heat. Whilet Peninus was at Peterborough in England, he saw in the wide and open street a Hornet pursing a Sparrow, whom when he wounded with his sting he fell down dead to the ground, and with the admiration of all that beheld them, he stuck 't out and fill'd himself with the blood of the fain prey.

Concerning the Copulation of Hornets Arist knew nothing of certainty, as neither from whence nor how they are bred. But for as much as they do for certain lay their young at the very sides of their cells, as Bees and Wasps do, it should seem after the same manner they bring them forth. But if they do couple, they do it in the night, as Cats do, or in some secret
cret places, out of all possibility of being seen; where Argus himself should not espie them.

The Hornet doth not feed on flowers, but lives for the most part on flesh: and rather than fail, oftentimes they will fly to dung and excrements. They hunt after grater flies also and the smaller birds, which when they take, they first wound the head as the Hawk doth, and then pluck it off and fly away with the rest of the body. In the winter they die many of them: because they do not as the Bee, lay up provision beforehand, but only live from hand to mouth, regarding nothing but their present necessity, Aris. 1. 5. Hist. Moreover, as Landau observes, they watch about the Bee Hives, and getting on their backs use them in stead of a Couch or Chair to carry them; for when the poor wretches strive to fly away, they carry a most cruel rider on their backs, who when he hath suckt out all the juice that is in the Bees' body, is the most contemptible of all winged creatures: he kills and eats up him which supplied his hunger. Also all sweet things whatsoever the Hornet will feed on: so much that I have seen him with mine own eyes to eat of grate worms. But the Indian Hornets have such a vast appetite (as Ovidius wittelly) that they will light upon Oyl, Butter, Cakes, Sawce, and all liquid things whatsoever; not spiring napkins or table-clothes, which they will Confecrate and defile with their filthy excrement, and laying of their slimy eggs. Now as they feed upon what they got from others, so they do not want one to prey upon them likewise. Above the rest the Brock, who about the full of the Moon enters their dens or nests and destroys both house and family. Nor are they food for this useful creature only, but they serve the courtiersmen by way of provolick, to forethrew the alteration of weather; for if toward the evening they are seen to fly about in greater store then ordinarily they are wont to do, it is a sign that the next day will be fair and hot: but if about twilight they often enter into their nests as it were to hide and shelter themselves, then expect rain, winds, and stormy weather to ensue. Upon which Avius thus:

So when you see troops of beasts Hornet fly,
Late at the end of Autumn, they foretell,
When first Virgilius flies the evening skies,
That storms at sea shall presently ensue.

Moreover whereas the same Medicines that cure the flinging of Wasp, will prevail also against the flinging of Hornets: yet as Aggregator hath taught us, a Hornet is the Bezoar stone for its own wound laid on with Oyl, Oys, or Ose dung; also Bole, and all fat earths are commended, such as Bacchus applied to bald Sileus, who was stung with Hornets, whilst he rifièd their nest for honey supposing they were Bees: Ovid describes it near in 3 Taxtor:

Thousands of Hornets his bale part torment,
And with their stings they wound his ugly face,
He falls and cries for help, a foul disgrace;
What remedy it was to late for to repose.

When that the Satyrs came, & found poor Sileus,
His face all sores, and basting on his knee,
They could not choose but laugh, Bacchus said thus,
Nor was it with Mud it prov'd a remedy.

He that desires more remedies against the stinging of the Hornet, may finde of them plenty in the story of the Wasp. For Authors do seem to make them all one, only with this difference, that in this case they ought to be given in greater quantity, and the use and application of them longer continued.

Now let us proceed to the Insect called Tenthredo,

Whether it ought to be called ἁρπαγος, ἀρπαγος, & ἄρπαγος according to Arisbalet, or ἀρπαγος according to Nicander let Philosophers judge; they seem to me to differ only in name and bigness. For whereas the Scholast of Nicander calls it ἰστυμφόλος, an Insect like a Wasp, I do not weigh that, when as ever and anon, by Poetical licence, he calls the Wasp, ἀπερ ζευγαριον, a yellow Bee. What name it hath in other nations I know not, and (to say the truth) nor know I the little Beast itself. Only this I finde, that Authors describe it to be in colour like a Wasp, like a Bee in bulk or bigness, and in communication of labour like all other social winged Insects. He is very saucy, loves the kitchen well and fits, innumerable that some think it should be written ἀρπαγος in stead of ἀρπαγος. But because it is given so much to Licorishelle, Hesychius calls it ἀρπαγος ὑματια, a wood or wild Bee. Hermodorus thinks they should rather be called ἀρπαγος; or ἀμμαργος rather than ἀρπαγος, as he faith it is corruptly read in Arisbalet: He makes his nests in the ground as the Wasp doth, with many rooms very large and liadomne. Pemnius will not by any means yield that the Pemphredo should be the same with Tenthredo. For the Pemphredo (as the Scholast of Nicander describeth it) εἶναι το κεραυνόν μελισσον, and ἀρπαγος ὑματια, i.e. the Pemphredo is very like a Wasp; but the Tenthredo like the Wasp. But yet notwithstanding the Scholast forgets himself; who writes also of the Pemphredo after this manner: Pemphydred a is Insect like a Wasp, it hath a sting, it is greater than a Pimibre, but less than a Bee; it hath wings, and a various colour reding to black; in fair weather it gathers suftenance from the shrubs in the valleys, then it flies and lades it up in the hollow oaks.

This Insect haunteth woods and mountains, gathers honey juice from flowers, and layeth it up
in a hollow oak as being his Repository for the fulfillment of his life: but honey he makes not, wherefore they differ in no other thing but in bigness; rightly termed of the Poet, Parumula Pemphredo, i.e. a small Pemphredo: as degenerating only and especially by that mark from the Tenthredo. Of winged Primires, we shall speak in the Chapter of Ants. And this shall be sufficient hint here to be spoken of winged Insects, such as are social and live together. Now we shall bend our discourse to speak of winged solitary Insects, or such as live severally by themselves.

Amongst these solitary ones, some there are that have nests, as the young Drone called Sirens, the Drone called Bombylus, and the Bombyx; others that have no nests, as the Fly, the Gnat, the Butterfly the Moth, the flying Glow-worm. Those that build nests, are the Sirens of both kinds, so-called by Enychus, in Enychus tam nomen, i.e. because they seem to have a kind of articulate or significant voice, or perhaps as that for Monsters, and the Sirens, because with his pleasing noise and buzzing he doth as it were tickle and charm the ear; and not unfitly and to alio, because they best and flutter in the air with their wings.

Of the Sirens there are two sorts, the one leafe all of a dusky colour; the other bigger black mix with other colours. This sort Penius refers to the species of the Wafl, and he describes it in his drafts. All the body black, except the back, which is reddish from the middle almost to the tail, the extremity of which being black, hath silver coloured wings affixed, the former twice as big as the other: they harbour in woods, and in the brinks of ditches, and ruinous buildings; whether they have any flying, or I know not.

The Bombyx is so called from the silver colour, because they never flye but they whirle and turn round in their flight: whence the Greeks call Toppes or Wheels, Βομβυξ. It is a creature resembling the Wafl, of a black hue, having a silver like as the Wafl hath; but flitting so deadly, and with such force; that it leaves the weapon in the wound. As a remedy to this Nicander commends the Pine tree Gum, and the unctuous honey of the Tenthredo. Parmen in his Iambics makes mention of this creature, which in the time of vintage are used to eat the ripe Grapes. Another of this sort is found in Alphus, but of greater bulk. Some of them build their nests spire wise out of clay like to glass or fall, fastening them to a stone or such like things but so hard and thick that you can scarce pierce them with a dart. For these they lay and bring forth little white worms, covered over with a black membrane; in another membrane they make wax in clay, much paler in colour and in greater plenty than the Bees. So Aribote and Pliny. Who indeed were very sparing in their relations concerning the Tenthredo, Bombix, and Humble Bee; either because their nature was not so well known to the generality of the Grecians, or rather because they themselves were not so well vers'd in their History.

The Bombylus greatest of the nesting Insects, is bigger than either of the Sirens (spoken of before) he hath his name from the humming noisy he makes: for the word Bombyx signifieth as much, to make a humming or buzzing noise: for which cause he is called by the Germans Hummel or Humblin, in English a Humble Bee, as you would say a founding Bee, the name being taken from the noisy they make: from whence (as the learned Turpin notes) the long pipes are called Bombiles from the humming found they give.

Polius calls thee motricinis, and Theophrasus cals a reed fit for these kinds of pipes BeautifulSoup.

They are of little or no use. Infamous that the Greeks use to call an idle unprofitable man, Βομβυκλος, i.e. a man no better than a Humble Bee; for such is this kinde of Bee, even of no use at all. Nevertheless one Antichristos to shew his wit, hath taken a great deal of pains to set forth the commendations of it. A cup with a wide mouth making a great noise as they drank, was in great requit with the Ancients; that so, not only the brain but the intestines might be intoxicated with the liquor, but the ears also with the great noise of the noise. They breed under stones hard to the ground; they build their nests sometimes with two doors, sometimes with three; in which there is found a beginning of a certain course Honey; and that (as Albertus relates, and Pernis says) not of any great quantity; who once found so much as he could scarce hold in three handfuls. The English Humble Bees have not all things, only some few of them, but those that have do ring grievously; the honey they make is not so sweet, and will all some water wafhe.

They gather their wax as the Bees do to their hinder legs: they couple tail to tail, in the mean while holding fast by some plant or tree, they continue long in the act of venery, and all the time clapping with their wings they make a harsh noise, as if they were singing a Bridal song.

CHAP.


CHAP. X.

Of Flies.

In Hebrew, Zebub; in Atabick, Babnon Aidaubel; in Illyrian, Minfcha; in Spanish and Italian, Mofca; in French, Mofche; in High Dutch, Flieg nuck; in Low Dutch, Uitzeg mugge; in English, a Fly, from flying or scampering away; for it signifies both in Scotish, Fleé; in Greek, μύκα, and το πτηνόν, that is, to fly deeply, or to murrise, the Fly doth both. Latin, Mufca.

Nor as proceeding from Muscas Mofis as some do fondly dream, but from Muscas a mufcle; for taking off his wings you shall see that his head is full of fineness, his body foit, his tail teni discord. Hence the diminutive mufcula in Boëthius, who thus elegantly cries out. Quid hominimbeccolius quem morfas muscularum necas? What to frail as man whom the smallest Fly is able to bite to death?

Now the frame both of its body and minde we describe thus out of Lucian and others. The Description, great Fly is the leaf of winged Insects, inmuch that it may be compared to the leafy Fly or Fleé; only he is so much bigger than they, as the Bee is bigger than he.

It hath wings, not ruch as other things that flye haves, but made of little skins as the Locusts, Graffhoppers and Bees are, but a very great deal softer, as an Indian Garment is fower than that of Greece. If any man observe the Fly when he opens his wings in the Sun, he may perceive them painted with variety of colours, as the Peacocks are. He doth not flee straight forwards, as the Bane do; nor skipping as the Locusts, or making a noyle as the VWilp; but winding in and out to what part of the air ever he pleareth to move himself. Neither doth he flee quietly and in silence but with singing and melody; nor to hard hearted and cruel as the great or little Flies, not as Bees and Wilps with a grave harfinkle, making a horrible and terrible murmuring yeas for far doth the Fly exceed all these in sweetness of sound as he lieth, as the small Pipe doth the Trumpet and Cymbäl, or as still mufick is sweeter then loud.

He hath a very little head bound to his neck turning every way, not compafted and fastened to his shoulders as the Locusts is. His eyes stand out very much, shining as if set in horn. His breast is very firm and well compafted. He hath his feet growing out of his body, not as the Wilps fast bound or tyed to it; he goeth only with four of them, the other two so emost serve in head of hands; as you see him commonly go upon four feet, in the other two holding up something or other that he hath gotten to feed on to his mouth as men do, and as we do. His belly is ferner answerable to his breasts, having b road girdles and fakes, He doth not sting with a fling as the Bee and the Wilp do, but with his mouth and fhout like the Elephant, and he ears and taketh up things with his mouth and flicking in a concave vefel he holds it in the top of his mouth: out of this comes forth a tooth, with which he picks or bites: he drinks nothing but milk and blood; that which he draws through of his flings with very little or no pain at all, but only with a kind of titillation or tickling. The lights like Truth, he doth exceedingly rejoice in, and doth behave himself honestly therein and civilly. Yea the Fly doth covet the light, that many times with the Spider or Spinner he ftooth his life for his pains; at night he goes to reit (as honest folk use to do) and makes no noise. He doth nothing in the dark, counting it unbecoming for him to do any thing privately, or to be guilty of that act which if done in the light would be a disgrace and dispaftement to him. I can alfo use it you is no little understanding that he hath also; whereby he doth eate the wiles of his treacherous enemys, the Spider; for he marks him as he lies in wait for him and looks upon him, and do declines his force lef he be taken in his net, and be destroyed. I must not fpeak of his provenle and valours, for in that he may feem to fue-pallie man himself. Honor the Prince of Poets, when he did endeavour to fay forth and commend the gallantry of the bravest noble man, doth not compare his strength to that of the Lion, Leopard, wilde Bear or the like, but to the undaunted courage and confidence of the Fly. Who although he be never so opulent and bearten off comes on again, and bites as close as he did before: yea such a strength he hath with him, that he will not wound the skin of a man only, but of an Ox or Horse; yea the Elephant also when he gets between the wrinkles of his skin, will thwartly ex him, and according to the bignesse of his finet gath and wound him: when he bites, 'tis not out of necessity or clownifhnefs to get blood only, but by way of love & humanity, & for that reason especially he feareth upon the fairest: yea what a pretty thing it is to fe a company of Flies flying to and again playing and sporting one with another, and hinging upon a thread as it were dancers on the topes. Moreover as the cleanly borne doth, the laies her orde all in one place, so that upper winde and foiling of the rooms where they ufe are all full of great spots which they make on that occasion, which is an argument that they are not altogether void of some kinde of memory alfo. T-cssiathe moreover, that such is their love to thoef of their own kinde, that they bury their dead companions. These doth as much diſcommunity them as Lucian commends them: and he inveighs against their procacy and faucines; which is such, that being driven away never so often, they notwithstanding return with ftreth affaunts. He blames them likewise for their impudence, in that they couple in publique, and know no end of their Venery almoft; neither do they as the Cock, when he once hath trodden presently falls off, but is born upon the
back of the female a long white, and the carries him; they fly away together into the air, yet are they not unfound with flight. Learned Pennius caught two Flies in the Acts, and shut them up in a box, and the next day he found them together still in the same posture; which doth much confirm what Arifli, Aelian, and Niphon say, to wit, that Flies do continue very long in the act of generation. Plutarch faith that the Moule and the Fly are indolent and unteachable creatures, who although they use the company of men daily; are by no means tamed, neither do they shew the least courtesie, or the least show of a grateful mind for what they receive of any man: both of these are by nature very fupicious, always fearful of treachery, afraid to be caught. She is altogether idle and careless, feeding upon the labours of others, and where ever she comes hath a full table. For her the Goats are milked, and the Bee bestowes her pains as much for her as for any other; the Cooks provide Meftles for her, the Confectioners Sweet-meats, the Apothecary Syrups, and these the tables before Kings, and walking all over the table she feales her self with them in their company, as also with all other whatsoever. Plantus took her to be of no use in his Caleuloi where he thus speaks: In my conceit you are a kindie of Lions amongst men, as Flies Gnats, Sowlies, Fleas that do much hurt and do no good.

Well therefore did Nature take care, that she should have no certain place to dwell in, as honest folks have, but should wander up and down, where she could get her a lodging and traveling harbour. But in imputation she goes beyond any beggar whatsoever; because they having had once the dam has therewith satisfied, but this beggar will take no answer, but will fill his unprofitable gut with the best cheer in the house whether the matter will or no. Ariflanus in his Lythgoeic recited by Athenes, brings in an impudent Parado Paseking on this manner:

**Canis etiam non vocatus, ut muscas advocat.**

I hallow to supper as the Fly, without any invitation.

Some such like matter Socrates upbraids Theodorus withall in Xenophon: wherefore the Egyptians being to set forth dishonestly and impudence together, they made the picture of a Fly. 36 Ornis faith. Whence it is, that Cicero (if I be not deceived) faith it was faid sometimes by way of jest concerning a troublesome indigent youth, Abige Muscapeper. Boy beat the Flies away. To this fo princely a little beast Nature (as meet it should be) hath denied long life therefore, 'For as soon as winter begins to come on, the greatest part of them expire; and those that escape flaying in cliffs, walls, hollow places, ovens and ock like, they lie all the while weak and languid, and not able to hold out another winter.' All of them are begotten of filth and innomine, to which they most willingly cleave, and resort especially to such places which are to unclean and filthy; unquiet are they, importunate, hateful, troublesome, tumultuous, bold, savoy, Homer amongst the battles of the gods and heroes elegantly defcants upon the bafhefe of the Fly, who like the Moule, alwayes hath his hand upon another mans trencher.

**The Fly, though often forced from your skin; Yet she returns again; she'll never sin.**

Yea Solomon himself thought their nature to be so bad, that he faith in his Proverbs, that one of them is able to spoil a whole box of ointment. To conclude, the Hebrewes to set out the Prince of Devils, called him Balabolus, i.e. a Fly; which with the same diligence, and never leaves off doing of hurt. Which is the reason that Witches and Wizards will have their Familiar to be Insects in likenesse of a Fly, using the body of a bad creature to far worse purpofes. I could alledge much more a great deal than this against the Fly, if I defined the name of Antilucan, with whom it is a dispragament for a Chilian to contend, yet or to meddle withall, more than with the most loathsome carkale. Neither will it be more disguise to me to make nothing of a Fly, than for Lucian to make him an Elephant: both indeed being too lofty of time, and vain ostentation of wit. But yet nevertheless that left like the Eagle I may seem to concern flies, or to neglect the least of Gods works; I shall with all diligence set down the Generation, Difference, and Life of Flies.

Flies are generated two waies, by coupling with their own species (which is done in the summer season, and in the winter if the weather be fair) or by the putrefaction of other things. The Flies are copulation, some of them dispatch the work sooner, others after some space of time: the manner whereof (as Arifli, affirms) is divers from most of the other Insects; for when the male attends the female, he takes the name of the female (that is stretched forth to seek for seed) into his body, the which being accordingly received, he furnisht with matter and strength to bring forth. Reuend Pennius saw two Flies at Hedelberg flying in the act of copulation, who (as it had been the son of Mercury or Venus) seemed to be of a mixed nature, and they did get up by turns. Somewhat a while after copulation they exclude or shoot forth little worms, as the Hen doth eggs; which afterwards by a strange Metamorphosis are again changed into Flies. Although Pliny contrary to experience doth without ground affirm that nothing else doth arise out them. Very rightly Scaliger faith, that the Flies at first do generate Insects unlike themselves, but ye in a capacity of becoming the same, (that is to say) white little worms, which afterwards being
being made like to Flies, have eyes hanging down by their sides; in reference to whose likenesse there is a kind of digitation in the eye, called *muscina.* i.e., headed like a Fly. Now, a great number of Flies, if not the more part of them, arise from dung, whence I have seen them to come perfect where before they were begun. But in this kind of generation we must note, that Flies are not immediately procured of dung, but of the little worms proceeding of digested dung, as the Philosopher writes in these words, "As a *musa* in the *musa* digests in parts gigantur, &c. Which Gazzara translated thus: *Mycis ex vermiculis simi digests in partes gigantur,* &c. In English thus: Flies are begotten of dung digested into parts, therefore they that desire to meddle in this business strive to diminish the dung that is not digested from that is mingled with that which is digested. Now these worms at the first are exceeding small, afterwards begin to be red, then as yet without motion as it were, cleaving by fibres they begin to move; then they become unmoveable worms, afterwards they move again and become again to be without motion, and in conclusion by the assistance of air and sun there is begotten a living Fly. Arise, here, as it seems; I speak rather from other observation than his own skill. For neither those worms that are generated by copulation; nor those which are bred of purefulation are so many metamorphoses or transmutations, before they are transformed into Flies. For they only grow to such a magnitude, afterwards are turned into a Nymph or young Fly, and so lie still, then at a certain time appoined by Nature the Nymph growth to be a Fly.

Neither are Flies begotten of dung only, but of any other filthy matter purefayed by heat, in the summer time, and after the same way spoken of before, as Gropalus and Lonicerus have very well noted.

But yet the question would be, whether Flies are not immediately generated of purifation, and not of those worms. For experience witnessed that there are a certain kind of Flies which are begotten in the back of the Elms, Turpentine-trees, Wormwood, and so perchance in other herbs and plants, without any preceding vermiculation, or being turned into little worms first. So that Scaliger that angelical man, and the most learned of this Age, writeth thus of their original: *Peradventure (faith he) they may seem not to arise from purifation, but from some certain principles changed into some sort of liquid gum, or from some other matter concocted by Nature for this end. Now whether concoction can be without purifation there is the scuffle. Each part of mans body hath its conveyance for the expurgation of its excrements, called in Latin *Emunitor vix.* But whether a living creature may be the excrement of a creature that never had life, let others determine; here my light falleth me, or rather I am altogether blind. A third way how Flies are begotten, Sir Tho. Kemsow an English man, and of singular learning, did find of all in form *Pensius,* and it was thus: The corrupted body of a Caterpillar or a little brownie, is converted into an imperfect Aurelia, from that not a Butterfly, but three black eggs are cast out that are somewhat long fashioned, from whence proceed ordinary Flies, or others like to them; and sometime the Aurelia being purefayed, neither Butter fly nor eggs come forth of it, but white worms, (sometimes one, sometimes many) come forth, whence are generated very small Flies.

The which famous observations of natural History truth it fell doth enjoy as to acknowledge received from the foresaid Knight; for no man before him did ever observe the like. Peter Martvry in his 3 Decad, and 6 Book, reports that the few drops of sweat falling from the fingers of labourers, turned into Flies, and so they wrote that in the marshy Country of Paris by reason of the contagious and venemous quality of the air, the drops that fell from the hands of the labourers do bring forth Toads. But whether it be done immediately or meditated by some worm out of which the Fly should break forth, he doth not think.

In the year 766, before the Nativity of Christ, Rivallius then being K. of Britains there were showres of blood three days together very great, very many, from whence came abundance of Flies, and so poysonous, that with their stings they killed a great number of people: so faith the English History.

Now the Fly for the most part is not at first a Fly, but a worm proceeding either from the dead corporpes of men, or the carcasses of other creatures, then it gets feet and wings, and so becomes of a creeping creature, a flying; and begets a little worm, which afterwards becomes a Fly. Take off the head of a Fly, yet the rest of his bodie will have life in it, yea it will run, leap, and seem as it were to breath. Yea when it is dead and drowned, with the warmth of the sun and a few flies cast upon it, it will live again, being as it were anew made, and a feth life put into it, so much that Lucian his disciples were persuaded and did verily believe that the soul of them was indeed immortal. Forasmuch as it goes and comes, it owns its own body and raiseth it up, so that it drinketh, eateth, wipes its head and eyes, makes clean its four ends, cleans, and its legs, claps its wings, and flies: verifying the opinion of Plato concerning the immortality of the soul, and the fable concerning Hermias; Ciaemoninus whose soul would often go out of his body, wander up and down a great way by it self, and afterwards would return into the bodie, replenish and raise it up again. Some will put drowned Flies into warm Athes, or warm Bran, and in a quarter of an hour foiling them in their hands and breathing on them, they will bring them to life again.
The Theater of Insects: or, Book I.

Chap. XI.

Of the divers kindes of Flies.

There is a great deal of difference amongst Flies, whether you respect the matter or form of them. Some of them come from themselves by way of copulation as hath been said; others from some avaricious or external matter: such are they that are bred in Dung, Apples, Oaks, Beans, 

etc. In regard of their form or shape, some have two wings, others four, with horns or without; some short, some long, some have round tails, others sharp or piked, hairy and without hairs: in a word, they vary in colour, shapes, bigness according to the nature of the Country they live in, or the partaken matter whereby they are made. I wish I had seen them all, and I know Apelles himself would hardly have been able to paint their fashions.

Now for brevities sake we will make two sorts of Flies. For either they are animalia, or insecta. Those that feed upon their own species, or those that feed upon other things. The first of these called in Latin, Luperus, in English the Wolf-fly, is described to be big, black, with long flanks; he feeds especially upon flies, if he cannot come by these he preys upon other Insects. Those that feed upon things of another species: either they are such as feed upon living creatures, or upon things innamor or without life. Of the first kind is the Flesh-fly, Horse-fly, Ox-eye-fly, the Suck-egg-eye-fly, the Fly that eats Serpents, the Dung-fly, the Fly that preys upon the Humble Bee.

The Flesh-fly.

In regard of his bigness and bulk of his body, he is the biggest of all other, he hath a reddish head, his body full of gray spots, his belly thick, bloated, transparent, having two wings, hairy, very greedy of flesh. He flies for the most part alone, unless it be perhaps in the flesh-market or Shambles; where the Butchers turn fencers, continually killing and beating them away with their Fly-flaps, left with their fly-blowses (which Hippocrates called vena in Greek) their flesh should be tainted. There is a story (as Celsus Rhodiginus relates it) that at Teaenum in the open Butcher-row, one Fly amongst the rest used to come by the space of an year, as white as snow, which I dare say was of this sort in regard it was seen to be so long together in that place. Apis solia, Myia canna, in English a Dog-fly; in the German tongue Hund Fliege, Hund Mucken; in the Pololian, Pha Mucka; in French and Englishman, and Philo, hippopite to be a Wood-fly: very irkome to the ears of Dogs, the which notwithstanding they make it off never; so oft, yet it returns with as much violence as before; where if he carry any white, with the galling of the flesh he raveth a bitter: of whom Homer in his Iliad. 15, Troy do mention this way, which I suppose, i.e. Why like a Dog-fly deft but contend with the gods? Atheneus also in his 4 Book, reports that the like name of Dog-fly was given to a certain famous Curtizan for her unparalleled impudence, mordacity and troublesomeness. Now the Dog-fly (to borrow the words of Philo) is an insect that bites hard, is importunate and treacherous: Veneris cum undique, arduis & insidias. This seemeth to me in holy Writ, as in Exod. 8, Psa. 77. & 104. to be the common name of all hurtful Insects, as appeareth by the Chaldee Paraphrase. As for their more special signification, they can be compared to no kinds of Fly better than those black great broad flat ordinary Flies which do so boldly fly upon carcases, and not only suck from the outermost skin of them privy blood as other Flies, but with great pain thrust out, and suck blood very deep. They want a snout, but in stead thereof they have two teeth as the Walps have, which they fasten deeply into the skin, but more especially they infet and annoy the ears of Hounds in Germany, in much that (as Camenarius witnesseth) they even pluck off the skin. These an English Gent, said he saw in Italy in flape altogether like the Dog-fly, only without wings: whole wings also are represented to close to his body that the learned Dr. Barbe takes them for the same. Chironia doth attribute unto it wonderful swiftnesse of flight and roundnesse of body. The nearest in likenesse to it is the Tick or Sheep-fly, making a kind of a horrid noise as he flies; and in his flight more fluid and heavy then a Gad-fly. These are two kinds of them, differing only in bigness, the greater which is the Forrest-fly, the other the lefe living in hedges and quicksetts.

The Horse-fly.

The Horse-fly called in Greek equidae, in the German Tongue Rost Mucken, is of the bignesse of the ordinary Fly, with a flat, hard, smooth body, and so compact a substance, that you can scarce break it betwixt your fingers; they are somewhat blacker than the common fort of Flies are; they never fly right forward but sidelong, as it were hopping and skipping as they go, they fly neither long or fast. In England especially they are very troublesome to Horses, flinging them continually about the ears, nostrils, stones, and
the tails, with the sweats whereof flowing down to the root of the hair they live and are fatained. The English call it a side-fly or a Horse-fly, as the Greeks θυγρός φλέκτης, of the like signification. Some of the Greeks call them διαμνηστής, and they say that in hot Countries the Dogs are very much vexed with them. They say that it is of that kind Creto makes mention, having wings and able to fly; but yet I think this to be another species; and only proper to Horses, and offensive to them.

This Bealt-fly is in Latine called Aflium; in Greek φλεκτή from φλεκτός Bees of king or flying: whence not only this insect but another that useth to bite the Horse (of which hereafter) and a third very formidable to some kinds of Fifth, are called by the same name of Oflim. Of this kind of Fly the Poet Virgil in the 3 of his Georgics chuseth him; his manner:

A Fly there's in Silanus woods; that much
Useth mere to green holms, the Greeks call such
Oilians, Aflus is the Latine name.
It makes a sharp harsh noise, and with the same
Heards of cattel frighted fly and quiver,
Woods, and banks sound of Tamagius River.

Calepine and other Lexicographers of his gang, before some Physicians, and even Pliny himself. Difference if makes this Fly one and the same with the Oxe-fly, so that it is very probable that they did not so heedfully read Aristotle as they might, or did not indeed understand his meaning. It is confessed on all hands that Aflis and Tabanis are a species of Flies, and that both of them have a sting in their mouth, with which they pierce the sides of the beasts, and suck out their blood. For so the Philosopher, εἰ φυγείοις καὶ εἰ σφιδαὶ της σπειραί της ἀληθής: Oxe-flies and Brees make holes in the skins of four footed Beasts, and they have a strong tongue which serve them for a sting, they are creatures that eat blood, &c. But yet that they differ much, Aristotle and Aflis plainly shew. First the Tabanis are more frequent especially in woods and highways that are better with trees and hedges, as they who use to travel on horseback know to their great trouble and vexation. For in the heat of the day they sting deeply: And being then greater in number do draw out such a quantity of blood, that many times the horses strength fails them, insufficiently that the Country people are forced to beat them off from their horses with fly-flaps and bought which they carry in their hands. But the Aflis are more rare, and never fly but near the water side. Moreover the Aflis (as witnesseth Aristotle) do take their beginning of certain kinds of broad and flat little creatures which haunt about rivers sides: but the Tabanis come of certain worms breeding in wood or timber; that which Socrates wrote, and Piersius diligently had observed. Besides the Aflis do trouble Oxen and all living creatures, according to that of Hesychius, χορεύεται πνεύματα τοις ημεραίς τοις μηταί κατα μισθόν, εἰσίν ἐνοχά τοις, but the Tabanis trouble Oxen only. To which agree that of Orphes: ver. 47.

Not δι' ἐμί διεσκευάσθη διότε δολος δολος, Ποιεῖται δόλως βασιλεύς εἰς βασιλέως ἄργον, ἐτεράσεως ἀργόν, ἁγνὸς τὸν ἀργόν ἄργον καὶ δολον, ἐτεράσεως ἀργόν, ἁγνὸς τὸν ἀργόν ἄργον καὶ δολον.

The horrid Brees mens body doth not spare, He flies from us into the open air.

And Homer in his Odyssey:

Οἶχος ἐκ τοιχῶν κα' ἐφ' ὅπως, κα' ἐφ' ὅπως Τὸς μαθητήν ἀδίστακτος ὁμοιός
Πηγῆ ἐν εὔμενοι, ὥστε τὰς ψυχὰς ὑπάρχον τῶν.

But they fled home as herds of Oxen doe,
When that the Brees doth force them for to go,
In the spring time when dates do longer grow.

Where the Scholiast thus defines this kinde of Fly, Οἰαρίς οἰαρίς διηαρίζοντος παρακάτω, &c. The Fly called Oftrim is of a yellowish colour, who when it enters the ears of the Oxe, caueth him to run mad: upon which Callimachus in imitation of the Country people calls him βατόκατος, an Ox-driver. But the Mypes or Tabanis do sit upon Men, Hores, yea and Serpents (as Nicander affirms). Their shape and form is also different, as the Philosopher Thweth De part. Anim. l. 2. in these words: The tongues of the Aflis and Tabanis are alike of a purple colour; yet these dare not go any nearer them, the other upon Oxen only. Now the Aflis hath a green head, and the rest of his body all over yellowish, having a greater inste to than the Tabanis; but making not to bear a noise, or buzzing he carries before him a very hard, flinte, and well compacted sting, with which he strikes through the Oxe his hide: he is in fashion like a great Fly, and forces the beasts for fear of him only to stand up to the belly in water, or else to break themselves to wood sides, cool fades, and places that the wind blows through. For whilst they stand in the cold water they flap their wet tails all about their bodies, and so cause him to be gone.
The Theater of Insects: or, Book I.

The Bee-fly.
The second kind of Tabanus.

Gnat like.

Tabanus.

gone. The Scholiast of Nicander faith that they are bred of Horse-leeches. As if he would have us to understand Horse-leeches by those flat creatures (of which Asfis makes mention before) and yet it is against nature or experience that blood-fucking mothers, should bring forth a blood-fucking brood. He flies exceeding swiftly; draws blood with much pain.

Pennius harfhett down a very rare kindes of Asfis, one of which was sent him out of Virginia by white, the other out of Kijtia by Elmer a chirurgeon for a great present. That out of Virginia was full as big as the biggest Flies, having a reddish head, and very like in shape too, but only that the head was black, and had from the shouloders a white streak drawn to the mouth, having also bigger and blacker eyes. He had in his mouth a long sting; and very strong, his shoul-der of a blackish brown colour, from whence came forth two wings of a silver colour, to the tail downward, it had six or seven joynts or figures, of a whitish colour, all the rest of the body blackish. In swiftnesse of flight inferior to none; pursuing the meat; his belly was between an ash and yellow colour, or a pale green. That of Elmer which came from Moscoy, had silver wings longer than the whole body; great eyes, very long, taking up almost all the head, a black bill or beak, hardly tripartite, with which out of hand the penetrates hole lined with a three double cloth, skyn flesh and all, sucking it with great pain. As for the Generation of the Asfis, or the Fly with great eyes; I wonder at the inconstancy of the Philosophers opinion thereupon. For first he makes them to come of a little flat creature swimming in the water (which the Scholiast of Nicander not unfairly calls Flutias, i.e. Hirundines in English Horse-leeches) and in the 8. of his Hiflo-y, he will have them the off-spring of the Gnat, in these words: ινα δι τους οαμ ου το νους μαρκαί ζησι κατα το ου μάκαρ, φως ου το μεν μαρκαί ζησι κατα το ου μάκαρ, ή γαρ ου μεν μαρκαί ζησι κατα το ου μάκαρ. Some living creatures live first in moyleauses, and after that they change their shape and live out of it, as it falls out with Gnats about rivers, from which proceeds the Bees. But how that can I know not: For of creatures that hive wings, it is impossible that other winged creatures of a diverse form should be generated, as the diligent observer of Nature may easily gather. And so much of the Oxe-fly which the Gnat call Hefnotyvis: but the English have no name for it. [Wherein the Author seems to me to be mistaken, because it hath afforded it a very proper name as is above mentioned.]

The other Tabanus or Asfis is begotten in the utmost part of the combs, and exceeds in big- nellie any Bee whatsoever; which, because he is so troublesome, not suffering the Bees to be at quiet (as the former would not suffer the cattle) the Greeks have comprehended under the same name of Oegyptus. The head of this Fly is of a bright bay colour, with a white streak running from his forehead to the nape of his neck, his shoulders and back of a darkish colour, in all parts else no way differing from the common fort of Flies.

He feeds not only on the juice of flowers and honey, but on the blood of beasts, which with great seditioneness and pain he sucks out.

Thee is another Fly much of the same sort, with a head and body more inclining to green. His shoulders shine with greenneffe, wings he hath two, whitish in the middle and outward parts, but are otherwise blackish or dunnish. This only once Pennius saw it, it Hanworth in the year 86, in the moneth of August. In the year 82, he found in England two other sorts of Flies like Gnats; one of which had a pretty big body, of yellow and red colour; it had two wings, the head very long, the tail reddish. The other also had a long head, very slender and shanks of a very sad black colour; the latter were longer than the former which he fretched at length when he flew and let hang down.

A Country-man there was that affirmed for certain, that out of their eggs (for he had observed them coupling together) came such worms that usually eat the leaves of trees.

The Fly called in Latinus Tabanus is of the Greeks called μουθος by reason per chance of its flinging or picking, for μουθος signifies also a spur wherein horses are pricked or spurred. The French call it Tabou; the Italians, Taban; the Spaniards, Tavans; the Germans, Bven, Kunfliege, rot muck; the Brabanters, Raukefliegen; the Polonian, Kpreza muck; the English, a Burrefly Stom, and Breese; and also of tickling and cling, Cleg and Clinger. This Calpa is more boldly then truly faith hath four wings. But with more judgement Alban and others, say it hath but two silver white. The whole bulk or body is very long, divided into three principal parts, the head, shoulders, and the ventricle or belly, distinguished with five or fix clets or incisions, the whole body of a blackish white, in the mouth of it it carries a strong long, and brownly proboscis; it hath six black feet in all parts else representing much the Dog-fly. In the months of July and August by reason of the extemity of heat they are most fierce, and do feriously handle Oxen and Horse, and young cattle, unlesse protected with fly-flaps, bushes of trees, or plants: which they follow by sent of their sweat, because they cannot reach them with their fight, being very weak spirited, from whence the infirmity of the eyes called purblindness is in Greek termed μουθος. They are generated faith by nature of the worms that come out of the wood pulfed. Which some cunning men before they have wings did use to bind about the wriif of the left arm as a remedy against Quartin Agues. They suck out blood with fixed force and in so great abundance, that a friend of mine whom I dare believe told me, that his horse being tyed...
tyred to a tree, was by reason of the multitude of them, killed in leafe then fix hours, they had drawn out to much blood that the spirits failing he fell down dead. By these things it is manifest, that the Tabani are of a different nature from the Aphlis; notwithstanding that most of the Greek and Latine Authors do seem to confound them and make them all one. Yeas even Gelseus himself in this very matter could not tell what to say in his book de Quadrup., and indeed unless it were only Piscinus and my friend Pennius now deceased, no man as yet found the difference between them. Aradius is here defined to be confined in the first place, because he finds that both the Tabani and Aphis have sting in their tails as the Waps have: and secondly, because he makes them to have eight feet, whereas none of them in the world was ever known to have above fix. Lastly, he reckons them in the clafs or rank of Gnats, whereas the Gnat never bites in the heat of the day (as the Aphlai and Tabani do) but altogether in the night at what time they are very irkome indeed,

Next to these is another Fly shrewdly annoying Cærell in the heat of the day, which Pennius calls Curvicauda, very well in English a Wrinkle-tails, in regard that alvities sitting upon the buttocks or belly of the beast, he bends his tail towards him with his sting stirtet, that he may be ready to strike at pleasure, whensoever opportunity may offer it felt. This Fly the English in their proper tongue call a Whame and a Burrell-fly, and it is scarce found any where else but in England. This kinde of Fly is almoat like the Bee in shape and colour, only it is bigger in body. It doth not cleave to the ilein nor fack blood as others do, but only thins with its tail, flying a long way after horses, and flinging them in their travel. Horses are naturally afraid of this Fly; whom upon the least touch they endeavour by what means possible with their tails, feet and mouths to drive away. Some are of a minade thane flies do not indeed give a sting, or prick, but with their tails they fatten their dung to the horses hair, from whence a white afte: come a number of very irkome Nits. But experience must prove that for reason in a matter so improbable is silent, True it is they are very violent upon their prey, as being blinde both the Tabani and the Wrinkle-tails, which may be the reason why they are so bold and fearles, as being feeke of any dinge. But especially the Ostrum from whence those famious Poets of old were fited to be Ostron perchis flung with this furious Fly called Ostrum. Plintarch calls them

The kinde of Flies that follow are more rare.

The first of which is very like the leffer Butterfly, with four filuer wings full of blackish spots, all the body over adorned with fiver streaks running athwart of it, the tail redish or brownish, the head black, the shoulders of the same colour with the tail, the fore-yards are thin, black and short; the feet small and black; they are most commonly teen in hedges, especially in the morning. The second very little differing from the former, but that the body, tail-yards legs and feet are of a brownish or dusky colour. The third species hath four wings: this hath longer wings, than the other, spotted with black spots, the head somewhat bigger, black, here and there marked with yellow spots; the two tail-yards thin and black, six whitish feet furnished to the more bulky breath, the shoulders are embowered with yellowish white spots, overthwart the back are five streaks of a yellow colour, with a little spot or speck between each almost of the same colour in the tail there are five red knobs, the end of which is forked. The fourth is not much unlike, but it hath silver wings, without spots, the tail-yards black and somewhat longer, the body is adorned with seven white lines athwart, I have seen also two Flies with tails like Scorpions, The first of them, as the former spoken of, hath silver wings, but somewhat lelle, with three crofe black lines towards the end, the head black, the breath, the feet and shoulders whitish; the rest of the body black, the tail hath five joints as it were or partitions, three of which are of a pale red, the reft black; the end of the tail forked, the forks are black, and like the Scorpion turned up, The other almost like to it, but the very end of the tail is more thick, the fork that is in it more blunt, the head dumbish, the mouth somewhat long; each wing bedeckt with fix black spots. There is also another sort of Fly that hath four wings, the body greenish, the four wings longer than the body, made as it were of melted fire, the nerves whereof are greenish, the tail-yards thin and black, eyes as yellow as gold, from whence it hath the name, and that undescribed of Christoph a golden eye, for a fly in flight, of a very

LIII

strong
strong fent, which like the Moth it leoth with the life. A great frequenter of gardens and sitting on Elder; whether he come of a Caterpillar, as the Butterfly doth, or out of the worms of trees, I cannot tell. That most learned and courteous Gentleman Joach. Camerarius first shewed it to Pennius.

There are sundry sorts of Flies, of the Greeks called πυτερίς, in Latin, Pilicauda, Seticands; in English Hair-tails, or Bristle-tails. For some of them have one, others two: other some yet three or four bristles in their tail: of which in order,

The first of these called Hebdrias, or Vultus, is a fly that hath a tail, the whole body is black except the middle or the back and belly that are red; it hath two silver wings, the shoulders thick, with two little black tail-yards, and a long bristle shot forth of the tail of it. The figure of this fly did the above said Joachim tend to Pennius, with all attending that it never offered to light upon any other herb but the chiefest Amos. Biflises, are two Flies that have two hairs in the tails of them; whereof some have bodies sharp or pike at the end, others more blunt. Of the former sort, two I have seen with four silver wings without spots, head and shoulders blackish; the rest of the body dunmis, be decked with divers crose lines of black. Both these had long and slender tail-yards, and the like in the tail, only somewhat longer, the body big and bulky. Those of two hairs or bristles are of five sorts: the first in all things like those with a hair, but that these are almost all over yellowish that hath two very long bristles in the tail, one of which being fortune out at length is like the tail of a Greyhound running after a Hare; the other twiled inward is like a spiral line. The second sort, is a kind of long Fly, having four silver wings, yellowish feet, the body black, shoulders thick, two tail-yards long and slender, the belly toward the tail, bigger then the rest, out of which two short bristles do issue, turning upwards; it lives in hedges. The third of these Carolus Clausus sent from Vienna, with a darkish dark coloured body, the wings large in a mixture of blew and silver colour, the tail stamnated or pike, out of which grow two bristles or plumes rather (as Pennius observes) of a Partridge colour speckled, with black and dunmis spots intermingled. The fourth kind is of a round orbicular body, about an inch in length; the head, shoulders and breast very black, the horns short, it hath six black feet fastened to the thick breast, the foremost shorter than the rest, the hindermost the longest; when the flies the puts her feet together and lets them hang down, it hath four darkish wings of a silver colour, her eyes black and shining, the umbo of her tail black-out of which peep two very short bristles from the shoulders downwards to the middle of the tail; she is almost of a yellowish colour; the tail is joyed to the shoulder as it were with a long thread: it runs very nimbly and as it were leaping; her nest is under ground, the feeds upon small Flies and Caterpillars. The fifth and last sort of these, is by much the least, yet of the same form and figure, only it hath very bright silver wings; the whole body to the tail is of a tawny or darkish red colour.

Of those that have three hairs or bristles there have but 5 sorts come to my notice. The first hath a body very long and black; the middle very red from black, with two black horns in the head; silver coloured wings, the very edge or extremity whereof is spotted with a blackish spot, the thighs or shanks reddish, in the tail it hath three long hairs or bristles, and flies very swiftly. The next is like to this, but less, all over black, longer than the former, thinner and flender, it hath silver wings also, the cornicles or horns all one with the former, it also threfith forth, three long bristles at the tail, not so swift in flight by much as the former. There is another of this kinde all over whitish, but only the wings, which are spotted with four black spots; the umbo of which are larger, the others shorter, which
Of lesser living Creatures.

The Fly with four hairs represents the fifth of those with three hairs, only its tail is somewhat bigger at the latter end of it, the feet as also the horns black, the wings long, the innermost three times exceeding the outermost in bigness, having a black spot in the middle, and in the tail four hairs or bristles.

To these are to be reckoned those Flies called in Latin, Meller, Pavones, and Libellae; which the Greeks from the likeness of a fifth of that name called Eus-alrus. In English they are called Adders, Bowls, Dragon-flies, and Water-butterflies; because they are seldom seen on land, but always about waters, as rivers or fens. The Italians call them Cervisont; the Hollanders, Romdons: for the form or shape of their bodies they differ little or not at all, but only in colour: some of them have bodies two inches long, long, and slender, withal, in form of a pipe or corner: and these consist of three parts; the head, breast, and the rest of the body, which is in feet of a tail. The head with two great goggle eyes, of the same colour with the rest of the body, is made fast to a very short neck to which the fore-feet are joined; all the rest being annexed to the breast. The hinder feet likewise are the longest, the better to lift up and fly their bodies. All of them

Lill 2 have
have forked tails, and with these they couple; remaining long in the act of generation. Cour-
treymen for the most part of them, are of oppo-
tion that these Flies are ingendred out of the
worms that grow from the water-bulrush put-
trefed; which if I should yield to be true, yet
doth it not take away copulation, and putting
forth of worms from their own bodies, whereby
they might from time to time increase, and
perpetuate their propagation.

The lesser of them are very slow of flight,
the greater very swift, and are only to be
seen in heat of Summer. Of these we have obser-
ved three sorts or species: The greater, lesser,
and leaft of all. The biggest of all, some of

the English call Brifes. Of which sort eight only
have come to our view. The first greenish, the
spots also in the neck and tops of the sides of a dark green; the wings silver coloured, they are
swift and make great speed in their motion. He hath seven black lines athwart the back, and
feeds upon flies like the Swallow. The second is like to this, but of a more dark hue. The
third hath eyes like to pearls, silver wings, the hem or extremity whereof is stained with a dusky
spot, the body is black, but very feldome yellowish on the back and belly; the tail black and
forked, adorned as it were with two plumes. The fourth is of a muddy colour, having the sides
divided as it were into six parts; near about the coming forth of the wing which are like silver,
you may perceive a large black spot, distinguished in the middle with lines of mud colour, toward
the end of the tail there appear four or five hairs or bristles. The fifth hath its head and tail gray,
the mouth black, the silver wings marked with one spot, in the end of the tail it hath three bristles
in manner of a Trident. The sixth is silver winged, with a black spot in the middle, the body
all over black; the back and belly sometimes, but that feldome of muddy colour, the breast and

The greatest Libelle.
The Mean.

The Smallest.

shoulers half black, half yellow, under the end of the tail two hooked bristles, at the end of all five but very small.

The seventh hath a head, neck, and shoulders of a dusky colour, the rest of the body red, procreated in Pennius study of a little worm that we never had seen before. The eighth shorter then the rest, with eyes like pearls, the body all over of a yellow colour, except where it is thwarted with cross streaks or lines, the tail seems as if the end were cut off, the but end thereof more broad, the extremities of its silver wings are darkned with a black spot, they are to be found most commonly amongst the corn.

The middle sort of the Libella do
Chap. II.
Of lesser living Creatures.

for forth Nature's elegance beyond the expression of Art. The first is of a multiform colour. The blue body or sky colour, the wings of bright violet colour, the space between the shoulders is adorned with four golden gems, set as it were in a blackish collar. The second has the head and body gray, the wings white, which are beautified with gray lines drawn quite through them, in the middle they are of a purple colour. The third has its head and body of a greenish colour, the lines of the wings are marked as it were with blood colour streaks, towards the edges or outermost parts like to a dark purple. The fourth seems to be all over of the same colour, to wit, of a dullish colour mixt with a pale green. The eyes of the fifth are blue, the head green, the whole body mixt of green and blue except the wings, which are most accurately wrought with silver colour and black, in the middle shadowed with a dark purple. The sixth is all over green; yet the wings themselves are of light green.

I have seen four of the last sort of the Libella. The first the body all over of a bright blue colour, the second red, the wings alike to both of them a silver colour, The third yellowish, but the tail more thick; the edges of the wings (as also all the lines that run along them are red and marked with a blood colour spot. The fourth which is the least of all, hath a long spiny tail, a great head, blue eyes standing out with two little horns to guard them; the body somewhat long, thinner, underneath greenish, above blackish, on the back it hath two greenish lines or streaks drawn along from the head to the railing of the wings, the tail bound together with five joints or knots, in the end whereof is a ring of bluish colour.

There is one of this number which killeth some of the other bigger very speedily: of a thin gray coloured body, and the wings alike coloured, and when he creeps into an apple, no hole can be seen where he went in; he feeds also upon feeds. This Fly William Brewer a learned man and an excellent naturalist sent to Penninis. They are found in the leaves of young Fenel. Flies of an exceeding fineness, in summer sometimes they are so little, that they are not able to be seen; they run and fly very swiftly, as much that you would wonder how it were possible for nature to furnish feet and wings to such very exceeding small bodies.

Water Flies, of the Greeks called blue, or Lantafires, as abiding in funny places, are those that feed upon things that swim upon the surface of the water, and that live especially upon the water, as these and the like, Phryganides, Macedonias, Tigaran, Ephesides Lutes, Poenis &c. Phryganides comes from the little worm Phryganiwm (which in English is called Cades worm) living in the waters, and in the midst of August, ascending to the top of figurines of the waters; it hath four wings of a brown colour, the body somewhat long, having two short horns, the tail forked, or rather bristles coming out of the tail. The form or figure of this Fly is various in regard to the great variety of those little Cades worms whereof they come.

Among the Macedonias about the River Augurum which runs in the midst between Borea and Thesalonicis there fly a kind of Flies, which are not every where to be found, neither are they any way like other Flies, they are neither like the Bees, Wasps or Hornets, yet resemble all in something, in bignesse the Hornet, in colour the Wasp, in hummings the Bee; in audacity and boldness all the rest of the Flies; the country people call them Joyntis, the Latines Eg立tes; these being flown upon the surface of the waters become a prey to the fish that are in the river. The greater summer Water Fly is seen in Helvetia in the month of May (commonly cold Tes giffas) as we have heard reported by a Gentleman, but which we leave to those of that Country to describe. The Ephesides called, are a kind of Water-fly of an ash colour, with four wings, six feet, near the tail having as it were many downy hairs. The Ware-fly called Luta is of a yellowish dun colour, it hath long wings, always standing bolt upright upon the shoulders so long as it flies, the eyes big and standing out of the head, the tail long and knotty, having two long hairs or bristles at the end of it; the is convergent alwayes about rivers, seldom elsewhere, especially at rain. There is another of a dun colour with four long wings, and long shanks, the body full of joyntes, two long horns it carries in the forehead, the head little, the eyes blackish and standing out of the head, the wings dun, but a little more bright then the rest of the body. For the most part found in woods adjoyning to fens and standing wares. To conclude, I shall relate amongst the rare sort of Flies, that of Cardanosthe himself describes it. Thus I have faith he little creature like a Beetle; of no unfavourable smell, small, and the width of all that eye I knew of Infides, it is of a dark yellow, not black, with six feet, and very short thin wings not covering the tail; the tail is of the same figure and form with the head, infomuch that you would think it had two heads; for as it hath a mouth in the upper part of the head, and two small cornicles there under the chin, so it hath two others also in the lower part longer then the creature itself, as many likewise in the tail, but these longer then the two lastest in the head; only the uppermost of those are longer and thicker then the lowermost, Whish rare creature I wish I had seen with Cardanus, that I might have here added to this description the figure of it. There is also besides these a Ware-fly, which men call from the length of the feet or shanks of it, Tigaranum, Macedonias, Podanum, Grunias; called therefore in English a Gnat Fly. Of these Flies are found four sorts. The first species hath long shanks like a wood Spiders, the body almost oval of a whithish ash colour, silver wings, black eyes sticking out, with two very short horns, the tail pointed or piked. It flies (much like the Odrich) hopping with the feet, sometimes it flies in the air but not far nor long. So greedy after the lights, that it often.
oftentimes is burnt in the candle. In Autumn it is frequently seen in pastures and meadowes. This of the male kind. The female is almost alike, but somewhat more black, the end of the tail as it were bitten off; these are called in English Shepherds, in Latine Opiliones, because they are most often seen where sheep use to feed. The second fort of *Tipula* hath a great head, eyes standing out, four small horns; the body pleasantly various with the colours yellow and black interchangeably mixt. The third is almoft like unto this, having that the body being all yellow, is better seen out with fix or seven black spots; both the male and female have a three forked tail. The fourth species is very rare and curious, the head and especially the mouth forked, the shoulders swelling, the feet shorter, the body twice as thick as the rest; the back black, the belly and sides yellow, the tail black and picked. It lives in hedges in the Summer, and is seldom found in open fields. Those *Tipula* or Crane-flies aforesaid do couple with their tails turned to gether, and so they fly; yet sometimes they turn again as it were to embrace one another.

**Chap. XII.**

*Of the use of Flyes.*

These little creatures so hateful to all men, are not yet to be contemned as being created of Almighty God for diverse and sundry ues. First of all, by these we are forewarned of the near approaches of foul weather and storms; secondly, they yeeld medicines for us when we are sick, and are food for divers other creatures, as well Birds as Fishes. They blew and see forth the Omnipotency of God, and execute his justice; they improve the diligence, and providential wiltome of men, All which shall appear in their places.

As for their prefaging of weather: when the Flies bite harder then ordinary, making at the face and eyes of men, they foretell rain or wet weather: from whence *Petitian* hath it.

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*Sittariis; cruris*

*Musca redit; summus; proboscide mordicat arm.

English:

Thirstily for blood the Fly returns,
And with his sting the skin he burns.

Perhaps before rain they are most hungry, and therefore to aswage their hunger, do more diligently seek after their food. This alfo is to be observed, that a little before a shoure or a storm comes, the Flies descend from the upper region of the air, to the lowest, and do fly as it were on the very surface of the earth. Moreover if you fee them very butie about sweet meares, or unguents, you may know that it will prefently be a shoure. But if they be in all places many and numerous, and shall to continue long (if *Alexander Benedic*it, and *Johannes Damascenus* say true) they foretell a plague or pestilence; because so many of them could not be bred of a little putrefaction of the air.

**Many**
Many wales doth nature also by Flies play with the fancies of men in dreams, if we may credit Aegoparius in his Apuleius. For the Indians, Persians, and Egyptians do teach, that if Flies appear to us in our sleep, it doth signify an Herald at Arms, or an approaching disease. If a General of an Army or a chief Commander dream that at such or such a place he should see a great company of Flies; in that very place, where ever it shall be, there he shall be in anguish and grief for his Souldiers that are slain, his Army routed, and the victory lost. If a mean or ordinary man dream the like, he shall fall into a violent Fever, likely may cost him his life. If a man dream in his sleep that Flies went into his mouth or nostrils, he is to expect with great sorrow and grief imminent destruction from his enemies.

Nor do they only foretell dreams, that shall fall on such diaries, or such times of the year; but they do afford much matter for Medicine, and cure for diseases. For Galen out of Sarranius, Aegoparius Cleopatra, and others, hath taken many medicines against the diseases called A abolish or the Foxes evil, and he united them either by themselves or mingled with other things. For so it is written in Cleopatra's Book de Orinatu. Take five grains of the heads of Flies; beat and rub them on the head affected with this disease; and it will certainly cure. Aegofigens used to take a great many Flies heads fresh plucked from the body; and rub the part that was bare or bald with this disease, especially if they were exterminated. For the blood of Flies (faith he) doth much help the parts that are exterminated with Nitrous medicines, or are otherwise galled or fretted. Sarranius used to mix a part of whole Flies dried to powder, with Alconumini quick Brimstone, Gunpowder, lowes Gall, and other like things against the Fox-evil. Some add to these Beads joining roots of Reed, and Fern, and bark of Ochmea; and with which medicine they cure perfectly not only the Fox-evil, but whatever defution of hair, and the thimble thereof however contracted; the place affected being only first rubbed till it be red again, with fig-leaves. Others use the blood that runs out of the heads of Flies; others some apply the ashes of them ten days together with the ashes of paper or wood, so that the third part be the ashes of Flies. Some others do temper ashes of Flies with womens milk, or coloers; some only with honey. Play, after the same manner. Gaely and Marcella burn the heads of Flies and mingle them with honey in field of an oystent, and thus make a medicine against the Foxes Evil. The like Medicine Play, much to procure the hair on the eye-lids: Take of ashes of Flies and Mouth-dung of each alike mingled half a penny weight, and add to it six six parts of Silphium, and with these and Ophio for sheepes far against the part. Some prescribe Flies with the roots of Docks for the Leprone to be anointed withal. Play faith that these were some, that for the same cause did give a red Flies dead, in drink, but those that were very weak a fewer number. That Flies are very good for duney diseases of the eyes; not only Galen, Galen, Play, and Archippus have affirmed also Neutwerk, or later writers, especially for the Pin and web. Blue-eye, lime-eye, and warrs on the eye-lids. If the eyes be weathed in the evening with water of ordinary Flies distilled in way of bath for a monthes space; it will cure them of all spots or films. If the hair be often wet with it, it will grow exceedingly, But the Veil must be bathed in Winter, and the Material distilled about Winter. With two drops of this water put into the eyes; Galler writes, the deafness of them will be cured; and this Medicine he thought of a Jew. Mut ius, which was thrice Confult, from observation, did hang a live Fly in a little linen bag about his neck, wherewith the name of bloodshot of them was cured, as Play affirmeth.

Flies in an odd number being rubbed together are reported to be very good to cure a fallen on the ring finger. Bean Flies drink with vinegar do drive forth a hoarse breath sticking in the throat, Holy Abba. The Fly Napheus of the helb Napelleus or Wolfsbane to called, doth not only cure the poysien of that herb, but all other poysien whatsoever, as Avenit withnesth, and Juliani Scipig coloures from whence this Antidote is made. Take round Birth-wort, Wuthdiffare of each two ounces; terra sigillata half an ounce, Flies of Napelleus in number 18, juice of Citron what sufficient, mingle them, make an Opiaire. For (faith Scipig) against the biting of the Taras, or any other venomous beast, or the poison of Wolfsbane there is no Antidote comparable to this. The same do Flanermund, and Petrus Apponem teach us. Yes, moreover when as there is no Fly at all but will cause vomiting (as I shall make good out of Arnaldus) why may not all of them be thought preparatives against poysien? Cardainus in like manner commends the wormed Fly, But it is kept burning of medicines by hand and eye: For because it is a very useful, Iz. by known experienced, tell while we affeed unknown medicines we lose the use of those we know. He relis if that an oil made of wood Flies was in great estimation; yet he adjoins us how to make of to use it. A Fly chewed and swallowed doth vehemently provoke vomiting. Arnaldus, I have heard of a certain man (faith Gaffor) that was wont to take three of four Flies into his body, which gave him a very good food. Take five grains of Bonn-flowers, let them be put into an earthen pot, with butter here and there laid between them bed upon bed, with which the veil may be filled, and being very well closed, let it be buried in bore dung, where the Sun uether to come, for the space of one year; at the years end you shall find the Flies turned into an Unquene, the which afterwards are exceeding good for any grief whatsoever in any part of the body; as I have learned of a friend of very good credit. Nomeus advise to take the bodies of great Flies when the heads are off, and rub between the fingers, and so anoint a small impolite swelling therewith, for a special remedy. Forinus the Poet affirms, that
that there was a German maid which lived three years with eating of Flies. If carrick cannot urine, or the urine seald their genitals, put but a live Fly into them, and it will give them eafe. Columella.

Neither do they serve for the health of men and carrick; but withall do seem to be created for food and fullenance of many sorts of creatures. For there are some kindes of Spiders which hunt after Flies and prey upon them. Swallows feed on Flies and almost on them alone, as if they were to be suppos'd to be made only for them, insinu'd as without them the Swallow could not live: and that the reason why they hunt after them aloft in the air, in rainy below near to the earth. Pliny affirms that the Bird called Himantopus makes them his chiefest food. There is a kind of Duck called of the Tigurnius Muggent (as if you would lay, the Duck that catcheth Flies) like to the tame Duck in bignesse, which greedily snatcheth up the Flies swimming on the water and eats them.

The Chameleon which some have reported, but falsely, to feed only on the air, feeds on Flies, which with his tongue fix inches long, putting it forth suddenly and waving it to and fro, he bites unawares, draws to him and devours them, as I have seen with mine own eyes in the year 1571. All those Birds called Wagtails (if I am not deceived) live upon Flies, but especially those that are whirly about the tails: in the German Tongue tiaden wägen, but others call it more properly Muggen ficher; in Greek, τουπαριον; in Latine, Muscivorum; in English, the Fly-eater, as being fed with nothing else, as Bellonius writeth. The bigger sort of Zizanius, so called, feed on Flies which they catch as they fly, as Swallows do, and never mule one, as I have taken a great deal of sport to behold. The worms of Pheas-flies, which we English call Muggots and Gentles Fishes are very much taken with; Anglers use toatten these to their hooks to catch Rock, Perches, Carp, and other fish withal, very good they are for that purpose especially if preferred in honey. Trouts are taken with the ground or Gaipath Fly, but chiefly with the dung Fly; so that the Anglers use toatten one or two of them to their hook, and with a sporting, or rather cunning fetching back of their line, do invite the Trouts more greedily to bite, and the bait being swallowed, do hang the fisher. Others put as many of those flies upon their hooks as they will hold, and plim them quite down to the bottom, especially where they know the greater Trouts use to haunt, who are very devisous of the bait to laied before them, and by their greedinece become a prey, and lose their lives; as William Benet informs me. The Fly called Purgantium (in English, the Cades Fly) serves for the like uses, as also the Fly which usually sits upon mans ordure. But every moneth must have his several fly, for that which is for one moneth is not for another; the which the Fishers very well know, who in defect of the natural Fly do use some artificial Flies made of wool, feathers,or divers kindes of filken colours, with which they outrun and deceive the Fifth. Only you must take heed that asoong as ever they bite, you pull your line to you, left the Fifth refusing the unfaavoury bait get away. In the River Aire stream there swim fifty divers colours feeding upon the native fly that flies on the top of the water, which when the fishermen perceive, they began to catch of those kindes of Flies, and fasten them on their hooks. Now these Flies it seemeth as soon as ever they are touched lose their native colours, and so become altogether unuseful to fish withal. Wherefore they are fain to use artificial ones made according to their shape and colour (as Aelian reports). They add also to the purple wool, and divers coloured, made into the shape of that Fly, two cocks feathers of wax colour, and so exactly resemble the natural Fly. From whence we conclude this art of making Flies to be very ancien, and derived to us by long tract of time; however we have some bold bragging hookmen at this day that ascribe it to their own invention. Nor may we wonder that fishes and fishermen do so lie in wait to catch Flies; when as Demitian the Emperor thought it a work not unbelieving Cesar himself; who as Suetonius faith of him, with an iron pointed instrument stab'd all the Flies in his Chamber to the walls, as they stuck upon them, and would not leave so much as one; inform'd that when it was asked by any who was within with Cesar, the servants anwered, Ne muus a quiddam non so much as a Fly.

But how strongly do those inferm creatures demonstrate the great power of God? For consider but the leaf Fly that is, and observe how in so little a body the most high God hath curiously fitted feet, wings, eyes, inous, and other parts, which yet are lefe then the leaf thread. How doth he out-fly a Fly of his own name ten times bigger then himself? doth he not excell all other Flies in running? doth he not pierce deeper with his inous, and draws out whole vellifels of wine? The Elephants, that great monster of creatures, is often vex'd and molested with other Flies; and that they are able to tame the Lions, Asp shewes in his elegant Fable, The Horse, and Bear are not able to endure their bites much leffe then the Sheep, and Asses, unlefe humane prudence came in for their aid, and did prevail against them. Hence came the invention of that which some make of Leathers, rubbels, or birds which we call a Fly-flap: and that orbicular fan fastened to a Longflick made of the most choice Peacocks feathers, of which Propertius of old, makes mention in this Dithich:

Lambe que turpe prohibet tua pranda Muscas,
Aliti excipiar, cauda superba sors.

That
That is to say,
That which forbids the nasty Fly thy肢 to lick,
Is Peacocks feathers fastened to a stick.

The Indians and Germans make thes, the one of Oxen, the other of Foxes tails. Some make them of small willow twigs, others after another manner: the fathion whereof, Ovid, Vegetius, Columella do exactly describe. Moreover, whereas the rugged skin of the Elephant is in stead of tail, mane, hairs, (to speak in Pliny's language) neither hath he any bristles to cover him, or tail to guard him, therefore men cover him all over with linnen or silk, the better to free him from the irknomnele of the Flies, and to keep him safe that they may not come at his skin.

That Oxen and cattel be not annoyed with Flies, anoint them with Oyl fried in a frying-pan, or with Lions great, and Flies will not settle on them. The same will Origamum or wilde Marjoram effect, if rubbed till it be timber and spread upon them. If you anoint the hairs with the juice of the leaves of a gourd, you would not a little wonder how it will free them from Flies, this I have oftentimes made use of with profit, Selaricus, Bay-betrees being made into a very small powder and boyled with Oyl, have the same virtue, if they be anointed with them; as also the drivel or oint of Oxen and Horses, Africamun.

Oftentimes Flies get into the wounds and ulcers of cattel, so that by reason of the worms which they breed, there is added more malignity. First of all therefore, those ulcers being made clean, Columella applies an ointment made of Pitch, old Oyl, and Bacon grease, both within and without; afterwards he applies Whey wingled with Athes. Almost all the Summer long the ears of dogs are so exacerbatet with Flies, that they often lose them quire. The which that it might be helped, they should be anointed with oyl.

The Fly Ophiusurus (from exiting or devouring of Serpents) gets close, Actios, between the scales of the Serpent Dryniam especially, in so much that at length it kills him outright: this Fly from the colour of its wings is called of Helychius xanumun, or the Broken fly, because it resembles the colour of brasse, it feeds on black Beetles; and by biting buggers in the Serpent extremeity of heat, after that unquenchable thirst, and death follows: having fed upon the carasses of those Serpents, if afterwards they happen to bite a man, the wound is incurable and deadly.

The Flies called Mariduera or Dung-flies are of divers sorts: one is like the Fleth-fly but bigger, his eyes of a darkish red, shoulders black, in which there is a circle somewhat long and white; the back black drawn over with crose lines or streaks. The wings silver colour, longer then the body; most commonly they are seen about mens excrements, feldome otherwhere. There is also a Fly green all over, so repiquent and glistenting as if it were transparent, the head dimmish silver wings, frequently in the woods, and most commonly about dung; in bignesse equal to the common or ordinary foot of Flies. Whether it be that which Situations calls Cinereus. I know not. I have light upon another Fly called xenos, Dung-eaters lefte then the green Fly, the body dun, the head of a full red, with a line along the middle of it, I have another the body rough, yellowish, the eyes black standing out; the shoulders and back black, curiously spoted, the tail ash-colour. Another fly there is white spots, somewhat towards a Saffion colour; it hath two horns longer then the rest, silver wings covering all the body; the head black, foursquare, and small, very frequently seen about horse-dung. To conclude about dung-flies (from whence also it is probable they are generated) there are certain yellowish Flies, the body somewhat longer then the rest, and bunching up; of whose generation we have before made mention. Alto I saw another rare Fly, not every where to be met withal, that feeds on mudwall made with mud and purfhefd materials, it was black all over, only it had silver wings, and in the shoulders it hath four white spots; in the rest of the body eight, i.e. on each side four; the eyes white, the forehead marked as it were with a white alizarin or little star; out of which shoot out two black horns and long, it hath also upon the top of the thigh or shank a little white spot sprinkled up and down, This Flies I keep though dead, in a box for the raritie of it. Bembidophagus is a Fly, montanous, big, very black, the body rough, the eyes somewhat long, great, the head of a bright red; for his prey he falls fiercely on the Humble-bee, and getting the better of him by flight, nimblly gets upon his back, and flicking close to him, doth to extremely bite, that he throwes him headlong to the ground,ucks out what honey he findes, and goeth away conqueror; on the top of Carmel hills Pennius affirms in his powers, that he saw it as long as the flight lasted; but the fortune of the barret falling to the Flies, the Humble-bees were put to the worst and flain. And thus much of the Zoephagi or the Flies that live upon living Creatures.

The Zoephagi so called, are those that make their living out of creatures without life, and those are either on the land, or in the water: of the land Flies, some feed only on the earth and the dew of it; others of plants, herbs, and flowers growing thereon. The one I call (in a term of my own) Ground-suckers Hunnifaga; the other, Hearb-eaters, Herbivora. The Hunnisga, or Ground-fucker, hath a dun coloured body, in the head toward the mouth, a whitish shining spot, the belly and feet black, at the comming forth of the wings on both sides a white spot, the back grey, in the shoulders according to the length of them four fullled white lines, the wings silver, and (if they be put into the water) shining like the glo-worm; it is found in foot-paths, and Mol-
Mole-heaps newly turned up; for it loves the ground that is made plain and smooth with treading on, and therefore called in English the Graspath Fly: it seldom comes upon flowers, especially at what time the Mole calls up fresh earth, of the juice whereof it is fattened.

Of the Herbwora or those that feed on herbs or flowers there are divers sorts or species; whereof three are like the Bee termed of Lucanus gallaris, military or war flies. In regard they are bigger, luttier, and stronger, very spicuous to look on, very gallantly set out with two silver wings. The first and chief of these hath a blackish head, the middle of the back being cut croflewife with two overwheat lines, the end of the tail black; the body otherwise mud colour. The second not much unlike, the head blackish, the shoulders according to the length of them drawn with three yellow and black lines, the rest of the body marked alike and with the same colours. The third and leaf about these, the shoulders are rough and yellow, the head red, the rest of the body is divided with four yellow and black lines going across it. The bodies of all of them do glitter, and as if they had nothing in them are transparent. They are incontinent in gardens, flicking the juice of flowers. Lucanus or these of these military flies thus: There are a kine of Fly which some call Military, others Dog-flies, that make a very harish and thrill noise, and fly exceeding swiftly. These are very long lived, and continue all the winter without meat, especially when drawn together, and fattened to ridges and tops of houes.

In whom this is most worthy of admiration, that both of them do the natural office both of male and female, like the Son of Mercury and Venus, who was of a mixt nature or Hermophrodite.

Much like to these is there another Fly called Apiarius, of a thinning black, having two wings, gathering wax, and fattening the juice that he hath gathered from the flowers to his hinder legs, as the Bee doth: He comes abroad in Autumn, and is seldom seen at any other time. Whether this be that which Arift. calls Sirenis; it differs certainly in the number of wings only, for that he makes to have four wings, whereas Nature hath afford this but two.

There are other sorts of Flies, that devour herbs and flowers, that are not like Bees, to wit, the Struthopesper, Euniperes, and Chelidonias, because it is like to the Swallow. Of the Strethopesper, I have seen three sorts. The first whereof is tender and sort, six footed, with two wings, the belly longer then ordinary, sending forth from the head a little above the eyes two feathers like Oftriches feathers, as it were horns of a downy softness, as soft as any feathers whatsoever; crump shouldered, all the rest of the body white, longer then the wings which are black. The second is of the same colour, whitish, the head of a dusky colour; otherwise it differeth little or nothing at all from the former. The third is all alike, only the horns are not so soft and downy; the tail is white, the body long, with five white lines going athwart it, the feet long, marked with black and white colours: as it goeth it lifteth up the tail a little, and softly clasps his two transparen wings together. These three species do appear in the Spring time with the first, in gardens, hedges and shady places very frequently before and after rain.

The Euniperes is a fly all over white or rather silver colours, small and every where downy; inasmuch as when it sits upon a flower, if you look not hard upon it, you would think it were a feather; the wings of it are divided, the feathers being forever one from the other almost like Birds wings. Pennins received one of these painted, from Edmund Knivet: afterwards he often saw them in hedges, and places fit with privet.

The Fly called Chelidonias, is twitter of wing then all the rest, sides, tail, head, brown and hairy, the eyes black and hanging out, the bill or rather the nose picked, out of the top of which that out two horns; the top of the shoulders as also the back black, two silver wings, the forepart whereof do answer to the blackneffe of the feet: sometimes it fits in one place for a great while together, as if it were immovable, but as soon as you come near it, its out of your fight before you can say, What is this? and will not yeeld a jot to the Swallow (from whom it hath its name) for twintwistle of flight. Pennins received another flower-Fly of the learned Carolus Clusius, black-having two silver wings, two dainty white eyes in the back, having seven yellow spots, in the midit whereof to be differed a peck of black. There are Flies that are found in beans, of fundry colours, but especially of a pale purple, which I conceive do come of the final worms called Mide. For when they are gone (which is in the midit of Summer) suddenly there comes forth a great number of those Flies swarming amongst the Beans, The Fly of Nepheus I have not seen, but those that come out of those black grains that stick to the stalk of the wormwood, much less thin Miller feel, more black than any Moor, only famous for their wonderful blackneffe.

There is a certain Fly called Tunzies, very rare and wonderful, whether you respect the form of the blackneffe of its life. It hath many names: Aelian called it Tunzies; Hefychius, Tunzies; of others it is called huegi* & in Latine, Diaria; it moveth with four wings and as many feet; for that it hath not peculiar to it in regard of the blackneffe of its life only (faith the Philosopher) but also as it is a four footed creature, and a flying creature. It comes forth with the Sun, growths flouriflieth, languiflieth, and dieth the same day with the Sun setting. In the time of the Summer Solstice, these diarie creatures break forth out of certain husks of putrefied grapes, which husks (or such as seem to be) whether they are a kind of Arelia proceeding from some kind of canker-worms living in the water, it is not ease to shew; for in that particular the Philosopher is silent, from whom most of this story is gathered. Pliny calls them thin membranes: Arift. small bottles, and faith they are common to be seen in the Rivet Hippes by the Cimmerian Bos- phorus of Pontus. They live a life both short and sweet, for they live nor beyond the space of a natural
natural day, and in the evening they put an end to as to their miliaries. In the mean while they are in full mood, and kept alive with their own radical doitfull, neither are beholding either to air or earth; hence we may gather the length of their life, yea rather admire and with for it. These insects Cicero speaks of in the front of his Inq. Ques. of Math. in his 2. Book de Sarmentia. Europea describes in these words, You may take notice (faith he) that in the Rivers of Romania and Litania, and the Princely islands and Bosphorus, in the Summer there are a great company of the Flies called Ephemerus or Day Flies: they be Worms and Flies both, some have four, others six wings; in the morning they run upon their feet over the water, about noon they fly about the banks, the fun setting, as many as were bred that day dye in the self same time, Which description doth much differ from Aristotles history of them, first because in the morning it is a creeping worms, then about noon a fly altogether, besides that he giveth to some six wings contrary to the minde of Arist. Jul. Scaliger in his learned Exercitation against Cardanus describes this Fly after this manner: I have observed a kind of Fly frequenting Sarcas and the Lake of Baccanum, called Ephemerus in the evening, but never any in the morning; being taken it lived only a night: it hath four very long wings, how many feet I know not; but if it have fix for (I do not remember how many it hath) it sufficeth, it hath a head like a fly, great eyes, the foot or beak rolled up together, the belly large, the tail exceeding long, and full of joynes, in the end forked, in some three forked, of colour a darkish, yellow in the biggest fcar, in the lefter of a brown or dimmiish, very specious. The Taurini call this insect Moniattes as they would say Manchelli, The Adriaick about Meramum and Trigoss, call it Cutuclen; of my Countrey men it is called Sitivola, i.e. Sagiella. Elah lib. 2. de Animal. sect. 4. sets forth another kind of these Insects, such as are bred of lowe wine Lees, which when the vesell is opened come forth, for nature hath given them a beginning of life, but in regard of the many miliaries to which it is incident, quickly freeth them of it, before they can be fensible of their own, or any others unhappines. But yet what those Flies of which Elian speaketh be, unless he be those that we call Bibiones? I know not; for that our Vintners know of no other bred in their cask.

But Scaligers Ephemerus, I should rather have reckoned amongst the Flies called paretis, had not he himself referred it to this Classis. I shall not think it much alfo to speak of Pennius his Triermes, or a Fly living three daies,for the likenes of the one with the other, that so the minde of the fudious may be filled with variety and rarity. It is of body very long, and fomewhat like a Butterfly, the head little and yellowish, the eyes great, black, flanding out of the head, the promenfis or beak winding in; of the colour of yellow mulelins, with which it lucteth dew from the flowers; two black cornicles shewen a little above the eyes, the back and belly yellow, the end of the tail dimmiish; it hath only four legs, the hindermost whereof are yellowish, the edges of the foremoft black, it hath as many wings as feet, the outermost whereof are pale, the intermediate borders of them being of a dark yellow, the innermoft of a brightish yellow. The outer wings when they are closed together for to cover the body, they are so conjuing, that you can hardly see a very hardly perceve where they touch; it flies heavilie and continues but a while in flight, within three daies it expires; it flies amongst Mallowes and Nettles, this was found by Poorborough in England in the year 82. witnessed by very honest men and without exception. Thus Pennius his Triermes.

In flowers, or rather the buds of the flower called white Bets, there is a kinde of Fly that ears the flowers, very small, I know not whither bred there, or coming thither from some other place, it seemes abide there for warmth sake and feeding. Pennius faith he was informed of this by his most learned friend Dr. Brown. I thought good to place the Fly Bibio in this number, because it is nourished by Wine, i.e. the clear juice of the grape (of which alfo it is bred). In the Illyrian Tongue called Finus robale; by the Germans, Wein Wurms; in the English, Wine Fly, Cardanus calls it Musculus; Scaliger not amisse, Vuvianum, and Virulium; for it flies into cellars of the houses, cares for nothing but wine. If you take it and look upon it, you would think it had no foot or beak at all, and yet it is reported that they will strike through a Cask made of inch board, infomuch that the wine sometime runneth all out. It may be Grapulius meaneth these, when he writeth thus: The Musculum, Muscule, Muscione, Flies bred in Autumn in the mother of Wine, and foiling the Wine cups, do not live so long (and that deferredly) as to come upon the table in the winter. In the Welt Country in a Town called Tanton, in the fruit of an Apple tree called Felus, in the Summer being rotten to the Core, there is found a glittering fly of a green colour; which when the Apple is cut in twain, flies out and seemeth to be bred there of some kinde of worm that is in it.

The wounds made by any of these Flies, must be anointed with bitter Almonds bruised, or Remedies 2. Walnuts; when ulcers are made, it is fit to pour on liquid Pitch boiled with Hogs-grease. Those things that kill and drive away the Tyke-flies called Ricinius, for the most part kill and drive away the Doe-flies, Columella.

The Fly also by his boldnesse and oarsenesse, hath taught men how to provide remedies against them; for whereas both at home and abroad, every where they were, to trouble some, that nothing could be so safely kept by the Cook, but presently they would be at it and spoil it, yes all kinds of meats whatsoever, they now use to fry or stuff up in their houses, or boil and mingle with such kinde of things as flies love, Nigela seed, Elder, Lawle, Coriander, Hellebores, Bo-gloffe, Borage, Sage, Beets; Loose-flitte, Origamum, Basil royal, Henbane, Licebane, Balm, a
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fluff having a flower like a Rose, Pepper, Ferula, Cockle, Libbards-bane; some give them Orpiment powdered with Milk or sweet Wines, and sprinkle it about. Rhufis writeth that Crocodile Broth chafeth away Flies; who also commends the perfume of yellow Afnick, with Oilburning perfume of Vitriol, writing Ink rempered with water wherein Wormwood hath been washed keeps the flies from the letters. Plin. The feed of Henbane, black Elæebore, and the Froth o lá.

Quicksilver with Barly flower beaten and kneaded, and made into little mortels with Butter or Grease, and smeared with a little honey: and so cast to the flies kills them. Attius. The gall of a Hare mingled with mills, or boiled in water, and sprinkled about the house will chase away all the flies. Anonymus. Flies are destroyed with the smell of Wine diffilied with the herb Balm, Lullus. If you would gather flies together into one places, Ciff Rhododaphne well bruised into a ditch; the juice of the herb Ferula sprinkled worketh the same effect. Attius. Bury the tail of a Wolf in the house; and the flies will not come into it. Rhufis. Avius Albertinus. Boos graece and Rofin melted, entangles them. Oyl choaks them. Verdigrafe kills them outright. If you anoint any thing with Cafta beaten in oil, it will be free from flies. There is found in my Country (faith Petrus Crescentinus) a kind of Toadtool or Muthrome, broad and thick, reddish about the top, which fendeth forth certain knobs or little bunches, some broken, some whole; it is called the Flies Muttrom, because when it is made into a pate with milk, it deteories the flies. If a man hold in his hand the Stone Hercules or the touchstone, although he were clad all over with honey; yet will not the flies come at him, by this means you may know whether the touchstone be true or no. Attius. They write that the K. of Cambayes son was brought up by poppies, who when he came to years, was all over so venemous, that flies at once pierced were twon to death. Sealliger. If the fly get into one eye you may thar the other hand and it helpeth. Aphrodiasis in Problem. If Camell chance to be luing by the Tabanus or Aflus (a kind of Fly to called) as it often cometh to paffe in Arabia, mount them with Whales great and all forth of fhe, and they will presently be gone. Plin. Selon in Geopnsices bids thet to sprinkle cattel with the decoction of Bay-beer skin; and both these flies through a kind of natural antipathy depart forthwith, if cattel be already fling with the Aflus Fly anoint them with Ceraph and water. The Taban will die (faith Poranzus) when you fer them before them Oyl of the decoction of land Crudolages called Sciusibruido with Hoys sea and the flour of oot. Moreover let cattel be led to pafure in the evening the fars guiding them, in the day time let them be kept in folds with buuds laid under them, that they may lye the more early and quietly. Virgin. Or else let them be brought to the fides of thick woods where these flies by reafon of the dunecile of their fight cannot fly to freely. Sundry kinds of remedies against flies lullius upon Hippocrates also Apolodinus and Bri trim have preffed more remedies against flies.

Now after what manner Flies do execute the Justice of God, let us brieuely fet down. No Age but will fpeak of that famous Army of Flies; with which that great Lord of Holfs of heaven and earth did of old correct the fury of Pharaoh, and of the Egyptians, being joyned with hardneffe of hart; and yet the wicked Hypocrife did not come to himself; but wallowing still in the mire of fin without any fent, did afterwards invirte greater and more grievous judgements to fall upon him. And that proud young gallant, who would needs ride to heaven upon his winged ftead, dismounted and cast down by the Fly called Ostrum. Hercules also, although exceeding in strength, the Poets inform, that he was almost vanquifhed by flies. In the time of K. Rivallus, when as corruption of manners, and guilt had injected Britain, there came down from heaven fhowers of blood, and thoife being dried away, did produce swarms of paytoned Flies, who if they did but once bite any man he presently died, as our Annals report. Nicollus Albanopolitans an English man, being elected Pope in the year 1543. called by the name of Hadrian the fourth, was choked with a Fly flying into his mouth. Urfpergenus. Others fay that he was killed with drinking a draught of water in which a fly was drowning; and that by the juft judgement of God, who excommunicated Frederick Cefar, (Whose furname was Barbara, &c. &c.) and did incense all the Princes of Italy against him. Nauclerus out of Johannes Cremonas, An ancient writer reporteth also, that the Army of Julian the Apolite was grievously inftricted with mighty swarms of Flies; and Grifus fayth that the Magistant were by them driven from their habitation. In the year 1548, great numbers of flies dropping out of the air, did cause in the Eastern Countreys incredible noifomefle and putrefaction; upon which followed fuch a Plague among the people, that scarce the teth man among them was left alive. In the year 1549, wonderful fire of strange flies did fly up and down many Countreys, who did hereby waste the graffe, trees, cattel, and men also. Cranes. In the year 1143, a fort of fly about the bignefle of the common fort of flies, only of fomewhat a longer body, did fo fill the air, that for many miles togethe; the Sun could not be seen, which were also very troublesome. Urfpergenus. In the year 1285, Charles King of France leading an Army into Spains, and making war with Peter King of Aragon, an Army of huge flies of divers colours fett upon the French, and flew them with their beaks, as it had been with swords. Marinus Nicolaus I. I. de Hisp. Reg. In the year 1578, about the middle of Auguft, upon the top of the Temple of Bremhium, there fete every ear a swarm of flies which made such a noise with their wings as if they would throw down the roof. Timothy Bright told this to Renuiss, a Physician, a man both learned and verufius; and of no fmall note with us. Hither may be referred that which Seruus reports, lib. Georg. 3. That amongst the Romans a Plague did often happen by reafon of them, infomuch that they were fin to hire men of purpose to catch them, who were payed according to the quantity more or lefe that they caught.
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cought. But how greatly they annoy the inhabitants of Africk, Asia, Spain, Italy, and the West-Indies, how greevously they fling and wound the Carthaginians, and the inhabitants of Hispania, besides Ovidius, let those Englishmen (by who accompanied that flower of Knighthood, and Mail of the Spanish pride, Francis Drake) as for those things which Apolloius Fulgens, and Pliny fabulously and superstitiously relate concerning Flies, I thought them unworthy of this place; and therefore those flies called Pisasides, Cyprians, Eldades, Alces, and the rest of mean invention I pass by, It shall not be from the matter to tax in brief the madness of the ancients Gentiles, that we may thereby be taught to lift up our eyes to the true Apollo, the God that doth indeed keep flies away from us. It is said of Hercules in performing divine Worship, whereas he was almost killed by the Flies, that he offered sacrifice to Jupiter, called Apollo, or the Fly-driver, by which means they were presently dispatched into the River Alpheus, from whence he was afterwards called by the name of Myricon or Fly-killer.

The Eons did invoke Myriones and Myades, that multitude of Flies might not cause a plague among them. Pliny, He relates also how the Cyrenacicks were wont to worship Acher the god of Flies, that by his means they might be secured from being troubled with them. Pliny more truly might have read this name Acron of Acheron, in head of Acher, if he had heard of the Town Acron where Babal-cubub, i.e. the god of Flies, that famous Idol used to be worshipp'd. Unfortunatis faith that the Devil did very frequently appear in form of a Fly, whereas it was some of the Heathens called their familiar Spirit Musca or Fly: perchance alluding to that of Plutarch:

His pol musca est, mi pater,
Sive profanum five publicum, nil clam illum haberti potest:
Liqis adsit ibi silice & ren omnem tenens.

This man my Father is a Fly, nothing can be concealed from him, be it secret or publick, he is presently there, and knows all the matter.

But away with those false and filthy gods which the Greeks therefore called yourselves, because they did serve for bugbears perhaps for children, and ignorant and heathenish people, which we that are Christians, and profess the true Creator of all things, ought not at all to regard.

There is also said to be another use of flies. For Plutarch in his Ars sacra relates that it was a law amongst a certain people, that whoever should be so bold as to laugh at and deride their Laws and Constitutions of State, was bound for twenty days together in an open chelt, naked, all besmeared with honey and milk, and so became a prey to the Flies and Bees, after which when the dotes were expired he was put into a woman's habit, and thrown headlong down a mountain; which place of Plutarch (by the Translators leave) I think should be interpreted not Cipho, but musca, anointed with sweet smelling ointment, Of which kind of punishment also Suidas makes mention in his Epicurus. There was likewise for greater offenders a punishment of Boat, so called. For that he that was convicted of high Treason, was clapt between two Boats with his head and hands, and feet hanging out; for his drink he had milk and honey poured down his throat, with which also his head and hands were sprinkled, then being set against the Sun, he drew to him abundance of stinging flies, and within being full of their worms, he perished by little and little, and so died. Which kind of examples of severity as the Ancients shewed to the guilty and criminal offenders; so on the other side the Spaniards in the Indies, use to drive numbers of the Insects out of their houses, as the custom is among them, naked all being dabb'd with honey, and expose them in open air to the biting of most cruel flies. But for these things let Nemesis arrive, who is at the beck of cruel mistress, yes may be said every moment to be preen'd with them.

To conclude; the last use of Flies (and that not to be condemned neither) appears to be this that whereas none of them palls a Summer, yet some of them do not live out a short day, we should by them be put in mind of our own frailty, and of the uncertainty of this vanishing life; the which although preferred with all the dainty food that can be got, with the finest raiments, and all the best wines and means that may be for a short space yet when it seems most to flourish, it on a sudden declines and scarce with the fly holds out an Autumn, much like a Winter: we are in Plutarch account but Musca, Daisemus, i.e. a's dures continuance, and as the dream of a Shadow. And with the flies, short liv'd, yet shorter liv'd then they, for the most short lived of them liveth a day, whereas we have young children that survive not sometimes the fourth part of an hour. Away then thou Tyrant whoever thou art, make laws as thou pleasest, persecute the godly, add impudence to thy strength, trouble and confound all things, give thy self up to all abominable and filthy lusts: yet at length Jupiter shall scare away these flies, and after thou art dead exercise thee with variety of torment.
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Chapter XIII.

Of Gnats.

The Gnat is called in Hebrew Arish. Hesoi; in Italian, Zancola; in German, Mack. m. 'Uch feh, Nach, Hunger flacks, in Flanders, Mejien; in Pomerography, Komorr, Welochomor; in Muscovy, Comor; in Spanish, Marquiste & molquiste, whence our teeman call it a Machomite; in French, if it be lefter, Monchoron, it greater, Bordelle; in English, it bigger, a Gnat, if lester, Midge; in Latin, Culex; perchance from its fling as Iphar, faith, or from the word cuanum which signifies the fame with corium a skin, but if I might be bold to give the Erymologists, I should rather read the word cuicmum, not culceum, a skin fly, because it most affects that: whence by way of Hieroglyphick it signifies a Laconer; because as the Gnat covers the fairest skin, and strikes till blood come forth, do both the Letcher; which Plautus seems to intimate, when as the Parafite, if I am not deceived, takes up an old fornicator for killing his mistress too hard after this manner: 

Eho tumibili, cante culex, &c. What! art thou not ashamed thou gray-headed Gnat? I can scarce forbear to tell thee thine own.

The Greeks have no general word that comprehends all kinds of Gnats; as on the other side the Latines want words for particular Gnats, with which the Greeks abound. Of the Greek words, Arish. seems to be most comprehensive, whence the Oetecnai worshipt Hercules by the name of Cronus, because he was thought to have driven all the Gnats out of their Country. The fame Alexanderinus wittener that Apollo was called in Attica Culicis. The Bocanai worshipt their god by the name of Apollo Paromias, because he drive away their Gnats called in their language, 

m^pouss, so Panstias. But since the Greeks have one herb they call xantam, i.e. Culicaria or Gnatbane, a remedy against all farts of Gnats, xitpa doth indeed seem to be the most general word. That is evident by the network cover'd spread on beds, taken from the Greeks which they call xantamin, and also at this day name not much unlike, a canopy, a thing to catch all manner of Gnats.

The Gnat seems to be a kind of Fly, yet as flies love sweet things, Gnats love things savorv and tart. The Flies do couple, the Gnats do not. They are most troublesome in the day time, these in the night, they make a kind of a dull humming noise, these fink furill, loud and pleasantly.

The Gnat hath two wings, for the bignes of his body great, coming forth of his chomp foulders, he hath fix long crooked ambiling legs going in and out, growing from his prominent square fquare, with which as Arish. faith, they with the more eafe lift up their bodies and go the better; he hath a very long body, as also a fnow or proboscis three times as long as the Flies have, with the sharp point whereof he breaks through the skin, and with the hollownes of his trunk he ficks blood, which he makes use of in head of a mouth and a tongue. Pliny. He makes a terrible sound and great, for the bulk of his body, so that Homer in his Batrachomyomachia, makes them to give the signals for the fight. Aristophanes in his Naubian derision of Socrates, brings in Chremiophas demanding whether the Gnats make that found with their mouth or with their tail. Yet in his Arisides he terms them vovoua, which the Scholiait expounds vovouetia, fowl fouging. Their Proboscis (faith Pennius) seems to be given them by nature to suck blood and to feed themselves withal; but we may not afient to him in this particular, even reason is againft it, for that the Gnat when he turns roundes one fings much flill, but in turning away more flat; which could not possibly be, if they were found with their tail.

The structure or make of the Gnat there is no man but with Pliny may juftly admire. For in these so small Insects and as good as none almoft, what reason is there? what force? what inexpressible perfection? where hath nature placed fo many fentries in the Gnat? where his fight, where his taste, where his smelling? where is begotten that terrible and great sound which that little body makes? with what curiosity are the wings faftened, and the thongs and legs to the body? an empty hollow place for a belly which caufeth such a thirst after blood, of mens especialy? but their dirt wherewith they pierce the skin, how sharp is it? as in the biggest it cannot be perceived, so it is doubled with reciprocal art, that it might be sharp to break through the skin, and fifulous to suck the blood.

Their manners and conditions are very ill disposed, both in regard that by their good will they will wound none but the fairest; and alfo those that are asleep, harmefle and thinking no hurt. Whence groweth the proverb, a very ill conditioned man, that he is naivam ciuanam, more mischievous than the Gnat. The Gnat certainly is a very mischievous little creature (to use Ehliani language) annoying men both day and night, both with his noife and his fting; espeially those that live near the fens or rivers. Of whom Tertullian against Marcius, and his fifth book speaketh thus: Endures, if them be able, the trumpe, and launche of the Gnat; who darst not only offend the ear with the forftiness of his found, but with his lance strikes through the skin, and venin alfo.

The diftinction of Gnats is very perplex and obscure, it hath puzzled all the Philosophers; which with the doubtful fentence of words in Authors have almost confounded the things themselves. But so much they seem to differ especially in magnitude and malignity. For there are these few sorts of them, the bigger, leffer, middlemole and leaff.
The bigger may be called araneus, because they have their abode in fenny and marsh places; there they are begotten, and there nourished, they have a very long, slender body with two wings, which never lift up above their body, as the fly doth, but straight up from their shoulders, and those are very near, polite and compleat, as may be.

They abound in woods that grow near the sea, and the fens, not only in norway, Engla, and other extreme cold regions, (as Olani Magus hath observed,) but in the west Indies in Hispanio-...
matter to thew where in many things he is out. Why doth he translate the Empides Maliones, who are said not to live above a day, and feed only upon honey? which must needs be hard for them to get ready in Fens and Marshes. For I may well call (without wrong to the judgment of Pliny or Penn) the Maliones as they call them Maliones for they neither care for Milkes nor feed on them, but only upon Honey, the which they can smell at a great distance; they have a bill like a Wood-peckers, long and sharp, with which they devour in honey so greedily, that at length they burst their bellies, and so presently expire. In this also did Ceres trip, to say the least that may be, that he translates the word Afcrides by the word Tippula. For the Afcrides (whether they come forth of the earth, or the water, or otherwise) every man knows do fig-mine little worms. Besides, the Tippula alwaies keep the top of the water, feldome or never go down to the bottom. Last of all, when as the Tippula themselves come of the Afcrides, who can rightly say that Afcrides are the Tippula?

'Flour, is called Culex fircarius i. e. Fig Gnat, not because it comes indeed from the fig-tree, but because it is fed and sustained by its fruit. For it is sprung of a certain worm that breeds in the Figs, which when nature cannot make her perfect work upon, nor bring to the sweetnesse and perfection of other Figs, lett she should make something in vain, by a certain quickening vertue, out of the grains of them being rotten and purfeated, she producestheese Gnats. Yet not so, as that the Gnat is the mother, or besides the intention of Nature (as Scaliger hath learnedly observed) or if he be, the truth, is the work by the bye is of more dignity than the main. Nature did propose to itself the perfection of a wilde Figs, a thing not so much to be esteemed of: this the being not able to bring to palfe, turns her self from to common a works, to an enterprise of greater weith, and producestheese Gnats which she effecteth. Concerning these Gnats Pliny hath the words: the wilde Figg-tree brings forth Gnats, these being defoured of the nourishment they should have received from their mother, being turned to rottenness, they go to the neigh- bouring Fig-trees, and with the often bitting of the same fig-tree, and greedily feeding upon it, they let in the sun wihall, and set open a door for plenty of air to enter in at. Anon after they destroy the milky moisity, and infancy of the fruit; which is done very easily and as it were of its own accord; and for that cause the wilde fig-tree is always set before the fig-trees, that the wind, when the Gnats fly out of them, may carry them amongst the fig-trees; who aflone as they come into them, the figgwell and ripening of a sudden grow very big and full. Whence it is that the Greeks to express a woman great with childe and near her time (yea or newly conceived with childe) call her Fig-Gnat, or Gnats-bitten. Those kemb'd and curle locks Pathick's and pro- fuitutes of unnatural lust, were called from hence Capsificats, as witnessthe the Greek Lambdaic, this words Πάπεριζ Περικις Καταρακτίζων λείψανα (means to make a word) Πάπερα καταρακτίζων. Nemo componit nisi Capsificatiss. There is no man that curls and trims his locks that is not Capsificatiss. To this Capification Turnebus thinks that Adrian the Empe- ror did allude, when he upbraids that alternate Poes Flores with his Pathick, obstinately under the term of round Gnats in a most bitter Sarcasm:

Flora had fain,

Egg solo Cefar effe,
Ambulare per Britannos,
Scythians pas primias.

To whom Cefar answerceth,
Egg solo Florus effe
Ambulare per Tabernas;
Littarque per popinias,
Culices paet roundus.

In English thus:

I would not Cefar be
To travel Brittany,
To suffer Scythian cold.

I would not Flora bee
To walk the Tavens free
In Slacking Brothels hid,
Or the round Gnats abide.

But what time these Gnats passe from the wilde fig to the fig-tree, they do it in such haste, that many of them leave either a foot or a wing behind them. Now that they generated of the grains of the unripe figs may be evident in that the wilde fig is left void of grains.

Caps (some call it auct.) is called of the Greeks, and to wicin, from biting or stinging, (for that the twinge the fleshs, and with their biting cause an itching in the fame) is a very small Gnat, not unlike the Conops, who although by his biting upon the Fig it may seeme the same Gnat (spoken of before, called Cyfa: sein: unica et to dixo (as Theophrastus faith) e tē βετον την oλίγην ετέρην Πηγην δρακών) but she (as he saith) is the very first of vipers. Which place Pliny interpreteth thus: There is a kinda of Gnats very offensive to certain trees, as to the Oak, of whose moisture that is under the bark, they are thought to be bred. Theophrastus calls all those worms, what ever they be that are bred in the Elm, Neter, Roper Poley, the Masicky Tarpetins and other trees, either with parafaction or otherwise. There or the like, but a little bigger, Curies in his 13. Book, faith are very hurtful to the orchard Wal- nuts, which are called of those of Lions, Bordels, Bordists. Galens opinion is, they are great devourers of Grapes. The moisture of the Elm included in its first growth in the leaves or rather blad- ders, if it dry up is charged into those Caps. In the Aurora it brings forth other kinda of Gnats, many, small, and black, called Conchures, Sympyrions. They do especially haunt and spoil watered gardens, the crop and scrap most kinda of h.e. Filarandus infestus, an Apothecary at Lions.
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Lions hath observed them very frequently to come forth of the middle or heart of the oak apple, having a hole made therein as also out of divers other herbs, not so much by reason of purance, but rather out of the alteration of certain principles being digested into a better nature by successive labour.

Origen upon Exod. saith that with these little creatures God did the third time take down the proud heart of Pharaoh: the which are hung in the air by the wings but yet as it were invisible, and do sofacility and quickly pierce the skin, that the fly which you cannot perceive flying, you may feel stinging. So all the ancient interpreters following Origen expand the word nemus.

Only Tremlus (a very faithful interpreter of the Hebrew text, and of sacred Writ) is of another mind; who thinks this plague to be swarm of such kind of creatures, as if the Gnats and all other venomous and stinging flies consisting all their forces and coming together in troops and swarms, had agreed as being sent by God to break the pride of the Egyptians.

They fly in the air aloft in manner of a Beesflk or Pyramid; especially in the evening, they play up and down by hedge fide, when it is hot and fair weather; they fly in the sun-beam against rain in the shade. It may be they are the same with those we call Midges, and doth not much differ from that which Aristarchus calls Schoggen; the Italians, Zenzalus; the Hebrew, Cishus. There is a kind of Gnats which the Greeks call voude vaiontes; the Latines, Hercules; in froth and malle like to Drones, and never would or hurt any but those of their own name and alliance; for as soon as they perceive other Gnats full of blood and moisture, after they have fought with them, they take them for their prey and eat them; whereas they live idly and do nothing else but seek for their food gotten by the labours of others. Our Ancients have observed a kind of Gnats to be bred in the Lowe Leeds of Wine. Which because they are not heard to sing or make any noise, I had rather think them to be those which Scalliger calls Fumile Musculina; Wine-flies. Not do I praise for the opinion of Niphus; in regard they, like some other things, and refuse sweeter: when as he himselfeth elsewhere, that they are fed chiefly with the juice of Oxen dung, than which nothing can be more sweeter.

The English Gnats are not so stinging as others, nor do they raise so great pimplses, but the lesser sort of them is the more cruel, and yet they have nothing behind them but a little itching spot, like aatisfiting. The Gnats in America, especially those they call Trinm, do so thot and cut, that they will pierce through very thick clothing. So that it is excellent sport to behold how ridiculously the barbarous people when they are bitten will sigh and trisik, and leap with their hands behind their buttocks, shoulders, arms, sides, even as a carter doth his horses. The Gnats about Terra insignis, or New-found-Land, and Port Nichols, as also in divers other Northern parts, are to be seen in great numbers, and of an extraordinary bigness, as the Seamen and Olaus Magus affirm. The cause of their multitude Cardanus attributes to the uninterrupted heat and the length of the day. The cause of their bigness to that watery and inunctuous moisture which was gotten together by reason of the long cold. But forasmuch as in the hotter parts of the Indies, as Oceiana (and experience) teellus there are altogether as great, and many more sorts greater and more, Cardanus may well satisfy himself, though he cannot do me.

Of the Generation of Gnats Nature secretes do diversly diquire: Albertus faith their matter is watery vapours. Aristotele denies that Gnats should be generated of Gnats unlesse by reason of Gnats: means of a little worm as Flies are. But since they do not use copulation, I do not perceive how that can be. Piersius was the first that taught how that Gnats do come of certain worms breeding in wood, when as yet every man knowes that Gnats are produced of worms in the New, Priests, Maulicks, Torpentes, mild Fig-trees, and other like Trees, if fed were fown; and that not by way of purance, but animation.

I did chance to finde (faith Brunsch) in a dirty filthy ditch an Insect with very long feer, which for the likenesse of the form, you would say was one of the larger sort of Gnats coming forth of a forre letherish purie. I did imagine that it might be bred of some worm like unto the canker shitt within them; for the shell within was such as those the cankers transform themselves into; Whether it should be called Calum, a greater Gnat, or Eriplis, it is doubted by the Author. To these (as to all other the like hurtfull Insects) the mercifull Creator hath granted but a very short life, incommun that which they which are bred in Summer never live till Winter, and they that are bred in Winter never see a Summer.

Yet notwithstanding God hath created them for divers use, whether we respect God himself, The Ufe of other creatures, or our selves. For not only Mygnetts, Mygni, Alhabarani, Archeturfcs Gnat- vics, were by the very commandment of God, driven out of their cities into deserts and solitudes, as Pauwlians Lees Afor; Alisans, and the Indian histories relate: but even the Egyptians Tyrant, of all that ever the earth bred, the most cruel, (as the sacred Scriptures that are more ancient then all the Heathenists) was vanquished with an Army of these. The left of those the Pope could not rid out of his thorat, but was with one of them miserably choak.

With what a khitenece did they charge the Army of Julius the Apostle? how did they make him turn his back, and fall down dead? Let Apostates from the faith confeder, and weigh the matter well; let them think more seriously of the strength, power, and majesty of the Creator, when as they see such cruel things and more sharp then any poynard whatsoever, to be in such an abject contemptible creature as this is. Neither doth God make use of them to punish wicked and godly men, but also for the preservation and safety of mankind. For about Merg and Alhabaram,
Alhabersz. as Strabo reports, so great is the plenty and freeness of the Lions, that unless they were chas’d away by a great kind of Gnats (that troops up and down all that Region) they were not able to live in safety, not in the most fenced Cities from their invasion. The same is wont to happen in some parts of Mysopotamia, as Ammianus Marcellinus writeth, where the Lions being lured with the Gnats, and defrayed of any remedy against them, throw themselves headlong into rivers, and are drowned in the deep. To the Egyptians also, although sometimes they were deadly enemies, yet are they now auxiliary to them, as Hecataeus writeth, in that they wound and sting to death the young Avides, before they get, feathers being noxious to them. Moreover, were it not for them, the whole species of Bats, Water-Frogs, and Bank Swallows which prey upon the Gnats and feed only upon them, would perish. But where is Gata faith that the Bird called Cnipholugus (a kine of Wood-picker with an all-coloured back), doth eat Gnats doth not agree with their nature. For that kind of Birds feeds on a little worm that bredeth in the rotten wood, called Cofius, the which he picketh out with his bill; He was received it seemeth, by the Amphibology of the word, which signifieth both those Worms, and Gnats also, for so are they called in Greek short. But if there were such a Bird I should affirm without all doubt that it is the Nectar, which by Hesychius and Varium is called Komphathera. The Gnats called Iemis do cause Figs to ripen, by taking away their milky moisture, and by bringing in the Sun beams with them: and for that reason in those places where Figs do grow, they are bred in the wild fig-trees, that from thence being blown with the wind, they may light amongst the fig-trees. By which words of Hirtz it is manifest that Capiitation is nothing else but, a certain skill how to cause the Gnats when bred in the green or raw wild Figs, to fly to the Figs, that by the waving of their milky juice and moisture may bring them the lesser or more plenteous nutriment; The which is brought to paffle into manner of ways; for either the wise fig-trees whereof so disposed round about the fig-trees, that wind might blow them thence unto them, or else wild Figs being gathered altogether, and bound together in a bundle, were cast into the trees; and therefore the little bitte like to a Beere, called in Greek vlygos, with his noise staring away the Gnats, and feeding on them if he catch them, the Fig-keepers are wont to chase away and destroy.

The Gnats also seem to be more worthy elusive than the ordinary sort of Almanack-makers; for they will resell you the weather at all times for nothing, and that more certainly and truly, than they which boast themselves born by the Tripos of Apollo, and a long while brought up at Cuma. For if the Gnats near Sun-rise do play up and down in open air, they prefigure heat; if in the shade, warm and mild showers; but if they altogether fringe thereat, that pale by them, then expect cold weather and very much rain. When a Gnats comes forth of the Oak-apple about Michaelmas, it foretells war and hostilities; if a Spider’s death, it’s a worm, fertility and fruitfulness. Mizald. If any one would finde water either in a hill or valley, let him observe (faith Panano in Geopon.) the Sun-rising, and where the Gnats whilest round in form of an Oblisisk, underneath there is water to be found. Yes if Apomastres deceive us not, dreams of Gnats do foresee news of war or a danger, and that so much the more dangerous as it shall apprehend to approach the more principal parts of the body.

Upon a certain time there was seen in the air between the Monasteries of Sion and Shene in England, such a pitch'd barrell of Gnats, that you could not see the Sun at mid-day. The light was maintained for four hours, as long as the Armies could stand; at length a mighty slaughter being made on both sides, so many dead carcases of Gnats we found in the hedges and high-ways, that they were fain to sweep the corn fields and meadows with beecombs. There followed upon this the banishment of the Monks in both the Monasteries. Stew. Whether this be true or no, I leave to those who can resolve such truths; I proceed to that may be of more certainty to be taken notice of.

Of great use are the Gnats unto us, when as the Fish called Thyphilus (as Athenæus writeth) can be taken with no other bait than with Gnats. But as they are sometimes useful and profitable, so are they to: the mort part very inkomone and troublesome, wherefore nature and experience have taught us remedies against them. To which end you may make a Fumigation or Powder of Pomegranet Figs, Chamxleon, Thistles, Lupins, Wormwood, Grift, Pine, Fleabane, Elecampane, Cedar, Radift, Cummin, Rue, Hemp, Dung, Galbanum, Calerorum, Fever-foote, Hare-scrobut, Goats-hoofs, Elephants dung, Balmstone, Sulphur, and Vitirol, which will drive them away.

There are prescribed also these compound receipts: to take roots of Elecampane 1 dram, Ammianum-, Chymiamus-, Thym即是, of each 2 drams; burnt sheil 2 drams, put all these into the fire and perfume your clothes. Another; Make powder of Harts-tongue, and with Vitirol perfume them. Another; Take Wine-les dried, and Cenece, of each alike, with Copperas and Ox dung, perfume them. Another; Take Vitirol, and with Harts-tongue, and with Cummin ground and with Ox dung, &c make them. Alfo the vapour of very strong Vinegar, and of Origanum, doth chase them away. Another; A Sponge dippt in Vinegar and burn in the house drives them away. So Wormwood, with Radift Oly, by anointing preferve from Gnats. Nouv. Palladin advizeth to sprinkle new Brine and Soot in the chambers of the house. Rue dippt in a decoction of Fleabane, and laid in the several corners of the house, kills the Gnats. Ruhius. If you make a circle of green wet Hemp about the bed, Gnats will not trouble you. Geopon. If you anoint your self with Oyl, or the Manna of Frankincense, they will presently be gone. The trees that grow in wa
warty gardens, and plants infested with Gnats, are freed from them by burning of \textit{Galbanum} as \textit{Pliny} faith. But a prodigious, that I say not superstitious, remedy seemeth that of \textit{Rhagis} to be, I know from what \textit{Doricus} he had it, hang some horse hair and make it fall in the midst of the door, and Gnats will not come in at it. But why should Vinegar kill them, a thing which they naturally desire and thirst after? unless it be the vapour of that thing that destroyeth them by taking away their breath (as it often comes to piste) whose substance would nourish them. \textit{Apollonius Tyaneus} (as \textit{Teuctes Chil. 2. hath left recorded) did so order the matter that no live Gnat could come into the \textit{Cities of Antiochis} and \textit{Bitaniam}. But since we do not see how that should be done, the pests credit may be given to it. The Grecians have devised a kind of tent or covering in manner of a net, of linen, woollen, or silk; which being hung about their dining rooms and beds, kept the Gnats from entering in. Our Countrymen that live about the Thames have invented a canopy (the first that ever I read of) with lea colt, but the same profit, which they call a \textit{fen-carpet}, being made of a broad, plain, half dry, and somewhat hard piece, or many pieces together of Cowes dung, and these they hang at their beds feet: with the smell and juice wherein the Gnats being very much taken and feeding thereon all the night long, let them sleep quietly in their beds without any disturbance or molestation at all, being sufficient reward for their pains to taken. In the day time they are kept off with a fly-flap made of Peacocks feathers or other like things bound together; unless they be very numerous, and small Gnats, for then they will fly into the eyes, ears, nostrils, and mouth also, and taking greater courage to them, illing more sharply, notwithstanding these Remedies.

\textbf{CHAP. XIV.}

\textbf{Of Butterflies.}

\textit{The Butterfly} is called of the Greeks, \textit{\phi\textalpha\nu\zeta} the Latins, \textit{Papilion}, \textit{Ardoynus} called it \textit{Cam-}
\textit{pli}; \textit{Sifore}, \textit{Ariaca}; the Italians, \textit{Furcella}; the French, \textit{Papillon}; \textit{Papilion}; the Spaniards, \textit{Mar-
\textit{terflye}; the Brabanters, \textit{Capelugen}, \textit{Undere Fellerin}, \textit{Brother Ilie}, the English, \textit{Butterfly}.

The Bohfly is a volatile Insect, having four wings, not two (as \textit{Chalmautus Frierungski Description} dreamed) six feet, two eyes standing forth of his head, and two litter Cornicles growing forth from before his eyes: the Butterfly hath two forked beam or bills, and within those fork is couched another little bill or beak, with which they suck in, some the day dew, others the night. They couple sometimes with their tails averse, sometimes reflex; and continue long in the act of Copulation. They lay and gather their eggs, not little worms (as \textit{Arift} imagined) on the top and under the leaves, some great, some small, yellow, blue, blackish, white, green, some letfer then Miller feed, some twice as big, others just as big; according to the colour and natural magnitude of each Butterfly. These eggs being laid in a warm place, or being cherished and caused to grow in the day time with the heat of the Sun's beams, shoot for a Palmer or canker-worm, at the first all one and the same colour with them, but after wards as they grow bigger they change their colour. Out of some eggs the Caterpillars appear at four daies end, others do not hatch before fourteen daies, which by little and little get strength and fly, but weakly; yea some of them being kept from the injuries of cold and hard weather, endure all the winter, as experience doth sufficiently confirm in the Silk-worm. After copulation all the Butterflies do not presently die but live in a languishing condition, till winter, and some to the winter soule: the lighter and weaker sort of them are very short lived; the more strong and hardy continue longer; they appear in the Spring time, out of the Canker-worms, \textit{Auricula}, going by the heat of the Sun, and by the temper of the air being in head of a Midwife to them; they are brought forth. The coming of them is for the most part a sign of the Spring coming on; but yet not always, nor in all places. For although they be very weak and not long lived; yet while we were writing, that (faith \textit{Pliny}) it was observed that their blue was thrice destroy'd by cold weather coming again; and strange Birds about the 6. of the Kalends of February gave notice of the Springs approach; but a while after with a cruel bitter winter weather that succeeded, they were all destroy'd. We ought not to wonder that those foolish \textit{Icarus Aftrologer} having no ground for what they say, do tell us that which is false; whereas it doth appear by this, that Nature her self is insconstant; and we being more addicted to second causes than we should, and being impatient of the first Mover, are deceived by her. \textit{Peninus} reports two swarms of Butterflies in one Autumn. Now although I do no deny that long and sharp frosts they may all die, yet they are able to endure moderate cold, and do live in warm places even in very cold sections. For how commonly are they found in houses sleeping all the Winter like Serpents and Bears, in windowes, in chimks and corners? where if the Spider do not chance to light on them, they live till the Spring. \textit{Arift}, saith that they all take their colour from the worm they are bred of: but yet (if
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Thus be granted; they have other colours besides, as will appear in their particular descriptions and histories.

They most abound in the time of Mallowes blowing, out of whose flowers when they have thrived in their in/out or proboscis they suck a sweet juice with which they refresh their bodies, Columbus in his Book de Nat. verum l. 9. c. 11. speaketh of the Butterflies thus coupling, and beginning on this manner: The Butterflies couple after August; after they have coupled the male straightway dies; out of their dung come forth worms. But all these things are so horribly strange that they have no shew of truth. For their chief time of coupling is in May and July: neither doth any Male of them die immediately after copulation; unless if be of that kind of Butterflies of which those Carerpillars come which are called Silk-worms. To conclude, those things he supposeth to be dungs be indeed eggs; out of which come not worms, but a great many little Cankers, out of whose caves come Butterflies.

There are so many kinds of Butterflies as there are of the Canker-worms: out of whose Aurelia they proceed. They differ generally in that some fly abroad, especially by night; these are called Phalaina. Others only by day, which are called therefore, Bicyclus, or Day-flies. The name Phalaina is a Boeotian and Cyprian word; fo for they (as Nicander the Stoic) wittell the name from the creature which flies to the candle, &c. The name of Nicolaus and Lycephon, will have shown to be taken for Phalaina of whom, because with the motion and force of its wings it oftentimes puts out the candles, is called Phalainopsia, from the roughness, and the bran and meal which seems to be spread upon it, it is called Jades. And because some of them are so far taken with the love of the light, that they burn themselves with the flame, they are called Pyranthe. There are those that interpret this Phalaina to be the Cicindela or Glow-worm; but not rightly; forasmuch as the Glow-worm never defiles the candle at all, but delights generally and chiefly in a dark night. The Germans call it ein Leicht mucken ein Leicht flugeln; the Helvetians, Flatterfchen; the Italians, Farfalla, Pavigioni, e Povina; our North-am also the Wort countrymen, call it Saulo, e. P. Schoen.; Animam, the soul; because some fiddy people in old time did fancy that the souls of the dead did fly about in the night seeking light. Nicander describes a Phalaina thus: which Hieremias Martinus interprets thus:

Consider what strange beings reside Memphis breeds;
One like a flying worm, by candle light;
Wherein he plays, as if he took delight;
Driven from meats, whereon at night he feeds.
His wings are narrow, of pale hue, not green,
But more like a bicoloured to be seen.

From these things therefore we may gather this description of the Phalaina, that it is a kind of Butterfly flying in the night, most defiers of enjoying the light; from whence it takes its name, of a body rough, its wings powdered or sprinkled as it were with a fine kind of ashes or dust; lying hid all the day time under leaves, or in some obscure place of cresses, in the night flying towards the candles, and by its too much desire of them reducing it felt into ashes: seldom or never it flies but with the wings standing upright on the back, as the contrary the day Flies keep their wings even with their body. Horns they have for the most part, either rough and large, or very little and short: but the day Flies more long and tiborous in the extremity of them. The Phalaina come out of the sheaths of the Canker-worm covered with earth. The day Flies from their Aurelia, either hanging upon or sticking into the boughs of trees. They are for the most part tough, and as it were dusty, flying in the dark, very tender; thence on the other side flying in the daylight, are more plain, smooth, even and have no dust upon them. They fly seldom in the day but toward the close of the evening, left the dust that is upon them being dried by the heat of the Sun and growth should shake off, being never used to be wet with rain. But these are not able to fly by night, lest the night dew should wet them quite through, and hinder both their flight and their health: wherefore in rainy weather and all night they throw themselves under the leaves, and never fly abroad but in clear and fair weather. The Phalaina are no little affected with the candle than these with the day-light: wherefore these rejoice at the day-star, that is to say, the Sun; but those at the night-star, to wit, the Moon, and Stars, and Candle-light, resembling somewhat the natures, splendor, and glimmering light of the Stars.

The Phalaina are all either very big or very little. The bigger sort of them have their belly and also the inside of their wings altogether of a fandy colour. The eyes seem blue, the head blackish; between the eyes come out two dusky coloured horns, Eagle coloured, with black crofe lines wreathed like a rope. Upon the shoulders there is a kind of fandy dusky coloured roll or welt; from whence a black crofe spot is drawn to the end of the shoulders. The body if you look on the backside, is of a bright blue or azure, if on the belly, it is of a fandy colour. The two outmost wings are very large and Eagle-coloured, finely set with spots and white circles, the innermost are fafle and yellowish, adorned in the inside with certain dusky streaks and spots; it hath thighs brawny and strong, all of a dusky colour, and at the end forked and black. It flies with a great noise, and being blinde
in the night, what ever glittering there
be aring of rotten wood, scales of
fish, or the like, it greedily followes.
As great Tyrants devour and spoil
theirubleeds; so those night-walking
Butterflies batter with their wings and
defroy those that fly by day, being by
night lodged under leaves.

The second Philome of the first mag-
nitude, as it is somewhat lesse in bulk
of body than the former, so far ex-
ceeds it in the gloss and splendor of co-
lours: as it Nature in adorning of this
had spent her whole painters shop;
and had intended the former for the
King of Butterflies, that is to fly,
strong, valiant, blackifh-freckled and
this for the Queen, delicate, tender,
fine, all bett with pearls and precious
stones, and priding it self in embo-
dery and needle-work: her body
downy like Geefe, somethings smooth
and hairy, like Martens or Sable skins;
the head little, great eyes standing one,
two cornicles like feathers, of a yel-
lo or bovve colour: the hath four
great wings, every one of them hav-
ing eyes of divers colours, the ap-
ple whereof is black, the circles or
roundle next to it of various col-
ours, with yellow, flame-like,white,
and black coloured circles, and semi-
circles. The outer wings from their
original to their extremities are
whitifh, beautified with certain lit-
tle veins and specks; the edges
whereof are adorn'd with a welt or
guard, and a hem of dunmifh or
dark yellow colour: the inner wings
brown or tawny, having one eye
apiece as the former, with a three-
fold border, the first whereof is
plain, the middlemoft part going in
and out like a focollop (both of a fien-
ly colour) the outermost of all of a
pale white, and as it were fown on by
some Skinner or Furrier, she goes upon
longe, fome brawny thighs, of the fame colour with the rest of her body. This did
Carolus Clusius fend from Pri-
ence, of fo elegant and notable figure,
that it is easier to wonder at and admire, than with his
expressions to describe.
The third hath a great body rough and blackish; each wing hath one eye, the light or apple whereof is black, the roundle brown, the half circle white. There are divers pieces in the wings of a wattre Amethjft colour; the edges of the wings at the first sight appear aff- colour, afterwards Eagle-colour. The head very short and little, putreth forth on either side a black eye, the apple whereof is of a notable whiteness, between those break forth two very small short horns of a dunnifh colour. It is be- gotten of a rough Canker-worm, not a smooth.

The fourth hath a great dark coloured head, out of which arife two straight cornicles somewhat black, the neck is adorned with vermilion specks, the breast rough, square, dusky, the shoulders coal black, the belly of Amethjft or purple colour, divided with five or six circles of rounds; the feet black as pitch, the wings of a light brown, full of long black little veins.

The fifth hath a white head, black eyes, the horns a little yellow, the outmost wings long of a fad colour between white and brown, the innermost being lightly and as it were by the by coloured reddish, the shoulders very black, the rest of the body somewhat of a rofe colour, bound about with seven black circles, a white line running all along the middle of the belly.
The sixeth hath head and shoulders rough, and the utmost wings drawn with blood colour lines, are a white brown; the eyes of the head standing out, of a violet or azure colour; the inner wings some what of a carnation, represent the eye in the middle part, shining with the apple crow black, the circle about it purple; the body like dried flesh, and a little smoky divided with six roundles black and brown.

The seventh hath the outer wings white, with certain brown spots here and there as if it were watered Chamberlet; the neck ring'd about as it were with a red skin reaching all down the shoulders like a Fryers cowle; the head is red, the eyes pearl colour, the horns flame colour; the innermost wings of a shining red speckled black; the feet red, the belly all of the same colour, with seven incitures or chits of a deep red lead colour.

The eighth is almost all over brown, but the edges of the wings and the middle part of the horns are of yellow or box colour.

The ninth is almost like unto it, but that the edges of the wings are like black sand, it hath horns broad and bended, of a whity-brown colour, the middle of the ouermost wings flopped with a round white spot.

The tenth is of a like bignesse, all over of a white brown, but that the middle of the ouermost wings is marked with a white spot, and the eye with a very black apple.

The head of the eleventh is tuberous, the horns slender, the body like clay trodden; otherwise the wings are all of a dark silver colour.

The twelfth somewhat of an ash-colour, the wings spotted black, the eyes black, the apple white.
The thirteenth hath very little or no horns at all, the body all over yellow, except the eyes (which are little and black) and the wings which are whitish.

The fourteenth appears of colour various; it hath black tuberous horns; as also the eyes and feet; the shoulders are drest with five white plumes as it were, of which the two middlemost have three black specks; the wings snow white, bespeckled here and there with black, yellow and blew specks; the body ruffet, articulate or jointed; the sides whitish, the parts her tail in or out as she pleaseth; the pleateth it is sharp, yellowish, jointed; all the body as it were sprinkled with dust; otherwise in regard of the tuberous cornicles it had come in the number of the day Butterflies. It layeth abundance of yellowish eggs, in the laying whereof she puts forth a little tail; which she puts in again at pleasure.

The fifteenth hath two black slender cornicles; the head and shoulders hairy, of a dun colour; the neck adorned with a collar of Vermilion, the fanks reddish; the outmost wings chamoletted with white and dun, the innermost are exactly redspotted with black spots; the body of a light vermilion, rounded about with six black guards, or wolts.

The sixteenth seems to be very rare: if you look upon it as it lies on its back, it seems to be all over of a murry colour; if as it lies, green and yellow; it hath five very red lines or streaks drawn along the shoulders; as also seven spots set quite through the middle of the back, do adorn the rest of the body: the wings also traverse with murry spots or shadows rather; the beginning whereof from the head to the bottom of the breast is terminated with a line of whitish or silver colour.

The seventeenth, when it goes upon its feet and its wings close to its body, looketh dun; but when it flitteth with the wings fletche forth, the innermost wings are carnation set about the edges, with a blackish lift or border: it hath very long cornicles, and the promiscus or fior doubled in or rolled up together; the gray shoulders are marked with round fand colour spots; the fide also, and all the joints of the body are set and edged about with hoary hairs.
The eighteenth being very rare indeed, was sent me by Clusius. The houses whereof pine colour, the head black as pitch, the nose crooked; the circle of the eye white; the neck scarlet or crinmion; the shoulders being rough or hairy, are covered as it were with a fable mantle; the outer wings decked with a white and black hem; the innermost red speckled here and there with black spots; the body black, as likewise the feet; but the sides of the body are set out on each side with seven blood-colour spots.

Like unto this there was another fent, but with the cornicles altogether crow colour; and on the middle of the shoulders dressed with a pure white lift; as it were with a string of pearl.

Of all theie the bodies seem to be of a great bignesse.

Now we shall adde to our discourse the middle sort of Phalena. The first of which is white all over; but only that the outer wings are bedawbed with certain black spots & freckles; and the innermost with very red specks and pimpls white in the midst; the eyes very black; the feet and horns yellowish; in fleed of a nose there comes forth a rough hair or bristle, the which is wound round up together like a roll.

The second, the whole body rough or hairy, and of a light red; and so are the outer wings; were it not for white spots, and hemis that go about; and yellow little eyes in them; the cornicles being yellow, are marked with black spots; the inner wings are of the colour of the marigold, but adorned with eyes and hemis like the former.
The third hath four white wings; the outer wings overcast with little blew veins here and there plentifully, and two round blackish spots in the middle; the line that is about the wings is yellow, and the comicles of the same; the head and body black, the eyes exceeding white; the sides of the shoulders are marked with four very white oblique lines on each side.

The fourth hath broad horns of crane colour, the body black, the sides gray, the wings yellowish, all over besprinkled with black spots like dragons, broad at the top, and afterwards round; the edge of the wings like the Bars flagged, and as it were prickly, all over black, within fix white specks; pearls being placed on each side do set it out.

The fifth is all over black, but that it hath pale reddish spots upon the wings.

The sixth hath the body and the comicles black, the eyes white; the wings are black underneath, above trimmed with golden hair & spots; to which are joyned black sides, run through with a silver coloured sheed; the outsides wings have a black border winding in and out, with gold laid underneath, and as it were wrought in and out with a needle.

The seventh broad horned, the black body waxing hoary; I know not whether I may count it for a discredit or a grace to it. The beginning of the wings are red, the rest yellowish, but each part embossed with black square spots and a golden thread running along the edges.

The eighth hath four comicles spreading wide, of ashl-colour, two of them very long and large in the borders; the body like the former, the wings of a pale ashl-colour, chequered with black, and painted everywhere about the edges with dots of the same colour.
The ninth, the head, eyes, corinicles, body, and innermost wings do represent the golden ocre; the shoulders and outermost wings are black, but only for a black border, having on each side of it an ash-colour line.

The tenth hath its body yellow, bedropt with black from the neck to the tail, both back and sides; the eyes, corinicles, and feet perfect black, the outermost wings white, but garnished with borders of yellow, black small studs, and spots likewise.

The eleventh if you look on the wings, it is snow or milk white, but only that it is all to bespeckled with little black spots; the shoulders also are white and downy; the body and back yellow, and joynted, having eight little black spots; the eyes big and standing out of the head, between which sprout out two black and hairy corinicles. In the night time she flies about the meadowes and pastures.

The twelfth hath its wings so long that it can scarce fly; it hath very short corinicles, little very black small eyes, all the body else is white, being here and there sprinkled with certain yellow veins and hairs.

The thirteenth (except its black eyes) is of a Crane-colour, somewhat blackish; the corinicles more than ordinary long, the body rough and hairy, the wings of the same colour with the body, but about the edges glittering with a greenish, glitih varnish.

The fourteenth is a very rare one, though all over almost of a sand-colour; it hath corinicles for the bounce of the body strong, black, and crooked like the oxe, the eyes great and black, the head fhort, the neck thick; the outermost wings adorned with certain black studs; the ridge of the back is dreft up as it were with five black heads of Gilliflowers, three forked.

The fifteenth hath its wings of a pale ash-colour all over, amongst all the rest it is ditinct of corinicles, the eyes are somewhat black; the back yellowish and set with five dusky coloured spots.
The sixteenth seemeth to be of the same colour, but that it is streaked with black athwart the outermost wings; but this is every where of one colour (except the eyes which are black). It hath a long body; jointed, four long narrow wings, six feet, those behind are twice as long as those before; it hath slender cornicles but growing out very far.

17. This comes of the Caterpillar of a Silk-worm, white all over but the eyes, which are blackish, and certain small yellowish veins running straight over the wings, and crofte the joints of the body: I call it the Silk-worm Phalena. Of which more in the story of the Silk-worms.

The leaf sort of Phalena.

1. In the Classis of the leaf sort of all, we shall place one and the first very admirable; going on four very black feet; it hath the outer wings azure, the innermost yellow, and the innermost (which is not usual) lefte then the outermost; the yellow body also is so big that the wings can scarce cover it; the cornicles are full of little points, and the eyes all but the fight blackish; the head and the snout (being long, slender, and rolled up together) are somewhat yellow.

2. The second appears blue and green, it hath a little body, the feet and cornicles blackish.

3. The third hath the shoulders and wings greenish, of the colour of leek blades; the body dunnish; the outermost wings are guarded with a guard (io) with white and dun spots; it hath a very little head, the feet and the cornicles ash-colour.

Moreover there are found in houses a certain sort of little silver coloured Phalens, marked with black spots, which fly to the candles, called Moth in English, which eat linen and woollen clothes, and lay eggs, of which come Moths, and of the Moths again these Phalens; they are said to come first of all from rose leaves and other herbs putrefying.

Three others I have observed in pastures and meadows. The first whereof hath the outer wings black, each of them marked with five red spots like blood, the innermost wings are all over red, the body dun, the head, short cornicles, and the feet blackish. The second is all alike, only that it hath but four red spots in the outermost wings, and hath a more slender body. The third is almost of the like shape too, but the cornicles are a great deal longer, and the red spots scattered after another manner; for there appear about the edges of the wings only two red blood-like spots; but from the rising of the wings two spots drawn at length. And thus much may suffice to be spoken of the night Butterflies, or Phalens; pass we on now to the day Butterflies.
The Day Butterflies are to be described after such a sort, that all men may see the fruitfulnesse and elegancy of Nature in this behalf and admire. For she hath not left played her part, or wrought hard rather in the variety of these, their colours, attire, rich apparel, roundles, knots, fluds, borders, squares, fringes, deckings, painting, making them; then she had done in the Phalanx.

1. The first Day-Butterfly being the greatest of all, for the most part all yellowish, those places and parts excepted which are here blacked with ink. Moreover, the roundles of the inner wings are sky-colour, infomuch that you would think they were set with Saphire stones; the eyes are like the Chrysolite: the bignesse and form is so exactly set forth in the figure, that there needs no more to be said of it.
2. The second differs very little from the first but in bigness; it hath nevertheless, very black eyes & longer cornicles, where you see the color white, there suppose it yellow, except it be those great eyes at the end of the innermost wings; the apple whereof must be made flame-colour, but the semicircle blond-red.

3. The third not much unlike in colour, but that the exuberances, and the outmost border of the innermost wings is sky or wood-colour; as also those three taches which you see painted under the hollow part of them.

4. The fourth may be said to be the Queen or chief of all, for in the innermost part of the wings, as it were four Adamant's glittering in a beam of Hyacinth, do shew wonderful riches, yeal almost dazzle the Hyacinth and Adamant themselves; for they shine curiously like stars, and do cast about them sparks of the colour of the Rainbow; by these marks it is to known, that it would be needless to describe the rest of the body though painted with variety of colours.

5. The head, feet, cornicles are of blond-red, but the eyes purple, the back black and blue, the belly yellowwhif, the wings at the hips of a bright yellow, and afterwards more fad; the utmost parts of them being nutty colour, and waxing blackish with an unpleasing daskines, are beautified with three little yellow spots; to the innermost being sprinkled with nutty colour, first two yellow, afterwards three pale yellow spots do flick. If you consider them with the face upwards, the upper wings are of a greenish yellow, marked with fix or eight spots, the innermost of a light grizzle-green, flained with two white spots; the belly and face yellowish; it comes out of a whitish Amechid, potted with little dark coloured spots.

6. The upper wings without are blackish, with a certain garn of a decayed red running through the midst; the extremities of them glitter with white spots and specks like drops, being sharpened with dark coloured notches round about; but in the inside that guard doth shew of a more clear and full colour, and toward the bottom they feem blue; the undermost wings appear of one colour without; of another within, without they are all over fad coloured, except a reddish border, with a prickly pude very small and blackish, marked with four little points, and two diverse coloured opals placed together; within they
they shew nothing like to this; but from a black and purl embroidery, they end in a fade fading red; the body is black, the eyeshorns,feet,all dusky and of the same colour.

7. The whole body is black, yet in every incision of the back, in hath two white spots; & wings between yellow and red, adorned with black and very white specks: but the bountiful Mother of all things, Dame Nature, hath chiefly beautified the borders of the wings, which have little teeth set like to laws at an equal distance one from the other, in the border whereof so blue buds pierced through with black lines, make a glorious shew.

8. Nature bred this with a chamblet mingled coloured coats, but it wants lively colours, for the wings are of a black reddish fading yellow and ruf fet colours, and it is more beautiful for its feath, than for its gallant apparel.

9. This is for the most part of an ash-colour, but if you look on the inside of the inmost wings, there is nothing that can better represent the wings of a Turky-cock; for the feathers that he flies withall, are covered by other feathers with scales; the eyes are black, as the horns are also, which are swollen like water-cats-tails.

10. The body is black, the shoulders are covered with yellow down, as is also the whole head; the horns are yellow alfo toward the head, which appears the fadder by a spot of a dark red; many round pearls set at just distances, do make the outward rounded skirt of all the wings to be more graceful: but within they are sealed with very black spots like lintels. But as the part is less comely outwardly, so the inward part of the inmost wings, shining with a whitifh green, with silver spots upon it, shines gallantly, and those spots that seemed outwardly round pearls, seem inwardly pure refined silver.

11. It holds forth a rare lift of oriental Pearls shining in blue, the upper wings being of a flaming yellow, new like fire painted with fix most black guards, the root of the inmost is black, then they shine from yellow to a fiery colour; the body is downy with darkifh hairs, and the horns and feet are of the same colour.

12.
12. It is wonderful beautiful, the wings are light blond-colour, dipt with black spots, they shine with small long beams dijerfedly drawn like threads to the very outmost of the coat, and this is adorned within with golden crooked lines like the Moon, being it felt a mutty, nicked on the sides like a Saw: the body is purple coloured from black, the eyes shine like gold, the feet and horns are black.

13. The body and wings appear black, upon the black wings, jagged in the circumference, but hairs grow, then borders, and lally golden fluds: also the small eyes in the black head are tinctured with gold, but the horns grow forth with spots white and black, and end with a small very black knob.

14. It much delighteth in the curiosity of the decking of it; the body is rough and blackish from white, a black eye, and a white papilla, about the bald eye you shall see a circle almost white as snow, the horns are the same with the former, the outward face of the greater wing is known by the flaming colour, golden lines being drawn upon it, with four dinted skirts; about the end of it three round pence set triangular, do adorn it. But the inward face of it seemis most pleasant with divers golden scales and lits put like a coat of male, and ryles of a house, also a golden line beautifies the utmost part of the wings. It represents a Peacock very much by its wings, and as that is, so hath it a proud and gallant body; the feet and legs are somewhat black, (left it should be proud of its texture) the snout is like a spiral line made up like a Maze.

15. This hath also a hairy beak wreathed up like a vine tendril; it is inwardly ash-coloured, and outwardly a faint gray, the wings are prickly, jagged like bats wings, some dun lines do outwardly part these, inwardly fix black fusdo much set them forth.

The outward wings of all are a dark green in fuchr, which some spots and pieces of white and yellow do beautifie; the inward are perfectly red, being sprinkled with ten most black spots, the belly flames with eight yellow cales, the back is red inclining to yellow, and the tip of the tail is a light blue. The rough shoulders are commended by a yellow Moon drawyn downwards, a white silver coloured apple makes the red eyes more sharp.
1. The eyes seem yellowish, the middle horns a decayed ruflet the wings and fort of Dryas, all the rest of the body are a pale yellow, the inward wings are marked outwardly with one only full yellow spot, but inwardly they are tintured with a certain black spot upon a watery green; the back is blackish from a blew, the belly is yellowish, it proceeds from an Aurelia coloured with gold.

2. The second is not so pleasing a colour, the inward wings from a fading blew, decline to a Crane colour, and end as it were into a lead-colour, the outward wings are blacker, noted here and there with dark spots, and the body seems to be the same, it flies rudely with dentless wings, and retrched in the borders, and as it were prickly, and like a mourner of that kind, it never comes forth but in mourning apparel.

3. We have painted this, as it were flifhe and raising it self with the wings lifted up, it hath also prickly dents, but the outward wing from a pale yellow is marked with the black pieces; but the next part of the inward wing from the root is dark black, the middle part is pale, the last part is whitish, chequered with right and thrawn fibres; the body appears dusky, the eye is black as pitch, the horns are black.

4. This is distinguished two waies; for when the opens either wing to balance her body, the body thewes black, and four dark wings fainted to it ridged as it were with a black pencil, and ending in a shining rufky colour; but when it fits on flowers and lifts up the wings, the first wing is yellowish, adorned with a comely round spot, like a target, the colour whereof is pale, the body of it black, the outward circle citron coloured; the belly, and breast, and the whole face are white; the black horns incline toward a yellow.

5. It seems inside and outside all alike; the head and wings look pale; the body is wan, as also the horns; the eyes are flaming red, the shoulders are hairy with a pale down.

When it stretcheth its wings towards you, it appears a shining sandy colour, like herb dragon, with black spots; the body also if you see the back, seems a warly black, the belly somewhat more dark; they eye is black, clear with a white, or whitish apple; the horns are black as a crow the wings from you are of an unpleasant brown, and of a decayed Weevil colour.

6. The
7. The jagged wings represent a fire-flone, shining with brili coloured little veins, and the skirt also being sprinkled with black spots; the whole body is of a shining black but that white points divide the horns, and in the black forehead golden eyes twinkle after a sort.

8. This hath the same kind of body, but the horns are reddish from yellow, the wings appear changeable, marked with divers pleats, ridges, borders, skirts, of many colours; all these colours are fad and dull to the eye; they want all clearness and varnish; and are plefiant only in their mixture, flying, and number; in some places they represent a smoky flame, elsewhere an unpleasing dark colour, and a fading red; and the rubies included in the left border in white semicircles are nothing lively.

9. The outward wings are spotted with dirty muddy spots, about the last part they are adorned with a black target, the middle whereof is set forth with an ivory point; the inward wings have four such targets, but augmented with a yellow circle besides; the two middlemost are of a fit magnitude, the two outermost are very small; the body of this creature is a whitish dark; the eyes that stick out are black: but if you look upon the inward part of the innermost wings, they look smoky, and they are very beautifull, with six gilded leaves curiously disposed.

10. The head is a pure white, but some dusky and black spots adorn the milky wings, the back and sides are red from yellow; or black spots put under the cuts do adorn them.

11. In proportion, and almost in colour and form of the body it represents the Eagle amongst birds of prey. It hath narrower wings than other Butterflies; it hath as it were a broad feathery tail; the inward wings are not watry coloured like the ruff of the body, but red from yellow, or of a flame colour; it hath a crooked nose like the Eagle, a belly hoary, the horns are great and frowns of the same colour with the uppermost wings; the eyes are pretty well prominent, black, with a pupil white as snow.

12. This hath the same form; it only differs in colour. The body is ash-colour, the tail is black, and the back is something silver coloured; the wings are long and blackish, and polluted with little black spots; the inward wings appear dusky dark-coloured; both their kinds of Butterflies are wonderful swift, and dare for flight to contend with the Eagle.

13. This
12. This is the swiftest of all, and hath shoulders seeming of a yellow moss's colour; the wings are white as milk; in the extremities of them they are marked with five or six dusky feathers, the middle of the yellowish back is adorned with a color black spot, of both sides two downy exuberances are thrust forth, the ramp is compassed about with a certain black down, it will fly as fast as any Swallow, and indeed is swifter than any Bird.

We have seen but eight of the smaller kinde.

1. The first parts of the inner wings are of a full bright fire; the smaller scarlet colour, and delicate red, but the outward wings for Dayrepresent a light purple, mingled of black and red, and drawn butterflies, over with some snow white spots; the rest of the body is black, even the branched horns also.

2. This is silver colour at the roots of the wings; which afterwards are purple coloured from blue; the uppermost wings are graced inwardly with two black white flutes; the body is full of dusky spots; it hath six purple feet, three put forth on each side; it hath a crooked bill; out of the head four small horns break forth, besides the two long ones.

3. If you should see this fly, you would say that the wings are of a decayed purple colour, pathug to a lively blue, and all plighted severally, but inwardly there are round eyes, they seem more gray and cankered; the head is blue from green, the body is deckt with dusky and white laces; the eyes seem very black, and the apples of them very white.

4. It comes in a pleasant habit, with wings set with eyes, that are of a moit heavenly incomparable blew. The most perfect artificer Nature it self made it all eyes; that you would say directly, that Argus eyes were not set into the Peacocks tail, but into the wings of this Butterfly, which doth stretch out against the Sun with no leffe pride than the Peacock doth, and (by the heavenly colour which she excels in) she is almost able to shame the Peacock.

5. The body is of a Crane colour, the upper wings are green in a white stalk; in the middle they are yellow and ash-colour, the inferior wings are at the root of a dark green, otherwise whole, but inwardly they are sprinkled often with spots of an unpleasante green; the eyes are black, as are the heads of their horns.

6. It hath round bunched smooth shoulders, which are of the colour of ashes mingled with ink, the body is full of cuts, and is of an ash kinde of colour; it hath narrow wings, and the utmost are of a Crane colour shining with some exceeding blood red drops, the little head, the feet, the horns are like the body in colour.

O 0 0 0

7. You
7. You would say, that this is kin to that is bred of Ginny pepper, and setting aside that it is fullest and more black in body, and the silver colour of his upper wings, it hardly differs from that.

8. All the wings are faint clay colour, or rather shining with a pale yellow, with some brown spots, and others that represent old cankered colours, the little eyes are black as a raven, otherwise it is all yellow.

9. All the wings are painted white and gray like sea shell-filis, the borders are rounded, and decked with white lines running through the middle with indentures.

10. This hath wings like Perwinkle shells, set with studs, it is mingled colour of a white and obfuscetered, and doth set forth to us the unpeakable power of God in the diversity of its colours.

Of the use of Butterflies.

He that beholds the forms, clothing, elegance, and rich habits of the Butterflies, how he chooses but admire the bountiful God, who is the Author and giver of so rich treasure? wherefore art thou proud in decked thy selfs, and taketh too much delight in thy own beauty? poolest thy temporary fading goods without envy, for know that there is no Butterly but is as beautiful and pleasing, and for the length of their life they have a more constant comeliness than thou hast: thou hast it may be an incredible agility of body, and numberless in running, but yet Or man if thou shouldst exceed all men, thou canst not equal a Butterly. But you will reply that thy clothed is incomparable, and that you can boast of the Perlum and Tyrian silk, of the best purple dyes, brought unto you by shipping: truly should you but see the rich robes of any Butterfly, besides their purple dyes, and the rows of pearls, and the borders set with diamonds, rubies, the pyropus, opals, emods; if you did but see and consider seriously the elaborate composition of their future and joyous and the embroidered work here and there, of fine divers coloured twine silk set with studs and eyes of gold and silver, thou wouldst let fall thy painted tail like the Peacock, and calling thy eyes down to the ground from whence thou wert made, thou wouldst learn to be more wise. It may be thou wert born at first in a house of clay and mud walls, or else in a palace built of polished stones; but some Butterflies are born in their houses that are the Aurelia like to pure gold, and exceed Attalus for the excellency of their birth, and delicacy of their apparel. Learn therefore O mortal Man, who ever thou art, that God that is best and greatest of all, made the butterfly to pull down thy pride, and by the shortness of their life (which is of no great continuance) be thou mindful of thy own falling condition. Wert thou as strong as Milo or Hercules and were fenced or guarded about with an host of Giants for force and valour; remember that rich an Army was put to the worst by an army of Butterflies flying in Troops in the air, in the year 104, and they hid the light of the Sun like a cloud. Lycophanes relates, that on the third day of August, 1543, that no hearb was left by reason of their multitudes, and they had devoured all the sweet dew and natural moisture, and they had burn'd up the very grave that was confused with their dry dung... Also in the year 1553, as Schedanus reports, a little before the death of Maurissius, the
Of lesser living Creatures.

The Greeks have many names for this Insect, for from the shining of the flanks and tail, it is called Καπνίς, μετακραίμει, κομμέλα. Suidas calleth it πλαθάνιος. Aristophanes, Hesychius,νονεραίας: it is also by way of metaphor perhaps called from the Latin word Schistula, a spark, καπνίζω, &c. &c. The same Author calleth the male of it ocularia, because it is καπνεται, but the female cannot be so called: some improperly call it φαλένα, for it is one thing to cover the light, another to carry light with it. Tho' which Aristophanes calls ὁδοθί, some improperly Cicindelae or Glow-worms; but upon what ground let them judge.

The Latinos call it Cicindela, Nettica, Nettula, Lucius, Luculce, Lucida, Flaminus, Vener, Lucernitus, Incendula, as appears out of Cicero, Pliny, Scalpo, Agricola, Verres, Felinus, Planeta Scalius, Turainus Albertius, and Sylvacia. In Arabick they are called Allahachtis; that is to say, bit by flying by night: in French Fortifant, Monch clair: of the Germans some call it Zindurcle, others Licht mucki, i.e. a shining fly, and Zindurnkre, speaking of the male. For in some places of Germany this male Glow-worm, that is which flies, doth not shine at all, but only the female called Grafs worm, Gingle, and Froenecz. About France the main from the time in which they do most frequently appear they are called St. Johannis Käferl and St. Joannes Fliegen. In Brabant Ein licht of nacht muggel. In Italian Lucilius, Lucilia, Farfalla, although they grant this to be the name of other sorts of flies that come about the candles, in Venice, Biefella (lucela), i.e. a fiery worm: in Cremona, Lucerola, Lombardy, Lucerola, in Spain, Lucerina and Lucerina; in Poland, Zkronek, Character, Wurny, Semicolor, in Hungary, Eyk wandrkh, boderakos.
The Theater of Insects: or, Book I.

Their description.

viLAMt. In English, Glow-worm, Shine-worm, Glis-worm; i.e. a glinting or shining worm. For here, as also in Galenicus the male or flying Glow-worm flies not, but the females which are meet worms. On the other side in Italy, and in the Country of Heidelberg, the females shine not at all, and the males do. I leave the reason to be discussed by Philosophers.

Now the male Glow-worms have wings, the female are without, and that is in Europe it self. The male Glow-worm of Europe, is a little creature flying, having four wings the outmost whereof are like leather, the innermost membranous of a silver colour, transparent. The body is long, a little squat and flat, having five incisures or clits: whereby it may be extended or contracted as occasion serves; the body at length seems to be longer than the wings, when contracted, shorter; the head broad, dummis, flat like a hood; out of the forehead come two incisures as out of one centre, near which the forepart of the head hath a little exsturbate: not far off from the roots of the incisures on each side rise little round swellings, shining like jet, which are in head of eyes, the head joined to a very short neck and body, of a blackish dun colour, it hath six feet in the breast near unto the head, the hinder of which together with the thumbs are of a yellowish colour, the rest of the feet blackish, it is slow, and creeps as it were with a grave pace; the breast buncheth forth a little, the body between the incisures or clits whith, at the tail it hath two spots, on each side one like a Moon, in clearing out of which cometh that shining brightness in the night, like burning brimstone, as if it did sparkle in the air: this never is seen in England, or if it do live here, it shines not at all.

The female Glow-worm is a slow paced creature without wings, the breadth of two fingers in length (although in Galenicus Joseph Scaliger (a great Philosopher of our times, not behinde any of the Ancients) hath diversely observed; whole words are these: Cicindelam volantim in coitu reprehendi &c. I enlightened (faith he) the Cicindela or Glow-worm flying with her male in the act of copulation; the male being toucht did not refrain; they were put into a box with boles in it all night, the next day the male stuck close; at noon the male let go and died. After which time about the evening many eggs were laid by the females which within the space of twenty hours went away alive. This story William Brewer in Englishman, a learned man and my good friend affirms for truth, being an eye-witness thereof, seeing them once in the act of generation. They are long in the act, and to bring forth many insects, this the Philosopher confirms speaking of insects thus in his 1. Book de gen. cap. ult. sapiens (Ap. mth. xiv. Sim. taries long in copulation, but afterwirds brings forth facility: I could with Scaliger had took notice what creatures came from those eggs for to the story had been more particular. Though yet according to the course of nature it be easy to judge. For what could come out of them, but those small Ereces black, thick, and rough, of which Aristotle, l. 19. faith those Glow-worms without wings are generated. Of these then came the unwinged Glow-worms, and of them with some alteration the flying Glow-worms called Bofrichi. From whence it is to be noted, that either Aritistakes copy is faulty, or that the interpreters have committed two errors; they have altogether left out the word μακρος (which makes so much for the clearing of the story. Secondly, out of those being changed they say come those (which Gesta translated) Cirrus, altogether against the mind of the Philosopher, if the Greek copy be not corrupted. For so runs the Greek, Ex λαίας φοινος & Sac. Or out of certain black, rough small worms cometh the Cicindela without wings; out of which in the second place being altered into a Chrysela cometh the flying Glow-worm; and out of them in the third place those which are called Bofrichi. But what insects
In the order of the Greeks, to which they are often called, are the Glow-worms, which are three kinds: the first, the bright-winged; the second, the little-winged; and the third, the wingless. The first kind, with its wings, is found in Europe, Asia, and Africa; the second, with its little wings, is found in Asia and Africa; and the third, wingless, is found in Europe, Asia, and Africa.

The Glow-worms are found in Europe, Asia, and Africa. Amongst the Glow-worms, which are found in Europe, are the following: the first, the bright-winged; the second, the little-winged; and the third, the wingless. The first kind, with its wings, is found in Europe, Asia, and Africa; the second, with its little wings, is found in Asia and Africa; and the third, wingless, is found in Europe, Asia, and Africa.

The Glow-worms are found in Europe, Asia, and Africa. Amongst the Glow-worms, which are found in Europe, are the following: the first, the bright-winged; the second, the little-winged; and the third, the wingless. The first kind, with its wings, is found in Europe, Asia, and Africa; the second, with its little wings, is found in Asia and Africa; and the third, wingless, is found in Europe, Asia, and Africa.
made use of no other light, neither within nor without their houses. But the Spaniards (because they had little light with their lives) did use within doors about their bmuse lamps and candles. But if they were to march forth against an enemy newly arrived, they make use of them to confound them, and each finder carrying four of them about him, divers ways confound the enemy. For when a naked traveller (as T. Cargo do in the Indies, and that very night that they came thither, lay hard by in the woods an infinite number of moving candles and torches as it were beyond their expectation, they thinking the Spaniards were come upon them unawares with guns and pistols and much light, speedily be- took them to their flaps. Many other insects of this kind are there to be found. But because this seemeth to be of most account, and to have the prehension above the rest, Ovidius hath left the rest undescribed. The Indians use to rub their faces with a paste made of them that so their bodies may seem all of a flame. How this may be, since as said before, the light variegeth with the life, I do not see, unless it be that the light may endure a while after they are dead, but that long it cannot remain is manifest by experience.

The Indians finding so great need of them, in that they could not rest in the night for the Gnats stinging them (which the Glow-worms being kept in the house did as greedily hunt after as Swallowes do Flies) and because they could not work by night without this luminous nature, before such time as the Spaniards came thither; they be thought of by some men whereby to catch them; the which I shall very partly out of Peter Martyr, partly from those reports of others which were eyewitnesses of the same.

Whereas the Indians were constrained by reason of want of light to lie all the night idle, they got them out of doors with a lighted firebrand and crying aloud Cicadae, cicadae; they do so beat the air, that either for love of the light they fly to them, or for fear of the cold they fall to the ground; which come with leaves of trees, others with linens rags, others with little nets made for the purpose detain till they can come to take them with their hands.

There are other little flying beasts, whose shine by night, but a great deal bigger than ours, and sending forth a far greater light. For they shine so bright that those which take long journeys make them take by a way to their heads and feet being alive; for so they may be seen afar off to the astonishment of those that know not the matter: the women use no other light to do their busines withal by night within doors but this.

There are yet other worms of another form, which give light by night; as we read in the Commentaries of Navigation. In the Island called Hispaniola, there are two sorts of worms which
flame by night. Some of the length of a mans little fingers bender, with many feet, glistening to bright in the dark, that a man may see all round about him for fifty or an hundred paces easily. That clear light flames forth only out of the cliffs, or if you will the junctures of the body near the feet. There are others like to these in bignes, and altogether as lightomes but only that their lightes ilueth from the head. Those things were noted in the histories of Navigation. But whether these Citiiades be of the kind of the Julii (as I think them to be). or whether they be like to our Isis not declared. But I neglece them to be by the multitude of the feet they have; for the Author reckons them in the number of the Scolopenes: Velarini Curtas in Diocles, makes mention of the Scolopenes (as he interprete it) whereas it is indeed a kindes of the Julii which in moit places, and in rainy weather shine very bright. Such a one my friend Brewer found in England in the heath grounds, and sent the worm dryed to Pembury. But that every man may better understand it, I shall set down his own words: Twice found a Scolopenes that shines in the night (yet as I said they are kindes of Julii) in summer nights, of a shining fiery appearance, in heavith and mois grounds. The whole body Shines together somewhat more darkly than a glow-worm. He further adds, It once hapned that I came sweating home to my house at night; that I wiped my head in the dark with a napkin, the napkin seemed to me all over of a flaming fire; whereupon I wondere a while; at this I saw miracles, all the little seemed to draw to one place, then folding the napkin together, I called for a candle, and opening the cloth, I found such a Scolopenes which I had rubbed against my head, and had caused this strange light like fire: Thus far Brewers who affirms that it was like to the Scolopenes commonly so called in gardens, and under stones and earthen vessels, wherein women are wont to set their choice plants or slips. All the Summer time and Autumn (faith Gadantius Merula lib. 3. memor. c. 61.) in griaffe ditches and without water when I was at Leheium (which is now called Farnierfor) I gathered little shining hairy worms in the night. The tame I saw in the ditches about Vigelewm (which of old was called Vergelemum) as Simon Eutens and I were walking abroad in the evening to take the air. But what those hairy worms should be, unless they be a kindes of Julii I do not know. There is another worm altogether unlike thefe of which we read in the book of the Nature of things: There is (faith he) a worm like a tay, which Shines like a fire in the dark, it is never seen but in great rains and then it foreteels fair weather to come shortly after. So great is the coldness of this worm, that it will put like ice out the fire.

If a mans flesh be but touched with the flame of this worm, all his hair will come off; and whatsoever it toucheth there with changeth the colour of it into green. But all these he handleth unhurtfully; for he confounds the Scolii (which he here calls Scolia) with the Salamander and Cicindelis and of these he makeith a very confuted and imperfect history. Neither doth Guilerimin de Combins nor Vincentius (which transferred all almost out of Guillerimin) in his obscure and dark tract where he reports this story, corret it. But these things are nothing to the Cicindelis and that which they write concernung the Salamander is other where amended. Hitherto of Insects shining in the dark.

Whether or no the Glow-worm being dead doth retain its splendor and shining, is wonte to be a question. Maufatius a very learned man writing on Pliny his 9. Book, faith it doth, and that boys taking the Glow-worms used to put about their heads the shining parts of them; with which if the hands or other parts of the body be rubbed, they also will shine in the dark. But by the leave of so great and learned a man as he is, experience teacheath the contrary. For after the Glow-worm is dead, that part whereof which so shinet in the night, though not proprly, yet within a few hours after is quite lost; and seemeth altogether to go away with the vital spirits; this is a clear case, from experience, and I have often tried the same. This I will grant: it is certain number of those that have no wings (for those that have shine not but only when the fly) be but put into a clear Crystal glasse, so that the air may freely come at them, with a little glass they may perchance give light for the space of some 12, 13, every day fresh glass be put to them; but at the length as they languish and faint away, so the light by little and little is remitted and slackned, and in the end they dying (as before is said) it is totally extinguished.

Vainly therefore do some boast of compositions made of them, with which they will keep perpetual light, as they suppose (amongst whom is Cardanus) as if they would bring down the Moon from heaven. Others there are not learned only but unlearned also, who have commited these compositions to writings, whereby they might the better betray their own ignorance. Of this perpetual light Albertius makes mention who in his Works gathers a whole bundle of lies together as it were into one body. And here now I will set down some of them that the Reader may be aware of them and the vanity and levity of the writers themselves may be manifeste. Some there are which take a great many Glow-worms, beat them together, put them into a vial of glasse and bury them fifteen dayes in horce dung. Afterwards they distil them through an Alumbick, and keep the water in a clear glasse. To this end Gadantius Merula, who hath heapep up many things together from this and that Author, without any judgement, hath these words: Of these Glow-worms being perfected, there is made a water, or a liquor rather, to a vessel which will wonderfully shine in the dark. Such a light doth this water or liquor give, by reports that in the dark at any one may read and write; and do any other busines as he pleaseth. Others left they should seem not to add to what is invented to their hands (for pregnant wits unless they bring forth some novelty are not well) together with the Glow-worms exhibit the fall of the Torosio, of
of a Wesphol and Sar-dogs, putting them in dung and afterwards they distill them. This watereth
tfay far exceed all other whatsoever in harte. Others put whole Glow-worms in dung for nine
days to digest; others for three weeks, then throwing away the Glow-worms, they take the fat
of them and keep it in a clean glass for use. Some yet more fondly take Glow-worms, and
casting away their heads, they put to them the scales of fishes, and rotten shining wood, such as
flitens in the dark, with the gas of Sar-dogs, and so distill them through an Alambick. Others
promise confidently to make letters to shine in the dark, by pricking out the yellow moiture of
the Glow-worm, and anointing therewith the paper, or painting it with the fame liquor in form
of a star, some rub them with the oyl of Limced upon marbles, and whatsoever you shall paint or
write, they persuade us, may easily read in the night, be it never to dark; but let them believe
that there have made the trial. Others after they have digested in horte-dung nine days, take
the liquor that is left in the bottome of the glasses and write with it, and so think confidently to
obtain their desire. John Arden, a skilfull Chirurgeon, an English man, walking after his steps,
above thirty years ago left such a description of this perpertual light in writing:—He gathereth
a great number of Glow-worms, and flush them in a gullen vessel well fopt, laces them in dung
fifteen days, then puts the water he findes in the bottome of the glases into a clear glafs; to
which he adds as much of Quicksilver, the drofs being purged from it, and then he faith you must
shut the glafs mouth very close, and hang it where you will, and then for certen (as he affirns)
it will produce the wifhed effect. Some have told me that this is very true, whom notwithstanding
I will not believe until such time as the experiment be made before mine eyes. Thefe
and many the like you may finde by readings but what credit may be given to them is easily con-
jectured out of what went before. Hence then we may plainly understand how foolishly and
vainly mens wildeome doth many times vaunt it self, and whither our wits may be carried, if not
founded upon right Reason, the militres of all Arts and Sciences, flumminger with all diligence the
smooth rocks of opinion and fell conceit.

How wonderfully the works of God are in our eyes, none can be ignorant, who shall diligently
consider this little creature and weigh its nature, and its light relembling that divine light. For
who is he that beholde the vanishing light of this, that doth not fix the eyes of his minde upon
Chrit the faling true, and the chiefe light of the world; and doth not call to remembrance,
that holy Spirit which doth illuminate our spirits in the most obscure darkenes of our understand-
ings? But this inbred light of the Glow-worm or rather borrowed light which some feeke to
extract others strive to imitate (as for example Albertus, Cardus, Merula, Vitalis, Micaldus)
have shewed themselves very fools in my judgement. Neither have they been warred by the fatal
end of Salmonus or Aldinus, who going about to imitate Jupiter thunder and lightning, were
therewith by him struck dead, and so did reap a just reward of that their impious pretention, for
they felt the force of true heavenly fire, who thought to counterfeit the like with a vain crack-
ing. Even so the wits of these times, while they seek to extract this light, by their bold enter-
prize do violate the Deity, and while they would seem to adore and for the glory of that his
work, they rather detred from it and difgrace it. But we leave these to pursues wheels, and pro-
ceed rather piously, and modestly to behold the majesty, wildeome, and divine light in this little creature.
For he which shall go about fully to search the majesty of the Creature in these small
creatures shall soon be confounded with the glory of it.

What necessary use the Americans made of them in their night journeys and busines, before
the Spaniards brought in the use of Lamps and To. ches, hath been said already.

But we that live in Europe, as we travelled by night (I remembre:) in Italy and other places, we
took a great deal of delight in them, not so much because they distilled the darkenes with the
beams of their splendor, but because they did illustrate the earth with their celestial light, which
compared with the light of the Sun and Moon, were not to be despifed.

Neither do they only please the eye, and inflit the minde, but they are good for the body in
diverse diseases, for the female Cicindel being put into the matrix of the male, caufeth the wom-
man that bears childe with much danger to be barren; faith Kirandus. Cicindelis being drunk in
wine make the use of luft not only irkifome but loathfome, as Benedictus faith; the fame also
Gibertius an English Physician Albertus, Nicolaus, Florentinus, and Rhoffis do confidently affirm.
It was worthy wifheth therefore that that unclean force of Lerches we with the frequent tak-
ing of these in Potions disabled, who spare neither wife, widow no: maid, but defile themselves
with lust not fit to be mentioned. Rhoffis faith that the Glow-worms are very good for the
stones, if be there with oil, and therewith their place having the hair clipf off, he anonished, which
will never suffer it to grow afterwards, Bairus. If they be beaten and put behinde the ears, they
will divert and evacuate all rhumes falling into the eyes and teeth. Anonymus. The Inr births of
the Ille Serida take a good sufficient quantity of them, and mixing them with fresh black wax
make them into a mafs, and lay it in the hot lands till it be half consumed away: of this
mafs of the bignes of a walnut, both young and old do take two hours before noon and
hours after; which do not only infuce heat into the obscene parts, but vigour also.
Theven. But this is not to be understande of the ordinary Cicindelis which is afo called caufeth
vility and barrenenes; by these Thevetus men thoe Glow-worms reckned amongst the kindes of
Juler, which being taken in drink do after the same man-
ner with the Cantharides as Merula writhe, provoke both seed and urine, Aetias very highly cont-
commends them for excellent baits to fish withal, being fastened to the hook, 

The Locust is called of the Arabian, Gines; Gierad, Gerard; of the Illyrian, Kobilos, Bruck; of the Scholomonic, Konos; of the French, Saperelle, Saperon, Languste; of the Spaniard, Lagunia, Gofanbote, Gaphantoles; of the Italian, Cavalere, Scipion, Satello; of the German, Huenelick, Springelken, Springell; of the Dutch, Hupperluk; of the English, Grasshopper; from leaping upon the grass; of the Latin, Locustus, as some think a locis usit; for that they scourch all places where they touch, and eat up and devour all things; of the Hebrew, Arbeh; of the Polonian, Komik; Szaravess; of the Hungarian, Lasza; of the Greek, Ἀρβή. Æneas, Ἀρβή ἀνά τής δεξιότητάς τους, whence comes the diminutive Ædixus, Locustula, vel Locustella, a little Locust. The Ionians call them from the number of their wings Terraplenides; that is to say, four winged creatures; others call them Cornrop, Parnopus, and Panaepus; from whence Hesicles and Apollo were called of the Athenians Parnopius, because they drive the Locusts out of their country, as Pausanias, Herodotus, Calix Rhodogistus, Lilio, Giraldus, Camezius, Strabo, have observed. Norwithstanding the word panaepus (if the interpreter of Aristophanes deceives us not) signifies that of Locust only which is easy to be handled with the hands. But before we enter into the description and division of them into their several kindes, I cannot but admire with Marcellus Virgininus, the workeanship of Nature, in which I know not, as I may fo say whether the did more fearfully sport her selfe, or more sportingly labour. For who first of all is able to describe so many colours in one body? who is able to set forth to many divers shapes of bodies, going, leaping, flying. For some there are green, some black, some blue, some one part of them of this colour, on the other of another. There are those which are of another colour in their flight, then they seemed to be before. There are some fly with one pair of wings, others with more; those that have no wings they leap, those that cannot either fly or leap, they walk; some have longer flanks, some shorter, and amongst these some have more and shorter joynets, some fewer and longer, some there are that finge, others are silent, as the Strizhus: some do no harm at all to tillages, so that children may take them up in their hands without hurt; others on the contrary are the pest and destruction of all that up growes through a whole Country.

And as there are many kindes of them in nature, so their names were almost infinite, which through the neglect of Naturalists are grown out of life. 

Now all Locusts are either winged or without wings. Of the winged, some are more common and ordinary, some more rare; of the common sort, we have seen six kindes all green, and the letier of many colours. 

The fift of the biggest, hath as it were a grafs cowe or hood which covers the head, neck, and almost half the body; the wings come from the neck underneath, of a greenifh colour, speckled with a few small black spots, the back green, the belly daky coloured, the tail or fem of the end black; it hath a great mouth, and strong big teeth, excellently made to devour the fruits withall. The second seems to be like this, but that the hood is fastned to the neck; the nose also and mouth are more red, and it hath greater spots in the wings. The third is of a green countenance, the shanks whitish, the tail blackish, the wings beft with greater flore of spots, and about the edges of a pale red.
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Now these are females, from whom the three males differ in this, that either in the end or above the tail they have two or three prickles or flings, and the middle of their hood appeareth more red.

The first sort of the lesser Locusts, called of the Tigrinae Holfspeckts, is in body black, the utmost wings spotted, the innermost spotted with vivianion; the thighs brown or swarthy, with black lines curiously drawn up and down. Of the second the cornicles, eyes, and flanks are of a plesiant red, the thighs or flanks are also diversifieid with black lines, the wings speckled, the belly of a dark red upon yellow, all which do exhibit a very fine pretty creature. The third seems to be of a dark blue-colour, the cornicles very short, and the wings of an unusual length, longer then the body. The fourth is all over of a darkish green, but that the head is set with two black lines, and the ends of the flanks are of a lively shining red. The fifth is a little lesser than the rest, but in ordering and variety of colour, more plesiant to the sight; the body, head, and feet are of a faint red, with green wings, and a golden lace drawn through the middle of the head very bright and shining.

All these of the lesser sort have wings as long or longer than their bodies; they have besides no stig or prickle in their tail, nor bear any stem; they are seldom seen in the corn but altogether in meddowes and pastures, as I have seen them in France, and our Country of Britannie: I have seen only three kindes very rare; i.e. Italian, Greek, and African: they are called Maurer foretellers; either because by their coming (for they first of all appear) they do shew the spring to be at hand, to Annex the Poet sang; or else they foretell dearth and famine, as Celius the Scholiast of Theocritus have observed. Or lastly, because it alwaies holds its paws in effect like hands praying as it were, after the manner of their Diviners, who in that gesture did pour out their applications to their
CHAP. 16. Of lesser living Creatures.

So divine a creature is this esteemed, that if a childe ask the way to such a place, she will stretch out one of her feet, and shew him the right way, and feldome or never misle. Her tail is two forked, armed with two briftly prickles: and as she resembles thofe Diviners in the elevation of her hands, fo alfo in likenefs of motion; for they do nor fport themselves as others do, nor leap, nor play; but walking fomy, she retains her modesty, and fhewes forth a kinde of motion and gravity.

Another fpieces of this Mantis, Carolus Clusius lent from Vienna exactly described, being brought thither out of Greece, which is like unto the former in shape and magnitude, but of another colour beloweon it either by nature or the place where it lives; for it hath cornicles of a full yellow, the eye of hyacinth colour, the wings of a faint yellow, the rump of the body of Amethyst, only that the feet fhanks, as alfo the joynts of them were more hairy and white, and the claws of the fingers curved backward were black.

I procured one from Barbary that was brought out of Africk with some cost to us, flider, five inches long, hooded; the head pyramidal, very long, out of which almost at the top came forth two little broad cornicles about an inch long, much like that Turbant, which the Tur-

kis Janizaries ufe with two feathers in it: a little below the root of it come forth two eyes standing out great, and of a dark red, the body long, of a blood red purple; the tail like a Swallow two forked, four wings of somewhat an all-colour, deckt with certain dunne spots; the four former feet and fhanks very fnder; the hinder (strong, brown) and long, and by reason of the spots drawn athwart all along the thighs blackish. And this of the common or ordinary and winged Locuits, and of the rarer sorts shall suffice to have been faid: unlefs the Reader fhall think fit with me to add more differences of them. The face of the ordinary Locuits is fierce, long, wrinkled, fenced as it were with fleshes, which even cover the mouth: in the upper part they have teeth furnished that are broad, black, and very hard, with which they fcarily eat ears of corn, and fhrench them with a great noise. The Greek and African Locuits appear with a short
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Concerning the copulation of Locusts, I rather subscribe to Valerio (who hath search'd diligently into their nature) than to Aristotles himself. They couple at once (as I have seen) by the male getting upon the females, at what time he presseth those two prickles that come out of the end of his back into the matrix of the females, and so they continue in conjunction very close and for a long time; in so much they can scarce with your hands be pulled a-sunder when once coupled neither by leaping and motion or any other way. The female being tickled underneath, moveth her womb very busily, and applyeth herself with the bottom thereof to the male's dust held him for a long while, sometime with the opening of the matrix, sometimes with the flattening or closing of it again: augmenting the pleasure of her fancy; for while the matrix is open the male gets into the bottom or farther end thereof; and when it is contracted or closed, she is delighted with the affection and tickling of the womb and the palpi thereof. Now there are to be seen two palpiages in the secret part of the female separated by a kind of partition, and are covered over with a little thick cover, which in the outside is black, hard, and grizzly, but within somewhat roughish, hairy and wrinkled; at the bottom of this the matrix appears white like that of Women.

Now the female bringeth forth (as Aristotles faith) the little flie that grows to her tail, being stuck in the ground, and then layeth all her burden together in the same place, not scattering up and down, but as we like a white comb. Hence proceeds a kind of little worm in the likeness of an egg, included in a little earthy thin membrane, the which being forced outcometh the Locusts and fly abroad. But (by the favour of so great a Philosopher) they lay eggs indeed in the beginning of Autumn, though not of the fashion of eggs, as I have seen with my eyes, and have had them in my hands. The which figure is fo tender, that with the least touch it is bruited to pieces. Neither is it laid upon the superficies of the earth, but somewhat deeper, and in the winter under ground: where in the winter they be perfected by concretion, in the subsequent year, almost at the latter end of Spring they come forth out of the shell or membrane aforefaid, wherein they were, being little blackish Locusts creeping up and down without either shanks or wings, which afterwards in a short time become bigger. They bring forth at the latter end of Summer, and when they have so done they withthold not, certain little vertine breeding about their necks (as it happeneth to the Beetle) in the time of their bearing, which do strangle them. These dying after such a foolish fashion as they do, are yet able at their pleasance, any one of them, if it do but fasten on his chaps, to kill a Serpent. In a wet Spring the eggs perish, but in a dry there is a great increase of them. Some will have them to be brought forth and to dye twice a year, (in the number of whom is Willichius) that is to say, at the rising of the Pleiades they come forth, and dye at the setting of the Dog-star then others to be brought forth. Some say at the setting of Arcturus. In mountainous places, and of a thin air there breed no Locusts, but in plains and places full of clifts and chaps; nor do they lay their eggs upon the superficies, but in the cists and caverns of the earth, both that they may be the better concocted, as also better preserved from cold and rain.

That they should be generated of the carcasse of a Mule or Afe (as Plutarch reports in the life of Cleomedon) by putrefaction, I cannot with Philosophers determine; first, because it was permitted to the Jewish to feed on them: secondly, because no man ever yet was an eyewitness of such a putrid and ignoble generation of Locusts.

Their death. They dye several ways. For the male after copulation (wherein he carries very long, and as it is possible, till all his radical moity, and all his spirits at once are exhausted with his venery) presently expires. As in like manner all the females as soon as they have brought forth, whether with vehementy of pain, or numerous figures, I know not, the which being very great cannot chuse but spend and exhaust the strength thereof. Oftentimes also great swarms of them being lifted up into the air by the wind, which afterwards falling, they fall down into the seas, or standing lakes. They are reported to pass over to far remote shores, continuing their journey for many days together, they are to be seen very great, and also they make such noise with their wings, that you would think they were a flight of birds, and they darken the Sun.

Their Copulation and Generation.

Their Death.
Of lesser living Creatures.

They come oft-times out of Afric into Italy in great numbers, biting and gnawing all with their teeth, even the doors of their houses. Neither do they hurt the corn fields, pastures, meadows, The mischief gardens, orchards, with their biting only, but also with their black-burning frightening dung, and efppe they do, cially with their cholerick and butter some or spirithe, the which (as Valerius Warnell) they went in great abundance out of their mouths as they bite. Yet notwithstanding they are not venomous; the Parthians and certain of the Æthiopian live of them, esteeming them very dainty meat. They are laid in India to be three feet in length, their shanks and thighs when they are dry serving for faves to fly withall. That found or noife which they make, Arslgala faith is made with the ruffling of their wings. But according to Pliny, it seems to proceed from the hinder part of their head. But I suppose it is caused thre manner of waves, by the grating of their teeth. As they bite the herbs, with the clapping together of their wings as they flutter up and down with noife, with the rubbing of their hard neck and shoulders one against the other while they leap and themseſeſſe like fouldiers armed with helmet and breast plate, are used to do.

Now we are to speak of the Locusts which have no wings, and those especially are Bruchus, Attelabus, and Aesopus.

The Bruchus taking his name from biting and devouring, may be called a Locust without wings; as the tefl of the male, the female females. The Male hath a pale blue colour circle or collar about his neck, under which hangs a double hood of a light yellow, and green, more or less from the back to the tail it is fet out with fix feek coloured plates running across from the back to both sides. The belly, which is sufficiently great, with the three prickles of the tail, are of the colour of an herb newly preft out of the earth, of a yellowish green, as also the thighs, face and conicles; but the shanks seem reddith. The first of the females is all over eruginous, but for a bloud colour line running over the back from head to tail; it is without a prickle growing in the fem or tail; it seems alfo to be girt about with ten green places, or rounds. The fcond is almoſt all over of a light red and brown, the belly a little yello with, the upper end of the fem it hath two prickles. The third hath a head reſembling a hog`s or tca-calts head, in flead of cornicles it hath a little beard on each fide of the nose; the two bunches or swellings on the top of the forehead are like to the ears of a Bear, and it hath two prickles upon the fem very sharp and brown, of the famie colour with the reft of the body. Thofe did that famious knight Sir Edmund Knivet, freely fend in picture to Penmus for the enlargement of this work, for he is a Knight that is ve ry courteous to learned men, andingularly noble both by deſcend and vertue, and famous for his curious fearch into the knowledge of natural things. The Latins call them Bruchs; the Mołtovites Chragf; the Polomans, Knorick; the English, field Crickets. Attelabus, is a fmall Locust, faith Hufchius, Pliny thinks it one of the smallift kinde; Hierome on the 3. chaper of the prophet Book, calls the little off-spring of Locuits Attelabi; Aquila more significantly interpretes them devourers. A little Locuit is laid to be the mean between a Locuit and Bruchus; it hath fuch little wittes that it is reputed to have none, and feems rather to creep than fly: for this caufe wherever it is bred, it bringeth all as it were to meal or nut, by grinding and confuming. It feems to fome to be of the kinde of Bruchus, till the wings grow forth, and then it grows into the number of Locuits. Stephanus, between Attelabus from Attelabi, because the wings seem fo small as it had none. The Attelabi, as Ariffta faith, do breed in fallow fields, as Grapthoppers do; they bring forth, and when they have brought forth they dye as other Locuits do; their eggs are spoiled by wet Autumns, when the waters increase too much; but in a dry Autum, the Attelabi increase more, because their eggs escape drowning. Attelabus; or Òer`, as Dioscovides calls it, hath his name from its flow motion, it hath no wings, thick legs, but fhort withall, not like other Locuits, whence it feems rather to creep than leap; it hath a great belly hanging down, as if it were made to devor corn. This Locuit may be is called in Scripture αἰθής, Nicander calls it αιθης, and αἰθής; though, as Ciferinus faith, in the Diachon of the Ambraciat, all Locuits are called μωλον, because they eat corn with a noife of their teeth. Franciſc an incarnus writ a little Treat of seven kindes of Locuits, according to the Scriptures and Rabbinis; but he decribed not thoe four which are numbered amongst clean birds that the Jewes might lawfully eat; thoe four were Arbeith, Saliams, Chargels, and Chagabal, which the Chaldens call几何, Rhaschen, Chargalas, Chorgeha; and the Greeks call them αἰθής, ιδιάρ, and αἰθής. Arbeith is a kinde of Locuit, called fo from her fruitfulnes, as Kimbi, Munfer, and Bronghton observe. The Septuagint have tranlated Saliams, οἶνοα, Hierome doth not rightly.
call it Scareodenn; for it is a flying creature, creeping with four feet, and leaping with its two hinder feet longer than the former feet. Kimchi makes it a kind of Locust which the Rabbins call Rhabckinn; Abahuza thinks that to be called Salham that its amongst stones; and Himmi subscribes to this opinion the foresaid interpreters called Chorgal, Sophieous, for it fights with the serpents, and flopping the chaps thereof, it kills the Serpent: Aristotle Hift. 9, cap. 6. faith that many have seen the Locust called Deos, which when it fighteth with the Serpent taketh him by the neck. Niphon needed not interpret tath Sophieous to be the Scelopendra or Viper, since the Philosopher calls it duely Sophieous; and the 70, learned interpreters say it is a Locust; however it seems Niphon was so blinde that he thought it impossibl for so small a creature to kill a Serpents but we thought he safer to rely on the testimoniies of so many learned men, (who had an insight into Locusts, and almost into all natural things) than upon the conjectures of so frivolous a Commentator, and deviser of novelties. Hagob or Chagob is called Attelabus; Hersona calls it Attacen. Amongst the Locusts spoken of, this is reckoned to be the lafl, and is per, in the left place, as likely to be the most grievous; for this not only taints of corn or eateth it, but breaks and grinds talk and all. It is bred of egges in a land fruitful for corn, which the female left there when the corn was gone.

Five other kinds of Locusts are numbered up, Joel 1. Amos 4. Dent. 28. and Psal. 78. namely Gamar from shearing; Telaka from licking; Chazalis from destroying; Thelafals from the blusting and nuff it brings to corn; and Chenamah from biting; because where it sets up its station, it tarryth there, and fortakes it not. Rodolphus Madinis on Leviticos and the Prophet Joel reckon divers kinds of Bruchi; some are golden colour, others yellow, others gray; Also from a whitish worm in frothy dew that in Megsicks to plants, a certain winged green creature is bred, in form like to the smallest kind of Caterpillar, first it leaps, and afterwards it flies, and therefore I think fit to call it Loculence, a little Locust. The English call that frothy matter Wood-spar, as if you would say the purefaction of the wood. The Germans call it Czekken-spirle: but what form that was of which Strarius says Cesius, Prusius, Nicander, Pausanias, Heft- chius, Didera, Jegen, Mebas, Syma, Separab, Aristophanes, Probis, Enthusias, Wase, Pho- vornias, Chirpe, and Isadores Ludoboeus; truly I cannot tell and I would gladly see some Oedipus who would declare their nature and use. But because Marcillus affirmes that there are some Locusts that use but two wings; and Willichen affirms to some six wings; they should either have described them, or have held their peace in a matter that exceeds belief. Also he flipp very absurdly, when he assigned a King and a Monarchy to be amongst them. May be amongst many little ones, he found one great one, and fhalned him for their King, because he excelled in magnitude; but Solomon, (that was of Philofophers and wise men the chief) faith they have no King, but are subject to a Common-wealth as Piumares are.

How God by these very little creatures did punish the pride and haughtines, and hard heartedness of Pharaoh, is apparent enough out of Exodus, and is spoken of every where. In the year 170, before the birth of Chrift, all the meadow sand were covered with clouds of Locusts, and nuff hundred thousand, com it is said, to the country, Julius Obfequens. In the year after Christ, 181, the war long enduring in Illyricum France Italy, and at that time being ended, that nothing might be wanting to punish those Nations, an innumerable company of Locusts, and far greater than the ordinary ones, confumed all the graft round about. In the year of our Lord, 591. when Agilinus reigned in Lombardy, a very great plenty of Locusts afflicted the Countrey about Trent, which are reported to be brought ouf of Africa by force of the winds; but the greater part of them were cast down with storms and drowned; but they were no left hurtfull and deadly to the Italians; for by the waves they were brought to the shores of Cyprus and by their venomous flinking smell, they caufed such a plague amongst mortals, that Julius writes, that of men and cattle there died above 80,000. Alfo at Venice, and about Brefcia for want of corns (for the Locusts had confumed all) fcalentamental a plague followed that in the year 1748, when thefe things hapned, above 30,000, men died of it. Again in the years 593, 693, and 811. Locusts came flying out of Africa after a great drought, that devoured plants, herbs, and baaks of trees, whence followed a strange famine; and fuch as is elegantly defcribed by the Author of Nannachius, in thefe veres:---

The mischiefs of Locusts do--

Famine was present with her empty veins:
The poor with hunger starv'd, their breath
Was spent; for neither broth nor bread remains:
Upon their mouths and guts hunger laid hold; They melt the chaps and bite their teeth not meat; Through wrinkled skin their bones might be told:
Nothing but skin and bone, they'd sought to eat;
In stead of belly stood an empty place;
The breast hung down, and seemed for to fly:
On the back bones rough great, pale was the face;
Lips white, eyes sunk, teeth stark, all was like clay.

Nor
Not was France free from their teeth and devourings, but in the years since the time the Virgin brought forth her son, namely in the year 1455, 1377, 1353, 1374, was miserably waited, and the citizens consumed by famine, and very many killed by a plague that followed it, and sometimes it left a third part of the inhabitants. These Locusts had commonly six wings, and were brought thither from the East. But at length by force of winds they were carried into the British Sea and drowned there: but by the flowing of the sea they were cast to the shore, and infected the air, and caused a plague no less cruel than the famine that went before. "Otho Frugi- gens." Also in the year 1476, they waited almost all Polandia. In 1336, innumerable troops of Locusts were brought by winds from the Sea Euxinum into that part of Sarmatia which is called Podbassia, where they did change their camps in a military order, and they eat up all that was in the fields where they pitched both by day and night; these of an unusual greatness at first wanted wings; then their wings growing forth, they flew at pleasure; and what shall I say? they eat not only herbs and leaves, and flowers, but hardly left any bark on the trees. Then they wandered through Germany, and came as far as Mil- lan, and having destroyed all there they returned to Polonia and Sicilia. At last in November for so long they lived, when they were consumed by force of cold, they called such a flemch, that had they not been eaten up by hogs, and wild bores, they would have caused as great a plague, as they had done a famine in Germany and Italy. In the year 1543, Locusts did a very great mischief to the Countreys of Mijnia and Marchia; at which time they were so frequent in Locumin, that being in heaps they were above a cubit high. Jacobus Eusebius. In the year 1553, it is commonly known what great damage did military companies of Locusts did at Arles: whilst we were writing this, we received news that the Spaniards were sorely afflicted with swarms of Locusts brought thither out of Africa. For they fly not like Armies through the skies, and darken the air. And the people when they saw them, rang all their bells, shot their ordnance, founded with trumpets, tinkled with brazen vettles, call up land, did all they could to drive them away; but they could not obtain what they desired, wherefore fearing their labour in vain, they died every where of hunger and contagion: as the Mariners and steer-men reported to us, who escaped very hardly from that danger themselves. "Entropima lib. 4. makes mention of very great Locusts, which were seen not far from Rome; to the wonder and amazement of the beholders, the inhabitants were so afraid of them, for their devouring nature, that they were frightened at their sight: Hence we may collect that those creatures are not the smallest amongst the Armies of the Lord of boifs, when he pleareth to punish the sins of men, and to revenge himself on the defpiers of his Lawes. But as his Justice is admirable, so in his greatest severity Mercy is not wanting: for being that Locusts have brought sundry Nations to want and hunger, and they have had no thing to eat, these Locusts have died sudden, and became meat for the people afflicted before: the people of hot Countries, their Utile. (whom especially they spoil of their increase of fruits) as the Ehtiopians, Tagetens, Parthians, Arabian, Lybiens, Medeens, Zemenes, Darenienens, Africanes and those that live about Lepros, the Zanaughis, Sengenepes people of Mauritania, and others live chiefly upon Locusts, and account their egges to be delicious; others prepare them thus; first in a low large place they make a great smock, by which the Locusts in flying are hindered and forced to fall; than when they have taken them they dry them with salt, the Sun and smoke, and cutting them in pieces, they keep them for their yearly provision, as we do fishes, not only those which have large legs, but the Atelabis, the Aellis Africas, and almost all kinds of Locusts, as we collect out of Dioscorides Strabo, Pliny, Solinus, Agatharchis, Pultarchis, Avicenna, Ptolemus, Loc and Dionysius Africanus; Elban, Diosorus Siculus, Aloysis, Cadmus, Africole, and the Centuries of Navigations, whence they were called dessed intellectuals, Locust-eaters. Yet though they accounted them amongst their choice meats, yet the Greecians esteemed them but for meaner fare; if we believe Aristotle and Pultarch in Sympol. where he calls them the Sultainer of the Countrymans table; S. Matthew in the 3. chapters, faith that John, the Baptist lived upon them and wildy honey; and God appointed for leaven, for to be a comest among Locusts for food, let them read the most learned Annotations of Venerable Bede upon St. Matthew. They have no venom in them; yet they that feed on them are not long lived, and fields that live to 40. years, and frequently die young, as Diosorus Siculus, Agatharchis, and Strabo have observed. St. Ambrose faith that Locusts hurt neither men nor fruits by themselves, but nourish them; and feed not on fruits unless God command them. But when God gives the word, they kill men, spoil the ground, and execute the vengeance of God. Matt. as I said, travellers feed not upon fruits; Ophiosmachi kills Serpens, all Locusts foresaw the Spring, and what is more acceptable to us? and if to so great multitudes they forset all of famine, by that they secretly invite us to prayers and repentance; they live so lovingly together, that they stand in need of neither King nor Emperor; for they fly together as Solomon faith, Prov. 30. without a King and live in concord, whence is that saying of Ecclesiastes, Thy keepers are as Locusts, and thy children at the young Locusts: that is not only numerous, but unanimous, and conspiring together.

What concerns their use in Phyfick, the Locusts are serving to that end also: for their smell their use in cures the Strangury, especially of women. "Discord. Bread eat with the flesh of Locusts, is good Phyfick, for those who are troubled with the Stone; fried Locusts take away the roughness of the nails; Locust legs bruised with Goats tallow, cure the Leprosie. Pliny. Mantes cure hard scrofulous re-
mors: Aedili dried and drank with wine are excellent good against the stinging of the Scorpion.

Aedali, cure the stinging of Bees, Wasps, Hornets, and Huts by Blood-fingers. Diphed, Empir, and Pliny 29. 4. Aradus describes this composition for the white skins of the eye for dimness, and cloud. Brevisarius lib. 1. c. 16. Let the Locusts be not all either green nor wholly black, but in a string through them and Strange them in a little White-wine, then dry them in the shade, then take Primrose roots, and Fennel roots, dry and powder them, and mingle with the powder of the Locust, then keep the powder bound in a cloth, in the said White-wine in a brazen vessel; of which wine (the cloth being fast gently crusted) drop two or three drops into the eyes: As for their quality and temperament, until they heat a little; they inflame, increase feed, take up venery, when they are failed; it items they are of worst juice: they cause thirst and burn the blood; yet they hurt not droppe persons; nor such as are lencoplogemathan. Sisineu. Further to touch upon other uses of them; Locusts, their feet and wings taken away, are good to feed young Peacocks, Columbida. Frogs about lakes and many fish feed on Locusts, which is so well known, that Belo-

ninus whitteth the same. Also the Selenitas have a bird feeds on Locusts, as Heftichs remembers. Jackdaws do also devour them; wherefore at the publick charge they are maintained in Thesius, Privy, and Lemnos: for they not only destroy Locusts coming, but they also devour their flue, whereby corn is preferred unhurt. Also they are good for Roos, Coughs, Hens, Geese, Ducks, for Hog all and theep, as beside histories, and long experience, Plutarch witteth in his book of Jis and Ofirs. Lastly, if your credit may be given to Apomastins a man moit, learned in the learning of the Indians, Persians, and Egyptians, to dream of the coming of Locusts is a sight of an Army coming against us, and so much as they shall seem to hurt or not hurt us, so shall the enemy.

Now it will be time to shew by what means the great abundance of them may be driven away by the providence and wisdom of man, and so I shall conclude this Chapter. Pliny tells, that in the Country of Cyprus, it was ordered by a Law, that thrice in the year they should war against the Locusts. Firstly, breaking their eggs, then destroying young ones, then by killing the grown Locusts. If any failed of this duty they were punished for their default. The Mag-

niis and Ephesians much in military order against them. It is no wonder that divers Nati-

ons took counsel how to destroy so cruel an Army, whereas in divers places of Africa and Mur-

ritians, they are so numerous and malicious, that they force the inhabitants to seek out new

habitation. We observed out of Pliny, Varro's and Pliny, divers ways to break and destroy their eggs. At the entrance of the Spring, rivers are turned upon the places where their eggs are, so that they abundantly wet all the surface of the earth, or the greatest part of it. If the place be so situated that they cannot do this, multitudes of men trample over the ground, so that no

place is left, that is either higher or deeper than the rest; if they cannot prevail with their feet, they use a drag, a harrow, and a scythe that are very heavy, such as Countryside men use; that they may the more easily blame them, and level the ground the better. Also abundance of military Charities would do no hurt here, for by frequent and often running up and down with the wheels, they would break the eggs: I should also commend the use of the plough, which would dig and turn up the earth, and cool the nests of the Locusts. Some counsel to fright the old Locusts with ringing Bells, sending Trumpers, beating Drums; and by discharging great Guns, to make that terrible Salomonean noise that may drive them away; some think that by great cries and shoutings of men, they may be terrified, as if the beating of the air might shake them, or, as though they heard any of those terrible noises, as some absurdly dream. Others make deep ditches in the fields, and with crackers that beat the air, drive the fearful Locusts either by degrees, and when they are come into these ditches, they are suddenly overwhelmed with earth, or calling in rubbish, they cover and destroy them. Some affirm that they are taken with pickle made with Locusts, that by it they fall suddenly into a deep sleep and afterwards dye. By these arts, Sisineu, Varro, the Locusts that vexed the people about Arliso were destroyed in twenty daies time, in Syria they fight against them in a方netherly posture. In the Island Lemnos, all Souldiers are bound to bring a certai

n measure of Locusts to the Magistrates every day. Some Nations, as I said, feed Jackdaws at the publick coths that as occasion is they may destroy the Locusts. Moreover the birds, name-

ly Storks, are called Selenitas which the inhabitants of the Mount Caisan formerly obrain'd to be fent by Jupiter against the Locusts that destroy'd their com. These birds come yearly to help them, but whether they fly back, or wherence they come, no man can tell. So soon as the Locusts are destroyed they forsake the Mountain, and go home again. Our new Author mightly commend the smell of Brimstones, and of gum-powder, and think they will kill Locusts by their smell; but if a cloud of Locusts or swarm come tumbling into a land, let all the inhabi-

nants lie cloze in their houses, for if they see no man in their journey, they will readily pass over that country, or else they will easily remain in that place. But if they come before it be observed, they will touch no herb nor corn, nor any thing that is sprinkled with the decocti-

on of bitter Lepidons and white Cucumbers; for they pen'ti to soon as they touch them. It may be the decodion of the leifer Cacumen- Worwood or Walch, that would do the fame. Al-

so they are glad to pale from those places where bats are hanged aloft on the trees. Moreover, if you burn Locusts taken in pits, the same way as I said, that flame will either chok the flame that are near, or will make them fall down, that they may be easily taken with your hands, or they will dye of themselves, being afterwards weighing with the Sun. If you would defend vine

from
Chap. XVII.

Of grashoppers and kricketes.

Of all the Insects making a shrillious noise, the Grashopper challengeth the chief place, and by great right too. For in the heat of the day he sends forth a most thrall and musical sound, sustaining his life with dew without doing any harm to be or trees. Amongst the Greeks he hath divers names, according to the diversity of Countreys, generally and by a common name he is called Τττη, by the Eleas, Λοκατμας by the Sideris, Κοιης by the Cretians, (as Bellanion faith) Αθηναυης by the Countreymen of Smidas, because it lives by sucking out of the dew. They attribute also divers names and appellations unto it from its sex, age, bigness, and tinging. For the female which doth not sing at a Αλλιοι calls Κωνοις; Stephanus, Καιλονος, that tinges not; Euathius thinks it is not a Grashopper, but another kind of creature like it. So doth Athenaeus s. 4. from Spemphoros, τελωθινος, the common τελωθινος, like to a Grashopper, or the Bird called a small Turtle. Indeed the words of Livius out of Alexis cited by Athenaeus in his Θεοσo give in a large testimony to the same, both that the Cercop has a voice, and was of a divers kind from the Cicada or Grashopper (I never saw the female Cercopes, nor the Pye, nor the Nightingale, nor the Grashoppers male) unless perhaps the Grecians were wont to keep together in their cases the male and female Turtle, so we should say they joynted together in like manner, the male Grashopper and the female Cercopa; for that they did not only keep them together with the Pye and the Philomel, for their singing fake, but that they might behold their mutual embraces, dalliance and lustful pleasure. Add to this that Athenaeus calleth it ηλλενις, or the more taltitative; so far is he from attributing all the busines of tinging and making a noise to her male, contrary to the custom of the female.

The Grashopper when he is come to be old is called τετες, when young and tender μελις & μελιν, as Hesychius observerth. The little Grashoppers (which Gaea callath Cicaspharos, and we Cicada) the Greeks call μπαλμα & μπαληθες, which signification I wonder that it is called over by Stephanus. The word μπας, put sublimate, signifieth the last Grashopper of all, as Φλαθίς witteth, τεθπιθανε ιπθες also do figure the latter Grashoppers, as we read in Callius although Επιθυμα will have them to be creatures of another species, like to Grashoppers as otherwhereth he calls them the females of Grashoppers. Their Επιθυμα will have so called of the Greek word μπαπαπαπαπαπαπα, from the found they make. The more vocal and obstreperous of them called Επιθυμα the Athens, or the Males, making indeed a very pleasant and musical noise. The other being mute and more wide are called Επιθυμα, from their silence, as also Αγαθοι. In Arabick Γιατρος, and Cicadae Valsaertrische and Robiche. Silvan. Cicada is a barbarous word of a Latine or Spanish word corrupted. In Italian Littalo, Cicara, and otherwhre Lactaera; in Spanish Cigarrocas, and Cigarras; in Germany and England I do not hear that there are any Grashoppers to be found, but if they be, they are in both Countreys called Berekrics, or Saulm Kricketts; in Flanders, Federden; of the Walloons, (if I mistake not) Straffen; in Polonis, Komkcz, Ζηλοθες, Spieca. Sometimes the name Krickets and Grashoppers, are promiscuously used, which cannot be, unless you will say that the Kricket is a Grashopper without wings. The Latines as
The Beater of Insects: or,

Book I.

Some that have after words will have it derive the word Cicadas, grafh into cadens, (i.e.) quickly railishing. And that indeed is the Epitath that Aristotle gives it, σχιστος πτερω, the short lived Grafhopper, so to indeed it seems to be.

Of the Grafhoppers, some are more common, others more rare. The common and ordinary to hath the head big, and bending downward; and is of the figure of a Penticson terminated with unequall fides; it is of a blackish green colour, having on each side two branches or boles of the same colour, but of an oval figure, and edged about with a dark coloured margine, and a line or Sreek of the fame running along cuts the boles in the middle, & the letter β of a pure black colour parts the head right in the middle; it hath eyes of somewhat a dark green, prominent and big, considering the bulk of the body; insomuch that I wonder that <N>igidius (that denies that they have any eyes) could not see them. But indeed as Aristotle faith they are very dull sighted. For if you bend your finger and put it back toward their eyes, they will rather come towards you then go from you, and will the sooner get upon your hand being drawn thereunto by the shadow of the finger; the head or rather the face looking upward, appears of a weak green from white.

The Grafhopper amongst the Insects, is the only one of the kind of creatures that is without a mouth, but hath it otherwise supplied by a long kind of compact falt infulence, which like a pronuncifus fupplieth the place of a mouth and tongue fashiond rounded and hollow like a pipe or gutter, referved for the moist part within, having ren freek running athwart it, with which it fucks the dew, the only nutriment that it hath; and which is peculiar unto it, as Virgil faiths, Parvens dum vortre Cicade: Whence it is in Athenaeus that the question is controverted, afterward concluded that water alone is able to maintain life, because with it alone the Grafhoppers are fullained. Hence it is that elsewhere he repeats the saying of a certain Paride to this purpose <Оп им встрицу ыезем>, i.e. I am not such a one as

live on dew nor herbs. And that of Thessalian it is very like it: Doth he live on dew like a Grafhopper? Away then with that Fable of Aristippus which is commonly received, that the Grafhoppers begged food from the Ants, for we may learn out of Plato, that the Grafhoppers are condescended to Apollo, and the Mites belowed on them this boon, that they should live only by singing, not so much as mentioning the dew. We shall also pass over those inventions of Tzetzes as not worth the mentioning, who reports that the Grafhoppers are always provided with food in great variety. It is reported by Antonius Alimarianus in his Book de Mannis, that the Grafhoppers do suck the juice out of the bark and leaves of the Ash-tree, or Elm chiefly, the which we call Manna, but yet it is more likely that they suck it off from herbs out of them, as the Butterflies do, both because they are always found to be empty within, and for that they are not perceived to void such things unless it be when they have taken in a little more dew then ordinary, they call out of their bodies the superficiality thereof, as the Countrymen have observed.

The body is fainned to the head by a very short neck, or rather none at all indeed, the shoulders are spotted with green and black, the breast is of a bright green well towards white, out of which come three feet and thanks on each side of a leek colour; the belly in the bigger part is two fingers in length, and one in breadth; the inner part of the belly resembles a target ending in a sharp point, and is compassed about with an hem having twelve or thirteen joynets in it; within appear certain incurus of the same colour with the belly; the males (that is, the leaf of the two) have the end of their tail forked; the females on the other side whole; their back is blackish with seven or eight green lines or incurus drawn athwart the same; the wings very curius, of a silver colour, and painted with dusky spots and specks very trim, the outermost twice as long as the innermost, and more various; the dark brown is more rarely seen, which Lodovicas Armachus a very diligent Chirurgeon, brought from Guinea, and gave to Peninnis: also Mr. White a rare Painter, gave him another brought forth from Virginia, it was all of an azure colour, (it may be it was that the Greeks call θησιος) but it was like the former in proportion, it hath both its wings silver coloured, but not at all, spotted, and the former green ones were. Those that live in quickers are most green and big, those that are found in oars, or corn, or grables are of divers colours according to the place where they be, and are far leele then the rest.

But if we compare their Nature and conditions with mans, they being our servants, do excel their Lords and Masters in virtue; and may teach us manners. For they flew forth that harmlessness of conversation, that they will not hurt or abuse any creature; but we perfuting the right
right use of things, can find in our hearts many times to abuse even our parents themselves. What grief will be content with the diet of the Grasshopper; that is simple, mean and frugal, not inquired with variety of dishes, or cookery, or curious mixtures: ye faire hath foolish curiosity prevailed with men, that unleas flesh of contrary nature, and with them fruits, leaves, spicles, liquors, be drested together, they think their appetite satisfied, & their palat very much wronged, manifesting that clean and wholesome diet of their forefathers. Those can quench their thirst with a little dew: we with our diversity of mixtures do rather invite and increase thirst than allay it. They living in summer near to the earth (in which they had rather sing) yet notwithstanding lead a cheerful life, and with their high strained notes, do make the lowness of their condition more easy to them. But we men if call from any high place, we presently despair, and are afraid at every turn of the wheel of Fortune.

The Grasshoppers hold on singing from morning till night; without intermission, very pleasant and agreeable, whereas many Preachers neither preach well nor often, scarce four times throughout the year: truly they may be ashamed being bred more civily, to be admonished of their duty by a wilde musician. These if you scratch o: tickle their belly (as Poets which were commended) sing more shrill; but those speak them as fair as possible may be, yea invite them with gifts, yet (like the Argonauta of Martial) neither the care, nor lift up their eyes or hands to the skies. Moreover these agree all together in one tune, and perform their mutual help in their affairs. But I would to God these did not wholly busie themselves in sowing frithe, and breeding controversies, that they did not wrangle together about wool and flax, figures and forms, and ceremonies, and of things decent, undecent and unfeemly. True is the proverb of Theocritus concerning them, ἔνιος ἄρσεν ἔθησεν, the Grasshoppers are a friend to each other, but man who ought to be a God to man, rather proves a wolf and a Devil, and putting off the nature of a man, tears up his own bowels.

Amongst the Grasshoppers the females are silent; the males do in a manner loath ventency, neither are drawn unto it but by many enticements of the female. But our women have more tongue by far than men; and the men behave themselves more licentiously than women. What is to be added further. The Grasshoppers of all other Insects seem to be without passion, but the perturbations of our minds do carry us on so headlong, that upon every slight caule, yet none at all, we wax hot with anger, pine away with grief, burn with envy and jealousy.

Now for the music which the Grasshoppers make, amongst all the Insects there is none like it; accounted to sweet amongst the Ancients, that they equalled it to the sound of the Harp, as Pausanias wrote; and it may be Lucerius therefore called Grasshoppers Teretes. When Simon Sillographius would commend the eloquence of Plato he compared it to the music of the Grasshopper's; his words are these: Plato sings sweetly, and as well as the Grasshoppers. They begin to sing in the heat of the day, even at what time the reapers would otherwise leave work, who else those laborious chanters get them up into trees, and there fill the ears of the Laboureers and passengers with their melodious noise. For as music is a kind entertainment and recreation to the flaring spirits and tired brain, so the unaffected notes and lays of the Grasshoppers, and the exuberance of their contention in singing, doth serve as a spur to provoke men to endure labour,
labour, and doth not only invite the reapers to gather the fruits, but detains them in their work.

Of the strife between *Eunomus of Locris* and *Arifla of Rhegis* two Harpers, and *Eunomus* getting the better, by reason of a Grashopper flying to his harp and sitting upon it and supplying the place of his broken string; read *Antigonus Mirmabolium confat. l. 1. & Strabo Geograph. l. 6.* Of which contention also *Solinus* makes mention; and indeed the Ancients by the Grashopper understand Mufick; and therefore they painted the Grashopper sitting upon *Eunomus* Harp, as the known Hieroglyphick of the Males, as *Strabo*, *Polegenon* and *Panfanius* give us to understand.

With the *Athenians* it was the fymbole of Antiquity and Nobility, and to that end (as now the Spaniards doth the golden Fleece) so they wear golden Grashoppers embroidered on their Hairs, from whence they were called *Myrippogeth.* The Author of the Anthologies faith further in his third Book, that the Ancients had the Grashopper in such veneration, that they made a monument for it in the Promontory of *Tanare* in the Country of *Laconia*; and engraved a very elegant Elogy thereupon in its praise; to which *Orms Apollo, Heryocly, 2.* doth subcribe. In a word, there is none to whom the musick of the Grashopper can seem harsh or impalebeat; but is either not well at cafe in his minde or his body, and so can be no competent judge of musical strains. The Grecians had them in such estimation, that they kept them in Cages to please their ears with them.

Now to add something concerning the manner how they make this noise, and then to proceed to their original and death. This fridulous and obturerous noize they make, some think to be caused one way and some another.

*Pierius* thinks it is formed in the fount or promusici: *Proclus Diadichus* by the rubbing together of their wings; a *Hippocrates* more ingeniously points forth a kind of fong; that is, *The Grashopper sings by frequent clapping of its wings together* and it makes a noife. And the fame thinks *Hesiod.* But that they sing not with their mouth all men know, as neither by the rubbing of their wings together as the Locust doth; but by the reverberation of a little membrane under the flabeis; (so they call those two coverings behind the hinder thighs cleaving to the belly) or as *Aristotle* describes it in brief. They make this noife by reason of the air hissing against the membrane under the midrife; for by that means it being defended or remitted, and forced up and down, there breaketh forth a fridulous sound, fuch as the boys make with their reed or oaten pipes, which have a thin skin, which being puffed down, flaken or intempest, it must make a found. And this is the reason why the female Grashoppers sing not at all, because they do that space between the thighs, where this thin membrane grows in the males and caufeth this found. Others make the females to be more cold by far than the males, and that they make the caufe of their silence. But *I<ommius* old men, and old women, make most noise and greater than young pofitons that are more hot, therefore frigidity cannot be the caufe.

Add further (if we will fland to the judgement of *Hippocrates*) that women are more hot than men; but if they be not so, yet it must needs be acknowledged, that the female Grashoppers are more hot than the males, becaufe under the midrife they are not so divided, but the males in that place (were it not for that little membrane to hinder) they might easily be blown through. Nature certainly intended by denying a voice to the females of thefe Grashoppers to teach our women that lefion: *δωρον γενομενον αυταις τινι ονοματος what ornament silence brings to the female sex."

They begin first of all to fang about the latter end of the Spring, the Sun being gone paft the Meridian, and per chance in hotter Countries sooner; where quicksets or thickerks are more rare, there they live more happily, and fang more willingly. For they are of all creatures the leaft melancholy, and for that reafon they do affect not only green and pleafant places, but champion and open fields. Yet they are not to be found in those places where there are no trees at all, nor where there are too many and too fhyd. Hence it comes to pafle, fay *Arist.* that at *Cyrene* in none of the fields there is there any Grashoppers to be found; whereas near the Town they are frequently heard. They flun alto cold places, indeed they cannot live in them. They love the Olive tree, becaufe of the thinnes of the bough and narrownes of the leaves whereby they are lefle fhyd.

They never alter their place, as neither doth the Stork, or at leaft very seldom; or if they do they are ever after filent, they fang no more; so much doth the love of their native foyl pre vail with them.

In the Country of *Melitus* (faith *Pliny*) they are feldom feen. In the Ilond *Cephelenia* there runs a River, on the one fide whereof there is plenty of them on the other in a manner none: that which I fould take to be the caufe, is either the want of trees or the too much abundance or elfe a certaine natural antipathy of the foyl; as *Ireland* neither brings forth nor breeds any venomous creature: for the fame reafon they do not fare the Kingdome of *Naples*; al though *Niphus* tells us that to be done by the enchantment of one *Mero. Timaus* that wrote the *History of Sicily* that in the Country of *Locris* on the hither Iide of the River *Hel licis* they are marvellous loud; on the other Iide toward the city of *Rhegis,* there is none one to be heard: they are not therefore silent becaufe *Hercules* prayed against them for difturbing him of his flees, as *Solinus* fabulously relates; but because they are more merry and joyous at home;
as the Cock is: where it is that the Lucian Grafhoppers will not sing at Rhigium, nor theirs on the contrary near Locria; and yet there is but a small river runs between them, such a one as one may call a stone over. Much certainly doth their Country (which comprehends in it all the love that may be) move them: where like the people of the Jews, they refuse to sing their native Songs in a strange Country; who being call'd out of their own habituation, seek means to die rather than waies to live: to prodigal seem they of their short life, and delirous after their native dwelling.

They do to affect of men, that unless they see fields full of Mowers or harvest folks, and the waies with passengers, they sing very low and seldome, or silently to themselves. But if once they hear the reapers making merry, talking and singings (which is common at noon) then they sing to loud as if they flrove who should sing loudest, together with them, Wherefore not undeservedly was the Parable in Athenien called wise, who being naturally obfemious by nature, yet was so full of talk, as if he frove that no body should be heard at the table but he. 

Socrates in his Phaedrus relates the History of the Grafhoppers very witty, warning men not to sleep in the heat of the day, left the Grafhoppers mock them: for the Poets report how their diligence was highly rewarded. For they lay that the Grafhoppers before the Muses were, were men: who afterwards when the Muses came taught them to sing; but some of them were so delighted with music and singings, that altogether neglecting their mealt and drink inconveniently, they perished; the which afterwards being turned into Grafhoppers, the Muses gave them that for a reward, that they should be able to live even in the heat of the day without meat or drink, neither to have any need of blood or moisture.

They couple and generate with creatures of the same kinde, as Arifiole tells us, and the male casts his seed into the female, which the accordingly receives; they bring forth in fallow grounds, hollowing it with that sharp picked hollow part of their tail, as the Bruchus doth, and therefore there is great plenty of Grafhoppers in the Country of Cyrene. Also in reeds, where the vines are propped, they make hollow a place for their nest; and sometymes they breed in the fuels of the herb Squilla, but this brood soon fails to the ground.

This is also worth the notice, which Hugo Solerius writing upon Aristotle affirmeth, that the Grafhoppers dye with bringing forth: the ventricle of the female being rent splitter in the birth (the which come being very much deceived therein, do report of the Vipers) the which I exceedingly marvel at. For they lay white eggs, and do not bring forth a living creature (as the field mouse doth) unless it be by reason of weaknes: of the egg comes a little worm, of that comes a creature like to the Arctia of the Butterly; which is called Tettigomes, (at what time they are very delicate meat: to be eaten before the shell be broken) afterwards about the Solstices, in the night come forth of that matter, the Grafhoppers, all black, hard, and somowhat big. When they are thus got out, those that are for the quicksters, betake themselves thither: those that live amongst the corn, go and fit upon that, at their departue they leave behind them a little kind of moisiture; not long after they are able to take wings, and they begin to sing. That therefore which Solerius Reignede concerning the burfting of the womb of the mother, I therefor conceive neither to be understood of the matrixes.

A certain woman did bring up some young Grafhoppers, for her delight fake and to hear them sing: which became with young without the help of the male, if we may believe Arif. b. 1. de hist. anim. but since he hath told us that all the females of Grafhoppers are mute by nature, and this spontaneous impregnation is far from truth, either the woman deceived Arifiole, or he us.

There is another kinde of Generation of Grafhoppers, that we read of. For if clay be not dug up in due time, it will breed Grafhoppers: so faith Paracelsus, and before him Hisbeus. For this cause Plato faith Grafhoppers were of old time men born of the earth, but by the favour of the Muses turned into that Musical sort of creatures, the Grafhoppers. Even at this day retaining their lives with no other food than dew, and feeding themselves by continual singings they live. For this cause the Atheniens were called Tettigophi; because they wore golden Grafhoppers for ornament in their hair, and for a token of their nobility and antiquity; as Thucydides 1. Syroporp, and Heraclidus Ponticus de praefio Athenieniibus celleth. Erythoes makes a proof of this custom, being born of the earth as they lay, who first governed the Common-wealth of the Atheniens, and they too in the judgement of Plato the Natives were Erythoes, i.e. born of the earth. Afterwards it came to be a custome that none but an Athenien, or one born in the place might wear a Grafhopper in his hair; of this origin is Aristoph: as also his Scholiast.

I doth faith that the Cuckow-spitlle doth generate Grafhoppers, which is not true, but that it produceth small Locusts is manifest. Lucretius in his 4. Book, faith that the Grafhopper in the Summer doth fliet his skin, according to this verse:

Cum veteres ponunt tunicae at state Cicada;

And for that reason he is called by Hesychius, p(afpho, i.e. the naked Grafhoppers or without a skin: whom I should not have believed unless I had the picture of the skin so call'd off by me.

Before Copulation the Males are of the more delicate taste, afterwards the females, for that they
they have in them white eggs very pleasant to the palate. The Parthians, as Pliny writes, and the rest of the eastern Nations feed upon them; not only for nourishment, but to open their veins, and to stir up their languishing appetite, as Athenæus in his 4. Books, and Natural comes expressly affirm. Hence Aristophanes in his Anagnus out of Theoricius, writes that the gods did feed upon Grasshoppers; at what time they had lost their appetite through cholery or putrid. I have seen, faith Elian l. 12. c. 6. those that sold them tied in bundles together for men to eat, to wit, the most voracious of all living creatures did fell the most jeune, lest any thing should be lacking to their exquisite dainties.

Diocondas gave a roasted Grasshopper to eat, and, faith they are very good against the diseases of the bladder. Some, faith Galen, use dried Grasshoppers for the Colick; they gave according to the number 3, 5, or 7 grains of Peppers, and when it goes off as when it comes on. Traianus bids to give them for the Stone, dried and beaten, the wings and feet first all taken away, and this to be done in a bath, with figues and Hippocras. Agines use them dryed for the Stone in the reins, and for the diseases of the reins he composed the invention called Diastigmen. Such another like Antidote doth Myceropus prescribe, but all heads and feet as superfluous members being cast away. Luminarius hath transcribed an Eleusian out of Nicollus of this sort. Take Grasshoppers, their heads and legs cast away, two ounces, Cromiumm; feed, Saffage feed, each 1 ounce; Pepper, Galanga, Cinnamon, of each 3 grains, Lignum Aloes half a dram; honey what is sufficient. Nicollus useth Grasshoppers burned and powdered, mangled with honey, and gives them about the bigness of a bean in a quantity of wine. Anisius three Grasshoppers beat in Wine. Some in stead of Cantharides use Grasshoppers to provoke urine, and in my judgement not without very good reason; for they are taken with leafe danger, and do work sooner, as well in this disease, as in the weakness of venery. Namus the Physician prescribes an Antidote of Grasshoppers, and Xenophyton, against the Stone in the kidneys. A recipe for the remedies of the bladder speaks thus of Grasshoppers; The last remedy for the bladder is a Grasshopper given in its time to eat (Males before copulation, but afterwards Females, as we finde in Aristotle) but out of their time, dried and powdered; boil them with water and a little spike; also let the patient fit in the same for a bath to ease the pains of the bladder. Some of our later practitioners, put Grasshoppers in oyl, and let them in the Sun, and mingle them with oyl of Scorpions, and anoint the privities of men and women, the testicles and parts about with it for pains of the bladder. Arnoledus Breviar. l. 1 . c. 20. & 32. commend the powder of Grasshoppers for the Colick, and Iliack passion, and also to drive forth the Stone; if half a Grasshopper in powder be drank with Goats blood, or Diuretic wine. Laframus highly exteems the ashes of Grasshoppers to break the Stone, taken with Radish water, or the decoction of chich Peaxe. Alfo they caufe idle and lazy boyes to hurt after them: Theoricius speaks thus of it in his first Idylum.

Hic in his ears of corn bound to a cane did make
A wish for Grasshoppers to hunt and take.

Neither are they only excellent meat, and very useful in Physick to men, but they feed Birds also, and inflame them. For the youth of Crete (as Belonius wittellyh) hide a hook in the body of a Grasshopper, and when they have fallen to a line, they caufe it up into the air; which the Merops (eing catch it and swalloweth; which when the boyes perceive they daют it to them; and so do excite their air-fowling not without profit and pleasure.

The Grasshoppers abounding in the end of the Spring, do force a sickly year to come, not that they are the cause of putrefaction in themselves, but only they shew plenty of purit matter to be, when there is such store of them appear. Oftentimes their coming and fuging doth potend the happy year of things by Theoricius, 3. lib. 2. c. 29. & 30. Niphon; faith that year but few of them are to be seen, they preface dearness of victuals, and scarcity of all things to follow. But whereas P. Languis (a Philosopher of great reading and learning, and a famous Physician) faith lib. 2. 47. that Grasshoppers did eat the corn in Germany as the Loculus do; Stemmarius, that it was done in Helvetia: Lygadibus lib. prodig, and the Greek Epigram doth affirme, that they eat the fruits and crop the herbs; truly (unless they mean a Locull in stead of a Grasshopper) they declare a strange thing, and (saving the credit of so famous men) I will not believe, for they have neither teeth nor excrement as hath been said, but only feed and swell with the dew. Besides, although I have gone over all Helvetia, Germany and England, and have searcht for a Grasshopper as for a needle, yet could I finde none. And therefore I suppose that both they themselves, as also Guili, de Conoye, and Albert. Vincentius, to have mistaken the Locull or Brachius for the Grasshopper, being deceived by the common error, who take the one for the other. They desire more of their nature and use, may consult the Authors of the Greek and Latin Epigrams, with praising them or dispraising them according to their own humour.

The egyptians by a Grasshopper painted, understood a Priest, and an holy man; the latter makers of Hieroglyphicks, sometimes will have them to signify Muficians, sometimes pat- lers or talkative companions, but very fondly. How ever the matter be, the Grasshopper hath furg very well of her self in my judgemente in this following Diftich.
Of lesser living Creatures.

*Sim lect infra genis exiguum atq; minutum; Magna tamen parvis gratia robun inest.*

Although I am an Insect very small,
Yet with great virtue am endow'd withall.

Next in order followeth the Gryllus or Cricket, both for that it refembleth it somewhat in the name of shapes, the wings excelled, but comes very near it in its note and manner of singing. *Calce* the Cricket, in spite of Pliny, calleth it from the harpies of the found 45th, but not rightly; whereas I have proved out of Arist. that this to be a greater fort of Locusts. *Friesius qwest. lib. from Pliny* calleth it *Tryzalus*; the which notwithstanding it be an Insect without wings as the other is, yet it is not at all like to the Gryllus in form or shape. It is called also in Latin Gryllus; in French, un*Grillon*, *Cryn*; in Arabick, *Surfar*, if we may believe Bekker. in Barbary, Gerard; of *Avicenum Algedes*; of the Polonians *Swierc*; Hungarians *Oresfer*; in Germany ein *Grilsen Heyme*; about Argentinum (from the month wherein it sings) *Bracht Vogel*; of the Illirians, *Swierz*; *Gryll*; of the English, *Kricket*; of the Dutch *Gricky*; Nachtieroet.

The Gryllus or Cricket is of two sorts, the field Cricket, and the house Cricket. *Pliny* refers them both to the kindes of Black-Beetles, but improperly, since they have not their wings in a cover, but only thin membranes, though the outmost are far thicker than those that lie hid under them. *Calcius* that came after him, makes it a kind of Locust, but his error is the same. *Niphus* in *Ariftoteles hist. 5. 28. et 29.* calls them ground Locusts and Branches, as also *Albertus* by ignorance calls them Grasshoppers. Of the field Crickets, some are males, some are females: the male is wolehig as big as the Grasshoppers, but the body somewhat longer, of a blackish colour, the head for the bulk of the body big; the eyes great, standing out, the fore-head hewed, but the horns without joynts, which notwithstanding are moved to and fro with ease. It hath fixe fea coloured like the body, the hindermost longer than the rest for the more nimblenes of motion and leaping; they go (as all the rest of the Krickets do) forward and backward; the wings as it were lightly engraven, and crooked, covering almost all the body, the tail forked, the body les that of that female; the having a bigger belly, is of an unlighty green colour; the eyes grafs-colour, the cornicles reddish, the tail three forked like a Trident, in bulk of body differing from the male. In the Summer they are found in the fields, making holes in the earth, and building their nefts. In a calm Winter they lie hid, in a cold and sharp they lie in their holes, the which they seem to have digged without the help of a Pioneer.

The noise which they make is caused by the rubbing of their wings one against the other, as *Pliny* witnesseth, *Jacob Garret* an industrious and ingenious Apothecary did the fame with the wings pluck off and rubbed together, very cunningly imitating them: inomuch that I wonder at *Scaliger* who saith it cometh from a kind of I know not what follicle and pipe placed in the hollow part of the belly; and at *Sabins* who ascribeth it to the collision or grating together of their teeth: the which *Pliny* also, but fallly, writeth of the Locusts, when as either of them through the narrowness of the passages of their holes do tightly rub their wings, whether field Cricket or domelick, they make but a small sound: but when they are out of doors and rub hard, they make a very shrill loud noise, yet not so at all without the motion and agitation of their wings: the which if you crop or pull off, you shall see all that noiseo preferently cease. In the heat of the clay (in which they are much delighted) and in the night also they sing before their holes mouth.

Their common abode is in pastures and meadows; they not willingly tarry in shady and opacious places, they seldom live till winter: *George Agricola* writeth.

*Ngidou* gives great credit to them, but the Magicians more; because they go backward and make a noise in the night, and make holes in the earth. The farther off they are, they make the shriller noise; whereas being near at hand they are silent, and through fear or suspicion presently break themselves to their holes. The *Kricket*, (faith *Albertus* l.4, c.7 exerit, 273,) if it be divided in the middle, or have the head taken off, yet sings and lives a great while after. The which if it be true, what shall become of that pipe in the belly of them in which *Scaliger* faith doth cause the sound? The children use to hunt them with a Plume tied about the middle with
with a hair, which they put into their holes, blowing away first of all the dust left the should hide her self again, and so is drawn out by the Pitturine. Plin. l. 29. c. 4, 7. But sooner and with less labour is the then take a long small twig or a straw, and put into the hole, and draw it out by little and little, out the comes presently to her holes mouth, as it was to ask what the matter is, or who offered that injury to her hole; and so is taken. From whence cometh the Proverb, Statius Gryllus, more sily than the Kricket; of him that for every light cause doth betray himself to his enemy, and witningly brings himself into danger. They live upon new Panick, ripe Wheat and Apples.

The house Kricket (if we may believe Albertus) is called of the Greeks κρική, but no such name can be found. It may be he took a barbarous word for a Greek; the English call them house Krickets the Germans, Heimgrill.

Plin. l. 11. c. 28, writing of the Scarabée (among which he falsely reckons the Kricket) hath these words: Some of them dig holes in the ground of others of them in the dry earth between the fire and the oven, making a great noise in the night. The Domeltick like the former be both male and female. The male is almost all over of a dullish colour, the back of a various dun, or rather black; the body long and much less than the field Kricket; the head almost round, the eyes black, the conille movable every way, in form and shape all alike the field Kricket; about the root of the middle feet two short white lines do crofs the back and adorn it.

In the months of July and August they fly, but not far nor long; and that like the Wood-pecker, or Hickway, with a waving flight, sometimes flying aloft with her wings spread abroad, sometimess depending with her wings close to her body: the tail is forked. The female is the bigger and longer bellied, the fly with four wings, of which the outermost are shorter, the innermost narrower and longer; the end of the tail have three prickles or brillites. Both the sexes fly, and leap and run, and that swiftly, they liek in greedilly the scum of broch, and barm of ale or beer; they feed likewise on the matter and liquor that come out of corrupted fleth or carriion. Of this Insect writes Albertus thus: The Gryllus or Kricket which sings in the night, seems to have no mouth as the field Krickers have, but there is found in his head a long thing like a tongue, and it growes above the outer part of the head, and that part is not cloven, as the mouths of other creatures; neither is there found in the belly any superfluity at all, although it feed on the moisture of flesh and fat of broch, to which either powered out or reserved it runs in the night; yea although it feed on bread, yet is the belly alwaies lank and void of superfluity.

The Kricket doth not only recreat men weare with labour, with their singings, but are good for phyfick also to drive away diseases. The Ancients (as Scaliger hath oberserved Exercit. 186, and found it by his own experience to be true) did use them in head of the Catehistic, and with the like succees. It being dug out of the earth with the earth with its is good for the running of the ears. Being rubbed between the hands it cureth the disease called St. Antonies fire, as also the swelling of the jawaes: but this Kricket must be digged out together with its earth with iron, and afterwards be rubbed; and so the patient will not only be cured for the present, but shall be free for a year from having the disease again, Plin. l. 50. 49. 5. 12. They cure also the Parodies, i.e. an Impudence or false coming of matter distillfled from the head into the kernels of the ears; whether they be bound upon the places, or the place annointed therewith, they serve alla together with their earth, to anoint the Kings-Evil. Their ashes mixt with oil, bring old ulcers to Cicatrice. The Kricket diluter in water is good against the Stone or difficulty of urine. Bellinon star used to drop the oyl of them into the ears of them that are diseased in that part; by that means taking away all the dolor and pulsation of them. Marcellus much commends the stroking of them upon the tumours of the jawaes, and binding them upon the same: and in the opinion of Haly being hung about the neck, they cure the Quartan Ague. Serveniu faith they cure the swelling of the Tonsils in this Puffich:

A Kricket with right hand on Tonsils prcs,
To kill the Kricket, gives the patient rest.

Children (as the Italiati do Grashoppers) do keep them in a box bored full of holes, or bags, to hear them sing in the night, giving them leaves of herbs whereon to feed, and so keep them all the Summer. They are kept in Africk in iron cages, and are sold at a great rate, as I have heard by some Merchants, so as to cause sleep. For those of the inhabitants of Feffe are exceedingly delighted with their thrill noise; as much as the Irish and Welsh with the sound of the Harp. With which also learned Scaliger seems to be not a little affected, when for their musick sake he kept them inclosed in a box, the which if he had kept in such a thing where they might have had aire he had not found dead after three daies, but able to live a long while: lib. de plant. For being excluded from the air they cannot live, which besides air and found have nothing in them, nor leem
Of lesser living Creatures.

To be any thing else. The last Summer I had a male and a female of them; but within eight days, I found the sides of the female eaten out by the male, which also it self two days after expired.

The Bird Lanius, as the learned Brenner hath observed, is fed with them. The which the faffens upon thorns near to her nest of young, for fear they should want food.

When they become offensive by reason of their number, thus they may be driven away or taken off. Take a good deep dish filled of water, and place it before their holes mouth with a good deal of oatmeal round about it; so the Crickets leaping up into the bowl are drowned; or if you mix water with Vitriol and inject it into their hole, they will be gone.

There is one little winged creature behind, which whether it may be referred to the Classis of Grafhoppers or Locusts I know not. For by that it flies in swarms, and eats the corn, it may seem to be a Locust; but in figure and shape it is likest the Grafhopper above any thing. The visage of this creature is wonderful resembling an Infant, it hath on the head a three cornered cap, in the top of which are four black spots; two often very long, the other two almost round between which you may perceive two very little points or pricks; it hath four wings, of which the innermost are folded double when it flies till that you would think it to have six wings. And there it may be were those Locusts of which Cursians have written out of Sigeberthin. In the moneth of August (faith he) in the year 874, a wonderful swarm of Locusts having six wings, and six feet, did fly out of the Eats, by which almost all France was destroyed. You would say at first sight they had a hood upon their shoulders; but if you look nearer hand, it is nothing but the upper part of the wings inclosed with a semicircle. The body very thick, of a black and dun colour; the hinder part of the wings were all full of black spots. P. Quickelbergin of the City of Antwerp, sent over this to Peninus out of Africa, the which I keep to this day in my flores house of insects, by the name of a young Grafhopper. And as little am I satisfied concerning the Tryxalus (spoken of before) it had its name it may be from gnawing or eating. But that it should be either the Bruchus or the little Herb-locust, Grafhopper, or Cricket, I cannot be induced to believe. Not only because Athenians, Pliny and other Philosophers are not agreed in that very point; but besides, because they do much differ in form and nature; and why I say may not nymphes be derived from nymphes, to make a noise? and if it be, truly it will beft agree with the Crickets, which because of the noise it makes, it may be as true of the Cricket, which Pliny very well distinguishes from the Blatta or Beetle, as by other things, so by the noise it makes; that which Pach. Camerarias son of the great Camerarias, and heir of his vestures first observed, Pliny advethed to rot 20 of them and to drink them with sweet wine against shortness of breath, and spitting of blood. The ashes of them in honey, applied to the rugged edges of ulcers takes them down; they are likewise exceeding good for the stopping of womens courses or monethly purgations.

Hitherto I thought good also to refer the water Grafhopper of Ron- dolin, whose head is like a pentangle, having as it were five corners, the eyes round and standing out of the head, not great but black; the cornicles very short, coming forth out of the outermost part of the mouth; on each side it hath three feet the hindermost longer than the rest; on the back it hath little winges or some coming; the tail forked, the belly oftentimes as it were cleft; the colour of the body some-what dun, or rather black and white. I found them in muddy and stinking waters, but the nature of it I yet know not. This differs from the land Grafhopper, both for that the head stands out more; and it seems to have some kindes of neck, and also it hath winges not fit for flight, but only to lift it self up. This is said to make a kind of a pleasant noise like the land Grafhopper, upon the leaves of the water Lilly, pond-weed, and other water herbs, The which I have not as yet heard.

Of Moths called Blattae.

Often men talk much of the Blatta, but few or none able to describe what the Blatta, properly so called are, neither do they give the least mark whereby they may be known; but gathering divers notions here and there do put them all together and confound them. And but that Pliny had brought some light to this Hiftory, the Blatta had altogether been omitted or left. First of all therefore we shall shew what insects the name of Blatta was given according to Authors, then we shall set down what the true Blatta and properly so called is. Now under the name of Blatta are comprehended both the worms growing in the ears, as also those Phalenes which...
which trouble the Hives of Bees. But since these doe the light, the other altogether shun it, why they should be accounted Phalens, I do not see. The Blatta also is a little worm eating clothes or books. So Horace in his Sermons, Blattarum & tintaum epilae & c. But Marius altogether differing in between the Blatta and the Tinea, and thereof to be creatures of several kinds.

It is taken also of the Moderns for the little worm called nip out of whose web silk garments are made. Some call the little worm that groweth in the grain in the low oake, Blatta, from whence cometh the Blattarian colour, or grain colour. So Turner, aduers. l. 18. c. 17. & l. 28. c. 23. The Blattarian colour is dyed with worms which come out of the grain of Cockles, out of whose blood is produced a most curious colour, not black, as some think, but a bright purple or scarlet. To which the Book de natura verrum & Guilel. de Conchoi do allent. The worms of the belly some call Blatta. Cardamines in one place calleth the worms that breed in meal or bran, Blatta. Gaze interprets the word ῥήχον as also ἀπόσπασμα, Blatta. The proper and right name thereof is ῥήχον; according to Pollux, ἀπόσπασμα; as also according to Lucian, deciding a man that was no Scholar, yet bought many books. The Italians call it Blatta, and Turma; the Hebræans Pintesta; the Germans: Stikell, Brotworms Brotpfahser, Malzgesafer, Springwibfell; they of Norimberg call one species of them by way of sport Schauhans, because it cannot endure cold, as Cereus virideth; the Illyrians, Swine; the Polishans, Molonzy; the Hungarianans, Mozy; the Spaniards, Ropa eva postilla. Now the Blatta is an Insect flying in the night, like to a Bettle, but wanteth the head wings.

There are three forts of Blatta; the foit Moth, the mill Moth, and the unfavourable or flinking Moth. Fraijns divides them altogether fallilly, confounding the foit and the flinking Moths one with the other, and making the ἀπόσπασμα to be the third species of them, seduced as it seemeth by Gaze's interpretation. That all of them when they are old do shift their skin; both Arif. hist. 8. c. 17. and Pliny l. 11. c. 27. do affirm. All the males are suppos'd to have wings, but the females certainly have none; they also are lefs soho more bulky and big bellied. All of them (but the flinking) run very swiftely, and die with cold. The male is foit, the female of colour more black, it hath a small head, whereout come two long comicles, every wates movable; the breath together with the thoulders orbiculare; in the body it hath feven incicroes; the wings are of the same colour with the body, it seldom flies, but (as the Oldrich doth) by help of the wings it doth run very swiftely; it hath a forked tail like a pair of Barbers cissors; it hath fix feet. It live about Privies or Lakes houfes, ditches and flamy foggy places, for the most part they are somewhat like the field Kricker, but of a more compact body, and with far more slender thanks.

In the Ship called the Philip; (which that noble other Neptune, Sir Francis Drake, took laden with spices) there was found a wonderfull company of winged Moths; but somewhat bigger than ours, sofer and of a more ivarthy colour. I have heard by many men of good credit, that there was one of these foit Moths found and taken in the top of the roof of the Church at Peterborough, six times greater than the common Moth which did not only piece the skin of those that fought to catch it, but it so deepeth that it did fetch blood in great quantity; it was about a great thumbs breadth in bigness and length, and being fluf in between two walls, yet after two or three daies got forth no man knewhow.

The Mill or Bake-hous Moth, I have seen : the Greeks call the female (if I am not deceived, because it had no wings) μακεις, μακης, μακις & ἀπόσπασμα: it is longer thicker, and of a more shining black colour than the ordinary foit Moth, with a little forked mouth placed as it were under its belly; the comicles like to the fisil, little hollow eyes; or rather eye-holes; the breast fourquare, with the four foremost feet fatned to it; the hindermost to the belly; above the thoulders appear as it were little wings, though they are not so indeed; the rest of the body somewhat thick, cut all over round about, circle or orbiculare wise; in the sides resembling the form of a faw, the tip of the tail and a fork growing on each side is somewhat like a Trident: these Moth Krickers take up their abode in warm places, as floves and bake-houses, and fuch like; let them be never so hungry, they will scarce indure to come into the light; or if they be compelled so to do whereby to get some food; they bereke themselves into the dark again with what speed they can; or else hide themselves in dust that they may not be found.

The third foit is fo unfavourly, and carries with it such a flinking smell, that from the same it is called of the Greeks ἄνθος, of the Latines, Fadida Blatta; i. e. the flinking
Of lesser living Creatures.

flinking Moth; it hath thighs sharp with prickles, as Pliny declareth it, the which mark of di- 

minution, if he had not expreth, perhaps this kinde of Kricket had not been known, or seen by 

me. For the black Beetles (especially the hairy ones) they are altogether of the same form, 

only the tail taken off. It is of a pure black glistering colour, very flowy paced as no crea- 

ture the like; the body so framed and ordered, that you would swear it were winged and had 

sheath wings, nevertheless none of them have any wings, nor the male it self amongst this fort of them, (what ever Pliny dreameth to the contrary) it hath thin flender long flanks; remains in deep cellars, and is a retainer to the 

Jakes; it creeps very slowly, but at the least glimpse of light, and whisper of talk she hides her self; a flametone creature, certainly, and most 

important of light, not so much for its ill favoured, but the guileness of its 

confidence in regard of the flink it leaves behind it, and of its ill behavi- 

our: for it frequents base places, and digs through other mens walls, and doth 

not only annoy those that stand near it, but offends all the place thersabout 

with its filthy favour. The mouth of it is forked, the back covered (as it were) with a sheath wing, to solitary a creature that you shall scarce find 

two of them together. Whether it be begotten of pure religion, or otherwise generated by the 

.commion of male and female, is not certainly known.

About Frankford near the River Min they are frequently seen, as also in London in Wine- 

cellars, and dark dungeons: the other species are more frequent in Bake-houses, and warm places. 
The flinking Beetle some confound with the Cimex or Wall-loser, a creature of the like 

quality; but not rightly. The inhabitants of Petnym have certain creatures which they call Aram- 

ers; Savius thinks them to be Butterflies. They are of the bigness of the Kricket, they go 

forth a great many of them together in the night time, and all that is in the house almost that 

is soft they nibble about and eat it. Lib. Navii. Butterflies I cannot say they are, because they grow, 

and do not fuck with their Promutics; I would therefore either make them to be Krickets, or 

some new kinde of Moth, or some creature mixt and made of both. In an Epistle of a certain learned nun 

sent to Gephe there is a description of another kind of flinking Moth. There is faith he a certain flinking 

flying Insect in Hungary that flinks beyond measure; I should call it a flinking Grathopper, 

but that is more like the Kricket. In Winter it defires the light; in Summer it thuns it, when it flies 

it makes a kinde of a terrible horrid noise, leaving a momentome flink behind it. Some there are 

when the air is infected carry this creature about them as some secret remedy, and adore it; 

say fome of them, which a hog would scarce do, will swallow them, so afraid are they of the 

Plague, and so desirous to use means against it. They are bred in wells where they are most frequent there 

grow as they say the most generous wines. & I have found it to be true by experience. So far Epistle.

All the younger Moths are whith, but at their full growth of a bright red or tawny. The 

flinking are as black as a coal.

Diverse Authors do speak of four other sorts of Moths, viz. the Venereal, bred in the genitals 

of men; the Bee Moth, the Cloth Moth, and the Library or Book Moth; from eating of the Books: 

but none of these, but the Bee Moth agreeeth with the defcription of the Moth: but that neither 
is so flinking as the one called Blatta, or so foist as the others before described; but of a more 
dim nature, rather poultered with meal than announced with oil. Of the rest of these we shall 

speak more fully when we come to speak, God willing, of the Lace and Moths called Times.

Much variety of opinion there is among the learned of the colour of the Blat Moth, or the 

Blattar colour. For if these Insects (of which we have now treated) are the Blatta truly so cal- 

led, why should not the black be the Blat colour, rather than red purple colours? Certain it is, 
it is that the Bizantine Blatta yeelds a purple colour, as that of the worm Cocinenal doth a red or 

scarlet; either therefore all colours may be called Blattar, or else this last of ours is not one, 

Indeed I wonder at the boldnes of Turpinus and Thylus, which will have that of the worms 
to be the Blattar, when as they are of no Author called Blatta; but rather properly it ought to 

be called a Scarlet red. The Blatanner colour therefor, to say the truth, is the Purple, nor- 

withstanding our Blatta send forth no such kindes of liquor; but are flies of the light, malle, cruel, 

rough, theewing, living of nocturnal depredations after an infamous manner, whence Servius 
calls them P Vendor inurn navigantes, night Pirates.

These little creatures, although they are hateful to nature it self, to Men and Bees, yet God 
hath endued them with a dainty vertues, in which they excell the Blatane Bizantine. For take off his 
shell or nail, which is there between his head (called papaver) and its neck, what doth the belly 
contain but the ornament to dye withall and to delight the eyes with their colour? And be it 
so that Princes and great men will buy it though never so dear, and by the greatnes of the price 
made it only fit for Kings to wear; yet notwithstanding when you have heard the virtue of these 
Beetles otherwise so contemptible, you will say they are far more to be esteemed than purple. 
For they are wonderful good for the pains in the ears, taken after this manner: Take twelve 
Blats with their wings crop off, of old wine and honey and 3, and half the rind of a Pomem- 
rane, of the juice of an Apple & spoonfuls boil them well in a new pipkin till the rind of the 
Pomegranate be made limber and foist; then beat them all together which done, add quantity 
Syracuse 3, of Tarne 3, the juice of 4 Onions priffled our what may suffice beat all these 
together and by them by for use; let this decoction be droped into the ears, and a lack of
new from wool is kept in warm. Galen [see loc. l. 3. Experience witnesseth that the foil Blars boyled in oil and put upon Warts are so good effect. The mill Blar, the head being taken off and the body bruised, doth cure the Leprofe, as Mafe and Pithen have left in their Receipts. The fit of the tinkling Blar, when the head is off, beaten with oil of Roses, Galen out of Archigenes faith is very good for the ears; but the wool in which they put it, must by and by be taken out: for that the substance will quickly breed worms. Others write that two or three of them boyled in oil, bruised and put into a little limen bag and applied, are very good for the same purpose; their entails beaten with oil or warm water are likewise good for the same, being dropped into the ears. Pliny faith, l. 2. c. 36. that from the two fat the heads must be pulled out before they be used in medicine; from the tinkling, the feet and wings, or rather that crust or shell like wings on the back, that being more hard, and more poiyonous; but it hath no wings. The tinkling Blata moreover mingled with oil or pitch, are laid to cure Ulcers, otherwise incurable; as also Wens and Swellings in the neck, Botches being layed on for 21. days together: they cure alfo the Scab and Fellions; bruised and fettled Sores, the wings and feet being hit taken off. We did thin to hear of these things yet truly Diocorus (as Pliny faith) reports that they have helped the Kings-evil, and difficulty of breathing, mixed with Rotten and Honey: the most learned thought fit to keep the ashes of them in a horn box for this purpose, or the powder of them to put into the body by way of Clyfter. Cardan faith they take away pains; but what pains or what kind of Blata should do it, he tells us not. The Phrygians and Lycianians anoint those with them that have a lapponge in the Matrix. Pliny l. 36. c. ult. Latt of all they may serve in head of Caileourum for an Antibil ammon; and Galen with them in head of the Bupre fis.

Now if you would have a remedy against themfelves, cast but a handful of Flex-bane (the Greeks Mafcula is the Lazines Camilage) and all the Blats will gather together to it. So called in Rome Blatara or the Blat-herb. Nature hath provided a remedy against them for the Swall owes; they are wont commonly to ipoyl the Swallowes eggs, wherefore they use to fence their young with Parly or Smallage, whereby the Moths are forced away from their nests. The which might be thought to be the Region of Ethen, but that Zoroafte in his Gepocnikes doth affirm the fame. The Upupa or Hoare inclufe their nests with earth flax against Moths. The Chong, ufe the herb Vervin to the fame purpose. If they be annoyed with the oil of Spice, it works the like effect, as Pauch Camer. reports. That they may be rid out of Gardens, let us hear Diophanes his advice; Get the Guts of a Ram fresh killed and full of dun, bury it in the earth where many Moths lies, and caft the ground lightly upon it: two days after all the Blats will gather to it; the which at your pleasure you may carry other where, or bury them deep enough in the place, that they shall not be able to rise again. If you would prefer your Bees from them, use sharp fumigation, or set lights near to the Hives, or else anoint the props whereon they fland, that they may not get up.

**Chap. XIX.**

Of the Buprefis or Burncowe, and the Cantharides.

Many of the Naturall Philosophers have made mention of the Buprefis, but so little, that they seem neither to have touched either their form, or qualities, no not so much as their true Name. For Argyrun Cals it Buprefis; Vigelniueter. l. 3. c. 15. Cals it Vulpefer or Bulpefer; and in the 78. chap. Buprefis most corruptly Situatio; if any other chief at Barbarns-cals, it Bupferis, Bullifer, Bupfis, to corrupted was the Latine tongue in these blinde time, that Barbarn had wrought a general confusion in all places.

Now the true name of it is in Greek, ἱππος, which is from θαυμα το βίτα, glia bowes rumpes, because it uheels Owen; Nicander in Alex. derivs it ab incendendis bowes, from burning or enfaming the bowels of beafds. It is called in English Bupres or Bupris, in Dutch Bupris, Bupris, in Lowgale, Blintz or Blintz, and in Hindewite Bupris. They are not Buprefis keepers know full well.

For first of all by their acrimony they enfame the belly of cattle, upon which follows a tumor, and a fewer, and a kinde of a hot typanomy, by which in the end the bowels are burst. By other, as by Helfchins in like manner:却又, or Belfchins, which is more rightly ascribed to this kinde of red little Spiders, found in nature grounds, which doth ufe to bite them. In English it is called a Blintz-buck, or Trangy, which being eaten by carpel doth produce the like tyrromes; the Lazines retain the Greek name of Buprefis; of the Germans it is called Geuchs Gach, Knofller, Gouffler, die Grimm, Stuckhenden, Wildenmunde, Rencker, or of those of Heidelburg, from its swift running, ein Hlut-zuck; in Italian, Bupris; in Spanish, Arcemb, bufis, if Mathadus say true. But I for my part, somewhat boldly, though not improperly, do adventure to call it by a new name in English Burncow, or Burncow.
Pennins reports that he light upon one about Heidelberg, and a true one indeed, who describes it thus: it appears faith he, both in shape and quality to be a kind of Cantharides, both for its force and properties (if Galen, Aegypius, Phaenomenus, Actius, Plinyus and Avien to be so believed) but of a longer body, the outer sheath wings of a yellowish green, or rather of a golden yellow; the thighs also are longer and thicker, the eyes globous and prominent, out of the forehead, near the eyes come forth two long horns, joynted; the head small; the mouth is wide, hard, strong, forked, having teeth with which he doth cruelly wound and bite; the belly not round, but very long; a great toe to the Beetle and the Lizard, aiming at their bellies (as being the softer and more penetrable part) which presently the grawes through, and when they fear to be overcome or caught, presently the retreats and hides her self: somewhat strong of taste (as Altimanus faith) upon the palat. Actius makes it to have a ftarch of Nitre both in talfe and smell. Cornarius, Lomercius, and Cordus being deceived by the strong fmalill of it could not forbear to say it was the same with the Cimex or nofome Wood-pevs, and called it accordingly Knifer and Quefier. It feedeth on flies, cankers, worms, and other the like Insects; provided the kill them in fight, for those that dye of themselves or are kill'd by others, she will not touch: when the hath filled her self with the carcafes of the flats, what she leaves the draws into her hole, and when she is hungry again feeds on them. Other safeguard qualities of this little creature let Peter Turner and William Brewer (Physicians for learning and opinion of contradiction second to none) relate, who with the Pennius at Heidelberg did observe its life and manners. Bellomius in his description of Miscellaneous Actius makes reference to the true Buprestis thus: it is (faith he) a little winged flying creature of a most strong fenflike to the Cantharides, but greater, of colour yellow or clay coloured; of such exquisite poftion, that the cattle when they have fed there a little while, do die of the graffe infected with its contagion. It hath its abode amongst the herbs called Saccory, Flea-bane, Nerdles called Voupefis by the inhabitants of Mount Atlas. Thus far Bellomius. From whence we may truly collect that both descriptions of them do agree, as concerning their ill favour, their bigness, qualities; only they differ a little in kind and colour. For we have not seen any of them yellow, unless I may call a greenish gold colour yellow. Neither indeed is it for to stand too much upon the outward fhape or colour; but admit that according to the diversity of the climate, they may both receive some alteration (as it is in men) and yet be the same in species. Another Buprestis of the right sort I have seen, the body a little shorter, and broader about the belly, the tail more piked, the head small, the eyes standing out the mouth gaping, and forked, the fheath wing for the length of it, chamfered; of a full bright gaffs and golden colour; the legs but six in number, long, proportionable to the body. The Prints of Mathiolius and Grevenius, beyond the nature of the thing, and the experience of their own eyes, express eight and more flander, (considering the bigness of its body, than the first fort of Buprestis) and blackifies the cornicles also but half to bug, and smaller; it equals the fift in liveliness of pace, goeth beyond it in noytomnes of favour, yea in this it excels the Cimex of thinking wood-lowie her self, and all wilde creatures. It hunts after Flies and Canker-worms, wherewith it is fed; so vehement strong it is, that it will kill the most deadly Spider that may be. Flyes faith, that in Italy this creature is seldom found, but now (as we have reason to believe Marcellus Virgillius) they are more common than the flare of the country can well bear.

But that they are indeed venomous by nature, and very nosious to man and beast, as Actius witnesseth (for they kill both by their whole subsance) doth appear even by this, that those which should give them to any one to drink, were as Blandam faith in his Par
delpe, to suffer death, For in the Law runneth: Quis Buprestes vel praecampionem fictaminus confci, aut mortiferi quid veneni ad nocem acce
erandam dederit? Judicio capitulis, & patre Legis Cornelius afficiens, who
ever hath give a Buprestis or a Pine-tree Worm to drinks, to kill any body or any mortal poftion being found guilty of such wickednes, their suffer death by the Law of Cornelius. I have been about Heidelberg two Buprestes like Scarabæus, the one of a golden green, the other of yellowish black. The one like to the former which we have described, but somewhat bigger; the outer wings all over streaked with golden lines, and shaded with a little green; between the lines rise up boles curiously wrought; very swift of pace according to the common nature of that Infest, But that which is of a yellowish black was sent unto me from Vienna by Jacobus Quickelbergius of Aumper, who hath been a great help to me to enlatch this history. The colour excepted, and that it was a little bigger, and had four horns, it altogether resembled the last we described.
The Theater of Insects: or,  
Book I.

The Ute.  

Although these Insects are such as hath been said, that they fret with their acrimony; that fretting they enflame, and with their poisonous inflammation cause extreme thirst, and a horrible swelling; insomuch that the very skin is burst; yet hath Dame Nature made them not withstanding very wholesome, which Art afterwards hath prepared for medicine, before they be put in use.  

Plinius and Aegina dispute whether they should not be prepared as the Cantharides.  

Dioecetes dries them in a sieve over hot embers, and so layeth them by.  

Galen steeps them in vinegar.  

Hippocrates commands to take off their wings and feet.  

And because they fret, excelle, enflame and swell up, and do strongly attract and heat the parts so fretted.  

Dioc. l. 2. c. 59.  

faith, that being mixt with fitting ingredients, they may be applied to the Leprose, Cancer, and wilde Titters.  

My opinion is, that they may be used in field of the bigger parts or Cantharides, rather than some kind of Blates (by Paulus his leave, if I may say so) not only because they are somewhat like in shape and figure, and in virtue also, as Galen writeth.  

Pliny saith that the Bupreftis by way of corrosive doth take away Ringworms in the face.  

Hippocrates doth much commend them in divers diseases of the womb.  

For to be written in his Book of the Nature of Women; and in his Book of the Diseases of Women; and in his Book of Barrenness.  

For the hardnes of the womb, to emollient juices and fat added Bupreftis, and sticte.  

To drive out the Monely Flowers and secondistes, prepare half the body of a Bupreftis (whether great or small) with twice as much pulp of a Fig, and apply it; for it purgeth the womb, and inflate it, and is a special remedy to procure the Flowers when they are pait hope.  

Sometimes he applis only a Bupreftis (if it be a great one) sometimes making a foft peffary, he takes ten, and adds to them a little fauer of oyl, and mingles with it Wine, Aebiopian Cumin, Seufes, and Ammiede, of each alike parts, and whilest they are hot he makes a peffary of them and ufed them to the Matrix.  

In the strangling of the womb, when the fit is over, the body first purged, Hippocrates makes a Medicament with a Bupreftis, and thrusteth it into the Matrix.  

Alfo for a Schirrous of the womb he ufed a Bupreftis, but wary and with diligent consideration; for he puts it in like a Suppository for one day, and when it doth much vex the patient by corroding, he bids it to be taken forth: moreover he compounds a Bupreftis, Myrrhe, and Etherium, and puts it in.  

So he doth also to bring forth a Molis, Gal. l. 12. cap. 1. out of Archigenes, describes a Medicament of Bupreftis, with Vinegar, Crowfoot, and Wakerobin root, against falling of the hair, Leprose, Elephantiasis, &c. the cure whereof you may easily finde there.  

Now as I have declared hitherto its profitable qualities, to (left I should transgress the bounds of history) I shall open the terrible effects that this poisonous creature causest in man and beast;  

if a man swallow a Bupreftis, tis as all as if it had been a Cantharides; the body swelleth, as if it had a tympany; much wind creeps between the skin and flesh; which happeneth no doubt by the flux of humour melted by the poison, and the vapours elevated upwards.  

The lips are of a strong colour, wiu, of a dead violet.  

In the mouth there is the poisoning of the tongue, the stomach, belly, and guts do ak extremely, the urine is flops, the body is ill all over, as also the head and brain are sensible of it.  

The remedy.  

A remedy of this is Salt-pees, taken in Wine and Oxe gall.  

Useful to that purpose is womans milk, suck out abundantly, and in defect, cowes, goats, or fleeces milk.  

Womans urine drank, and vomited up again; but before a vomit they ought not be given; because by that means the Fever would be more sharp.  

Dioec. Frit of all therefor of good flour of Wine sodden, or with oyl of Myrtle Bacon Iard or Pork broth, or with good oyl of Olive, or boiled Wine a Vomite is to be made.  

New Drink drank freely, is held to be a special remedy against the Bupreftis.  

Galen and Archigenes. Pliny commands Nitre with water, or Latervorts, Aja dulce, Wine and Honey, or Bezoine dissolved in warm water; or take red Nitre 4. drams, and in warm water of Poica cause Vomit.  

After vomit there must he means used for purgation, afterwards use dry Figs (as Galen precepts) or a decoction of them in old generose Wine when the fit begins to be base.  

The Thebene dust is prescribed to eat alone, or bruised in sweet Wine or womans Milk: all kinds of Pears, and oyl of biosflomes of Apples, are much commended for this use.  

Nicander commends wood-pears, (for that I think he means by exwestes) and especially Myrtle berries following the authority of Dioscorides.  

For that they do refrigerate and bind, and by that means do asswage the hot nature of the Bupreftis, and help the weakness of the stomac.  

But heed must be taken they be not eaten while the body is yet swoln, lest the disease be increased by the poiyon being kept in.  

Some with good reason give 31. berries of bladders Nightshade, and with Almonds the make Almond-milk, together with the decoction of Lettuce, Violets, Borage, Buglois, garden Nightshade, Plantain, Raisins, and the great cold Seeds.  

Acinis gives the root of Scorion-grafs in sweet Wine to drink.  

Many extoll the wings and feet of the Cantharides for an Antidote against the Bupreftis, but either it hath an opposite quality by antipathy, which makes good that opinion, or else we may suppose it to be false.  

If an Horse or an Oxe eat one of these flies, presently he swells, growes mad, and shortly after burrest and dieth.  

So Aeian, 6. de Anim. c. 35, and Hierocles a Greek writer witnesses it.  

He bids to binde the horses head, and to open the veins about his noffles, that the blood may run forth of his mouth, and to rub it with Coleworts, and give him Fih-pickle and Oyl: and Vegetine likewise almost in the same words: If a Horse or an Oxe eat a Bupreftis with the grafs, his belly will instantly swell, he is inflate all over, he refucheth his means, and he often and by little and little sends forth his dung.
To cure this, 

\[\text{Abstain and tinge with the same remedy: presently get upon the Horse and cause him to gallop as fast as he is able, afterwards let him bleed a little in the roof of his mouth and let him swallow the blood as it runs forth, chewing it in his mouth; then keep him continually walking; let his diet be wheat steeped in sweet Wine with Leeks given him with a horn in Wine warm well beaten with Raifins. Some, as \text{Praeulius} taught them, pour Oyl into the nostrils of the Oxe; l. 17. c. 17. To Goats that are swolen with the Buprestis, apply Bacon-lard, or pour the fat broth of it down their throat, faith the same Author.}

The \text{Cynopteris} seems to be the same with the Buprestis, for that works the same effects in Dogs as this doth in Cartel; or if it be a different sort of creature from this, I confess ingenuously I have not met with it.

\[\text{Chap. XX.}

\text{Of the Cantharides, or Spanish Fly.}

\text{I know not what the reason was that the Cantharides above the rest are so well known, of so great use in Physick were omitted by \text{Pennius} and \text{Gerber. Which task notwithstanding I shall willingly undertake, and thus I begin their History. The word \text{Cantharides} in Greek is the same in Latin; in French, it is \text{Canarde}; in Italian, \text{Canarola}; in Spanish, \text{Cebilla}; in the German Tongue, \text{Granne, Kaffers, Goldkaffers}; in Low Dutch, \text{Spaensche, Dielebe}; in English, \text{Cantharides or Spanish Fly.}}

Of the Cantharides two sorts have come to our knowledge, the one greater, the other lesser. Of the greater sort there are some thick and long, taken in wheats; and fat likewise as the Blats and drawn with variety of golden lines, which in the wings run athwart, and those are accounted of the best use in Physick. Others are lesser and lean, hairy, called the innermost, not so fit for medicine. Of the greater sort also not all are of a glittering green, but some of them of a red, but all of them of an inexpellible splendor, and very pleasant to the eye.

The smaller Cantharides \text{Thomas Dreyce} first of all acquainted me withal, they seem to differ a little in shape and bigness; but have all the same virtue and original. Of these lesser, the first hath a long forked head, with black eyes standing out, the cornicles long and black, the wings coming forth of the middle of the loin; the which are marked with two silver coloured spots, and a few other white specks. They are commonly found in 

\[\text{Keeses, or Asle Partly in the summer time. It hath feet and thighs very tender and long; of colour virmilion inclining toward a purple. The second is of the same colour with the first, but only that the eyes and cornicles seem to be green. Of the third the head and shoulders are not to be distinguished, of a rufy colour, and the eyes as black as pitch; the wings of like colour with the head, but glittering with golden streaks, the feet black and short. The fourth is like the third, but only it is rufier in colour of grafs green, not rufy as the other; otherwise, except the bigness (for it is the least of all) it doth not differ. As well the greater as the lesser of these Cantharides, do not come of living creatures, but of dry and moist pustilation. The race of Cantharides is bred in wheats and corn fields, and in fig-trees also. 

\[\text{Thomas, as in his Book and Chap. They are bred also of the sponge of a Roke called \text{dem Carinus}, and of the Caterpillars which are found in Fig trees, Poplar, Pear tree, Ash, Olive, Roe trees; for in all these there are worms bred that are the originals of Cantharides, but in the white Roke they are less effectual. The Cantharides couple and generate likewise, but not a creature of their own species, but a worm only; they feed upon pulp and grain, but espically of wheat, and those which are so fed are accounted most fit for Medicine: they smell like Tarte, taff like Cedar, as \text{Nicander} reporteth.}

Their virtue consists in burning the body, causing a crust, or (as \text{Diocides} will have it) to corrode, cause exsculation, and provoke heat; and for that reason are used mingled with medicines that are to heat the Lepry, Tetters, and Cancerous sores.

And in being mixt with Celers or fit plaisters, they do cure deformities of the nails, causing them to fall off. They are used in medicines for Corns on the feet or hands. Some
Some anoint the places where the hair falls off, with Cantharides bruised and liquid Pitch; the skin being prepared with Nitre: they are good for Cauterities but care must be had that they do not ulcerate to deep; then some command to anoint the ulcers, thereby with the gall or dung of Mice mixt with Hellebore and Pepper. Cantharides mixt with quick Lime, cure Botches, as if you should cut them off with a razor. Some use to call a little of them into Medicaments to provoke urine. But there is a great question of it, because they are poison drunk, in respect of the bladder that they afflict with perpetual torment. There is no question but in ointment they may, do good with the juice of Wilde Vine, or with Sheeps or Goats fats. Some of my Masters put only their wings and their feet into Medicaments that go very well, urine. We, faith Galen, are wont to call in the Cantharides whole, and we judge them to the be the, that are found in wheat, and have a yellow girdle running adveiz, their wings to adorn them. L. 3. & l. 11. de simp. fac. also put under them mightily provoke the terms, and put Medicaments for the Dropie, they are a very good antidote against it; as not only Hippocrates and Dioscorides, but Galen, Avicenna, Rhadis, Pliny, and the best writers do repute amongst Physicians. I cannot here prove sufficiently the excellent use of them, with Levia, Salts, and Gum Ammoniac, to divert Catarrhs, to cure the Goe in the feet and hips; by drawing the matter that lies deep from the centre to the superficies. Alfo they are good against the venom of the Salamanders, as Pliny teacheth l. 29. c. 4. Alfo in some cases, and in some compositions, they are good for such as want erection, and do promote venery very much. But as righty mixt and exhibited in due proportions they are good for being alone, and being not rightly mingled and given disorderly, they cause cruel symptoms and sometimes death. When Ann. 1579. I read at Eafa, a certain married man (it was that brazen bearded Apothecary that dwelt in the Apothecaries' shop) he hearing that his stopple was too weak to drive forth his wires chaffily the first night, consulted one of the chief Physicians, who was most famous, that he might have some efficie prevalent Medicament, whereby he might the sooner dispatch his journey. But when it was day-break almost, there followed a continual distension of the yard without any venereal defires, and after that bloody urine, with inflammation of the bladder, and the new married man almoft fainted away, all Antidotes proving nothing a great while. I remember that the same thing happened to a Noble man of Frankfort in my remembrance, whom when an illiterate Physician thought to cure him of the Dropie by giving him Cantharides, one in number inwardly, he killed him with lamentable torments. Have a singular remedy against the weakness of the Genital parts, which when I used it indifferentely, however it did great help to many Noble men, and no hurts, (who generally are more fuidious in venereal matters) yet it did one amongst the relef so much harm, that after venery (which he was too much addicted to) he pifled blood continually, and swounded away frequently; truly unless there had been plentiful of milk at hand, this Firis bird had died and suffered desperately for his Lechery and licentiousness. Thus far for their Phyletical force, now we shall pass to their deadly and ignominious qualities. They are held to be amongst the number of poisons most deadly, not only by reason of their corroding and inflaming, but by reason of a purifying quality they abound with. Their juice entering into the veins either from the flameth, or by the skin, destroys a man like to poison. Therefore Ovid when he wills mischiif to his enemy, lib. Tibi, withes that his parents might give him the juice of Cantharides to drink. Cicerò ad Fec. l. 5. & epist. famili. Casus by the accufation of L. Cahrus is said to have taken Cantharides, and if by that means he was resolved to kill himself. Gel. l. 3. de simp. fac. writ thus: If they be taken inwardly in a very small quantity, mangled with things fitting, they powerfuly move urine, and sometimes corrode the bladder, whereas it manifesteth all things that kill by a cold quality, if they be taken in a small quantity they may nourish the body: but such as kill by purifying (as Cantharides do) not at all; since they are enemies to mans nature. Coffles a Roman Knight, well noted for his familiarity with Venus, when he was sick of a dangerous Tetter, a Physician was sent for by Cales to cure him, who gave him Cantharides to drink, and so killed him. Pliny. Also Cantharides were objected against Cato of Utica (as the same Author faiths. l. 29. c. 4.) as if he had sold poifon by open fale, because he fet them at 6o. Sextertia. But when they are drank too largely, or applied outwardly too long and too deep, they are wont to produce these symptoms. There happens pickling and pain in the bowels; which is extended from the mouth to the secrets, and to the loyns, and humachers, and hypochondres, and they ulcerate the bladder with a painful ulcer, and inflame the yard and the parts adjacent with a vehement Inflammation: then they pifs blood, and after that pieces of flesh. Sometimes there follows a Diarrhoea and Dysentery, swelling and dulnes, and the mind is perverted, and there is nauseating and heaviness, and a frequent desire to make water and go to stool; but almost it is in vain. They taie a taste of Pitch in their mouths: all which symptoms are set down in Dioscorides l. 6. c. 1. Gal. lib. de Ther ia, ad Pifton. c. 4. and l. 3. de Temper. c. 3. and in Rhadis lib. 8. c. 17. To those that are infected and affected, Dioscorides first prescribes frequent vomiting, then frequent Clysters made with Nitre to cleanse the guts; then to preserve the bladder he gives milk inwardly and fleas feed and. And he will have their Clysters made of other matter than at first, namely of Barley water, Marsh-mallowes, white of Eggs, Mulcilage, of Linseed, Rice-water, decoction of Fennel, Hydroiels, fat Broths, Oyl of sweet Almonds, Goose-grease, yolks of Eggs. Alfo he bids to give inwardly Cowes milk that is lowe, Hydroiels, kernels of the Pitch-tree, the great and the
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the small, sweet new Wine, Ducks' grease, a decoction with Diurick seeds, (namely the four great cold seeds) and decoction of figs with syrup of Violets. Oyl of Quinces is commended as the certain Therack for this disease. Also oyl of Liffles, and Samian clay. Rhafis after that Clyfters of far Broth are call in, will have incocion made into the yard with Oyl of Rose fs; and the fiek shall be put into a warm bath in a great Var. sit. c. 17. Authors are not agreed in what part the pofton of Cantharides doth lie. Some think it lyeth in he head and fees and others deny that; yet they all agree that the wings are an Antidote in what part forever the pofton lyeth; and tho' being taken off it is deadly; so that this venom hath its remedy joyned with it. Plin. l. 11. 35. Lyrum of Napley writes that Purflain is an Antidote against Cantharides, which Pliny l. 20. c. 13. affirms of white Basil: who alfo l. 23. c. 2, and 4. l. 38. c. 10, commends very much Vinegar of Squils, Oyl of Dill, Cofes Milk, and Broth of Goats Befh. And thus much shall suffice for the History of Cantharides, which I wonder that the molt learned Gefner, and efcpecially Peninus overlift.

CHAP. XXI.

Of Beetles.

The Beetle is an Infeft that may be called unufualnes, as if he had his wings in a feathet.

It is bed of putrid things and of dung, and it chiefly feeds and delights in that. The Greeks call it αὐλοφόρον; the Tyrians, δαμαΣ; the Germans Κατεγραφον; the Italians Efferuavino, Peloter; the French, Efterbof; the Polonians Krewka; the Illyrians Krabak; the English, Beetle, or Bug; the Northern English call it Klock; but the Southern, Starkenbeke; the Arabians Kanafis and Kanafes by Aviörenna. The Greeks all with one consent, hold that all Beetles are males, whereon one may eafily understand the fente of Aufoin his Epigram upon Marcus that was gelled, Rhodinios l. 8. c. 5. Antig. lef. renders it to us. Also the Egyptians caufed a picture of this creature to be made on the statues of their Heroes, intimating thereby their munhood, that had no mixture of feminine weaknes; for men muft be valiant and manly, feminine puflimainity is a great disgrace to them. All Beetles call their skins, and they have no sting; when you touch them they are afraid, and they leave off to move, and they grow hard. Alteru s did vainly attribute to them four wings hid under a claffy cover, for experience fhews but two, very tender and frail, wherefore they have them put up in a hard cover over them, to defend them that they may take no hurt by hard bodies. For the great part of them either dug under ground, or bies rooted wood with their teeth, and makes houfes and nefts there: so that if they were not excellent well guarded, they could never keep themselves safe from external injuries. When they fly they make fueh a humning or noise in the air, that Laerius write the gods talk with men by these creatures. Of all plants they cannot away with Rofe trees, and they hate them as the deituation of their kinds; for they dye by the smell of them (as we read in Geopu) but on the contrary they take great pleafure in flinking and beaftly places.

I remember one was call to cleifie privies, when he came into an Apothecaries shop at Antwerp; and fmeft the fpices, he prefitly fell down in a fwoon, which one of the ftandants oberving, he went and gathered up some horse dung in the ftrees, and put it to his nofe, and to a man used to flinking fmes was recovered by a flinking smell. Therefore it is no wonder if a Beetle (that we faid before was bred and fed with dung) being anointed with oyl of Rogers, he kill'd thereby; they are the words of Clemens Alexandria. 2. Pedag. which alfo Plu tarch elsewhere, and Aelian alfo affirn. They abhorre the fmoke of Alhur, efcpecially of the leaves of Pflamum, Acer, Cow dung, and Nigella feed, Rhafis 88. The Hemerocallis of Di efordices is called by some άµηρόβος; for the great force it hath to kill Beetles: but as they do extremely fhun thofe plants, fo they very much affect to be under its shade, and they naturally delight to go under it, under which when they are gathered in heaps, it is an eafe matter to catch them, for they will hardly go from it. Beetles are some greater, some lefs. The great ones, fome have horns, others are without horns. Thofe that have horns, fome are like Harts horns, others like Goats horns, others have Bufs horns, others have Rams horns: fome have horns in their nothes: we fhall speak of them all in order. The Ιλιναίος, or Harts horn Beetle is called Locomus by Nigidius; as Pliny winnefeth. Some call it the Bull, others the flying Stag: Hellychus call it ιννοβος, because it lies hold on things in its way with thorny fpecies: the Comedian and Englaffhin call it ιννοβος; because it is the greates of all: Car danus calls it ιννοβος, a word commonded of Greek and Latin; Gerae Cals is Ιννοβος, the Italians call it Corcis and vulgarly Palupufa; the French, Cerf volat; the English, Stag-fly; or Flying-fly; the Hollanders, Vlieghende hert; the Illirians, Gerlin; the Poles and Sclavonians Krowba, Vliekls. Amongst all the homed Beetles, for the shape of its body, length and magnitude, it may challenge the first place, and is the molt noted. It is blackfift of a dark red, efcpecially about the outward cover and the breath; it hath two whole horns without joynes, and with brances like a flag as long as ones little finger in such as are grown up, but they are lefs and short.
ter in the young ones; or (as Pliny saith) it hath long
and movable horns nicked with cloven pincers, and
when it will it can bite or nip with them. For it will
close them wonderfully, and with its homes for that
end for which Crabs and Lobsters do their claws.
The eyes are hard, putting forth and whithiff, it hath fore-
yards on both sides of them; one pair that are branched
between the horns & the eyes, the joyn whereof makes
almost a right angle, and two more breaking forth of
the midle of the forehead straight, and plainly ending as
it were in a little smooth knot; it goes upon fix feet,
the fore feet are longer and greater than the rest.

Lonicera makes this to be the male: but I (if there be
any distinction between the male and the female) could
not doubt to call it the female; both because the other
kinds of beetles are lefts (for as Aristotle observes
the males in Insects are far lefts than the female) and also
in copulation the females receive from the lefle, as
experience confirms it. The male is altogether like it,
but 'tis lefts both for body and horns; which though
they be not branched on both sides, yet pretel to
together they do move far sharper prick ones fingers than
the female doth. The third is three or four times lesss
than the former: a black colour, with little cloven horns,
neat to which there are two fore-yards distingiuished
with many joynts. It hath eyes a little standing forth,
and that are great in respe of its body. The shoul-
ders on both sides end in an acute angle. It feeds for
the most part in a clammy far juyce coming forth of the oak; nor is
it easily to be seen but where oakes grow. The fourth kinde is very
rare: it hath two little horns, thrice branched inwardly, they seem
whithiff from black; the back is parted with black and white spots,
but the belly with silver coloured and blew. It goes on six feet, which
are no lesss black than the fore-yards: when the head is cut off, the
other parts of the body live long; but the head (contrary to the usual
custom of Insects) lives longer. This is said to be dedicated to the
Moon, and the head and horns of it wax with the Moon, and do wane
with the Moon, but it is the opinion of vain Astrologers. The horns
are not without their Medicinal venner: for they cure childrens diseases; for hanged about
their necks, if they be great horns and full of branches, they serve for an Amulet. Laid to
fcrophulous humors and the Gout, they help much, especially if they be applied with the earth
they have call up. Pliny. It horned Beetles they call fages, be boyled in wine and the arte-
ries of the arms be adorned with it, it cures Agues. Mirabilis. But I note by the way, that
Gyllerius of shelf fish, was not very wise, who writing a Book of the Nature of things, was quite
out, when he placed that flying Stag amongst the Grasshoppers; sometimes he makes it a Locust,
sometimes a Brachus, sometimes he confounds it with a Glow-worm, conjecturing every way,
but teaching nothing. The Philosopher saith that those Stag-flies are bred only from worms
growing in rotten wood. But I rather approve of it, that they breed from dung as experience
tellifies. Arizones, larizones, argones, xepones; (there are words that are synonamous) in Latine,
Capricornus: the Germans call it Holz-back; the English, Goat-chaffor; in greatnes and colour
it resembles broad-horn, it hath a little broad head, great oxe eyes, almost three fingers
overthwart in length; it hath a forked mouth, gaping and terrible, with two very hard crooked teeth; with these whilest he gnaws the wood, I
speak by experience) it doth perfectly grant aloud like a young pig. May
be this is the reason why Hejchim hath related that they bound to a
tree, will drive away fig-grants. The shoulders of it are curiously wrought
by nature, they seem to be a hilt made of Ebony and polished, it hath
six feet, distinguised with three little knees; but they are very weak
and faint, and altogether unfit for such a burden. These receive help
by two horns that grow above their eyes, and are longer than their
whole bodies, they are flexible with nine or ten joynts; not exactly
round, but are rough like Goats horns, which although it can move
them every way, yet when it flies it holds them only forth directly,
and being wearied with flying, it with the them for feet: for knowing
that his legs are weak, he twists his horns about the branch of a tree,
and so he hangs at eape; as our Breram saw in the Country about
Heidelberg; in that it resembles the Bird of Paradise, which wanting
feet
feet, clings about the boughs with those pendulous nerves, and so being tired with labour, takes its ease. They thrust upon us some German fables, as many as say it flies only, and when it is weary it falls to the earth and presently dies. Those that are flies to tales, render this reason for it: Terambus a Satyrus, did not abtain from quipping of the Muses, whereupon they transformed him into a Beetle called Cerambyx, and that deliberately, to endure a double punishment, for he hath legs weak that he goes lame, and like a thief he hangs on a tree. Autunus Likeatis lib. t. of his Metamorphosis relates the matter in these words: The Muses in anger transformed Terambus because he reproached them; and he was made a Cerambyx that feeds on woods, he is seen upon wood, and he hath crooked teeth, and he always moves his jaws; he is black, and long, having wings on his belly, as the greater Beetles have; he is called the Wood-eater Ox; but in the Fables, Cerambyx. The children catch them to play withal, and they pull off its head and carry its and it flies with the horns like a Harp made of a Tortoise-shell. Which words, while Metastationis strove to put them into English (one otherwise well skill'd in the Greek language) he committed two great errors; first, by taking Cerambyx for a Bird when he called it a Fly; secondly, because he translated it, that the head with the wings are like a Harp, when as the Greek book hath it the horns. But whether this be that kind of Beetle that runs up and down, and makes a noise like a kid in the leaves of Eriphila; (the Wizards say there is no better remedy to cure the voice) truly I am ignorant of it, but I suppose it is the lesser Beetle, because the stalk of Fennel gigantic would scarce contain this when he is grown great. We have seen divers kinds of Cerambyces besides this we now speak of, one that was like to the frit of thefe, but differing in magnitude and colour; the belly thighs and horns were of a watcrish blew; the shoulders, tail and cover wings were varied with some black spots, also the joynes of the horns were black; the hinder legs grew longer than the reft; we received thefe from Quickthorpe, who fent them from a Sower, we have one more that is green without, and underneath dun coloured; the head, shoulders & cover wings are a dark green, and shining alio with gold; it is something a long body, and items like the other, but it is something less; it hath purple horns, but the feet and the legs are of a violet colour. I first gave to Pennins a third that was of like colour to this; it smells almost like Nutmeg and Cinamon. But that (wee fmall) (as good as the oyl of Myrtle) presenty when it dies evaporates into the air, and leaving the body, doth wholly infinate it self in to the box it was kept in. Cardanus makes mention of this Beetle, but I know no man that found it before me. There is yet one of a shinning black, that hath a great belly, thick, with a body and horns shorter than the reft, the joynes of the horns are not round as they are in the reft but lightly saw'd on both fides, Pennins faith he is beholding to Caroli Clusius for it. The fifth is altogether like the frit for head, mouth and teeth, with very black eyes; a brown colour all over the body; a mouth wide open and dented; the head, neck and wings are blefted with very small black spots; the body of it is almost as great as the second Cerambyx; it is but seldom seen, it lives in houfes and dry wood. The fifth is ash-colour with a very little head; they eyes are both white; the horns are somewhat long, jointed, differently bled with white spots; the cover wings, and almost the whole body
is various, it is conversant in bouses, but whether it dwell in wood also I know not. I saw the se-venth brought from Russia by Edward Elmers, it was brownish all the body over, it had round jovyns on the horns 7 or 8; it is easily known by its form. There is an eighth kinde not far differing from this in figure and magnitude, but that the head, shoulers and wings are blewth.

Pachinus Camerarius sent a ninth to Peninus (he was one that deferved singularly of the Common-wealth of learning) the wings and feet were of a fandy colour; the head, the horns and belly were blackish; he had bowed horns made with many tumings and knots, which he turned to both sides in the twinkling of an eye; it creeps upon plants (especially on Cythius) I think the Beetle which Johannes de Chaun describes lib. de varia quercus historiae ch. 26. is of this kinde: There dwells a creature in the oaks, of the kinds of Beetles, (so far as we can conjecture) it is of a blackish colour with long legs, carrying two prickles in his head, a little crooked where- with he lays fast hold of what he meets with. Those Carpenters that have timber of oakes found this little creature alive in the very heat of the oak.

The country people of Lyons call it Thuto: it lives beet and longest in rafts of bouses, and it sometimes comes forth and shews it self making a little noyse in places where flouses are. Geners of pious memory, Epit. I. 3, law such a one, or one like it, voided by an old woman that was sick of a Pleur- reis, his words are thefe: An old woman that was sick of a Pleurefe, voiced a black Beetle downward, after he had drank a Potion of our Oxy-mel with a deception of Eunugreek; it had long feet, horns that were joynted and were flexible; it was full of raw purrefation, and alive: it was as long as two joyntes of ones finger. The tenth is all purple coloured from black; and hath a forked mouth. The eleventh is all black. The twelfth hath horns that are not fo much joynted, the head and shoulers are blew; all the rest of the body seems a bright red. However you fee the horse of all thefe, some straights, others crooked in their pictures, (for to explain them the better) yet for the most part they wear them with a bending of them backward to their shoulers, as goats do, as you fee the fift Cerambyx; and upon that account I think it fit to put them into the fame rank. And thus much for Cerambyx; or Capricorn, and its kinde.

I have learned no other use of them in Phy-licks than that taken in the left hand, they drive away quarrain Aques, Phis. I. 30. cap. 11. It may be poffibility, by better experience will diouver more of their vertues, and will not fiffer themfelves to be perfwaded that a creature God hath made fo curiously can want rare vertues in Me-dicaments, which he hath beftowed on far better things (according to his goodnes unto mankinde) Fitter-mice take this for their chief dainties, and prefer it before Gnats, especially if they can catch them and squeeze them alive.

Bousque or Tangyques, Oxe, or Bulls horns rather, hath alwaies two horns flanding straight and right forth; it is blackish from red, and seems almost without any head; yet it hath a very small head flunk into its short thick shoulers, and a little thorn comes forth of the middle of the forehead, very sharp for defence. We have seen four kinde of Noife-horns, the chiefeft and greatest of all lives in For- dis; it is very black, it hath a note on its face crooked horn'd like to the stem of a flup; about the middle whereof there is another horn bent inward, and comes forth of a little knot, and such another comes out of a banch on the shoulder; the whole body from the end of the horns to the tail is four inches long, and it is about two inches broad. Like to Beetles it hath no female, but it shapes its own form it self. It producteth its young one from the ground by it self, which
Chap. 21. Of lesser living Creatures.

Purs. Camerarius did elegantly express, when he sent to Pennius the shape of this Insect out of the Florchoue of natural things of the Duke of Saxony; with these Verses:

A Bee began me not, nor yet did I proceed
From any Female, but my self I breed.

For it dies once in a year, and from its own corruption, like a Phoenix, it lives again (as Mounius winnseth) by heat of the Sun.

A thousand summers heat and winters cold
When the hath felt and that she hath grow old;
Her life that seems a burden in a tomb
Of spices laid, comes younger in her room.

The seond kinde of Nose-horn very rare and worthy to be seen, sacred to Mercury, Carolus Clusius sent painted from Vienna, where it is very frequent, the form is as you see it: it would seem all pitch colour, but this the belly is a full red; that crooked horn in the nose is so sharp, that (what is said of an Elephant going to battle) you would think it had got an edge by rubbing it against a rock. The third Nose-horn, and fourth seem to be alike, but that the former hath wings growing out longer than the sheath covers, but the others are shorter. You would say they were rub'd with shining ink, they are so perfectly all over black. The Ram or esthous, hath knotty horns, violet colour, a head greenish from gold colour, the shoulders like Vermilion, a purple coloured belly, these wings of the colour of the head, it goes forward with legs and feet, of a light red, but the wings shut up in the sheath, do finely express the small whitish membrane of a Cane.

The greater Beetles without horns are many; namely, that is called Pilularius, and another that is called Melambes; another purple, one again that is dark coloured; one called Atvrons and another Fella. Some call the Pilularius the dunghill Beetle, because it breeds from dung and filth, and also willingly dwells there. The Greeks call it coros, and tnanos, and from its form like a car, ἐπιστείλαμα: the Germans, Roff-kares, Kaas, or Mißkafer; in English, Dung-beetle, Sharndogg; in French, Femelle merce, as you would say Dung-digger; the Latines call it Pilularius, because it turns up round pills from the dung, which it fashions by turning it backwards with its hinder feet. Porphyrie doth thus describe the nature of it: All your Pilularius have no females, but have their generation from the Sun; they make great balls with their hinder feet, and drive them the contrary way, like the Sun in obturates a circuit of 28 daies. Athen faith almost the same. There is no female Beetle, it puts the seed into a round ball of dung, which it rows and heats in 28 daies, and so produceth its young. They would say...
thus much: that the Beetle called *Philaenus* makes a round ball of the roundness of the Heavens, which it turns from East to West to long, till it hath brought it to the figure of the World; afterwards it leaves it up under the earth where it begets, and when that hath to find it up it lets remain there for a Lunar month; when that is ended, it calls every ball out of its nest by itself, which being covered in waxes, the Beetle women comes forth without wings, but in a few days it grows up to be a flying Beetle. For this reason the Egyptians consecrated this to Apollo and adorned it for no small god, by the curious interpretation of όποιος, whereby he collected, that the likenesses of the Sun was given to this creature, and to be excused the idolatrous customs of his Country, *Pliny and Plutarch, Ep. 4*. They would fully here Roes as the plague of their family; but dung, especially of Cowes and daughters, they love to make, and stuffing the smell of them a very great while, they would fly suddenly to it, *Theop. of Smal*.

But they go but slowly, yet they lay their continuall and exceedingly, and delight most of all to produce their young ones: for oft times the little round balls that they make, by the injury of the winds or of the place, fall away, and fall from a high place to the bottom; but this Beetle dehien a propagation, watcheth with perpetual care, and raising this Silphian ball to its hold with continual striving, and that tumbles back again, at length the reduceth it. And truly unles it were endued with a kind of divine soul (as all things are full of Gods wonderfulness) it would faint and bespent in this great contrect, and would never take this pains any more. Some say they die being blinded by the Sun; but the most think they are choked by lice (that creep all about them) they hardly hold out one winter. They chiefly delight in the shade of the Ivy tree, as most heinful for them. *Praxamis in Geopon*. I have let down the form of it so exactly, and in its colours (for it is all black) that I need say no more. Beetles fift breed from dung (faith *I. L. Langius*) as the Worms breed out of rotten wood; then their seed being bred into a round ball, and the same being enlivened, breeds their young ones: every one knows this sufficiently, unless they live where no dung is; for in dunghills they are obvious to every Man.

Beetles serve for divers uses; for they both profit our minds, and they cure some immituities of our bodies. For when this living creature, (and scarce a living creature, for it wants some lentes) being of the bafeft kind of Insects, and nothing but a crust, doth excel man in divers faculties; this should teach us modesty, temperance, labors magnanimity, justice and prudence. For though its house be but a dunghill, yet it lives concerned the earth, and is buried and delighted in it; nor doth this more willingly drink or eat amongst Roes than in Goats dung, which finds in its fenses as sweet as Maccaron. For it lives by the law of Nature, and will not exceed her orders. The greatest care it takes, is to make the greatesst balls it can, as if they were sweet balls, which with wonderful labour it rolles from her: and if she chance to roll its burden against some heap, that the ball slip away and fall down again, you would imagine that you saw *Silphius* rolling a stone to the top of a mountain, and falling back again upon him, yet it is not weary, nor will it rest, till it hath rolled it to its nest, no earnest it is about its work. But we poor men do nothing that is worth our 1 hour, or as we have power to do, and we give off in the very steep entrance of venery, and we spend all our pains and dyes in idleness, following all curiolities, till we get a habit of mitrichet to our own detraction. Who doth not see the courage of the Beetle? if the shall obereve him fighting with an Eagle (as is related of the Beetles in India) I believe that it will come to pass, (as Eratistus said) that some men extremely favouring the Roman Commanders, will lament for the Eagle, that the confederates in upon takingly a Bird to fight with it, that he should be defeated by it, that the greatest flames, and the Beetle will win pride enough that he beborne with an Eagle, though he should be overcome. The Poet say that *Apis* was attemnted of to weak an adversary as *Silphius* was, and valiant Captains diddian to contend with common soldiery. Again, a man would wonder whence this mean *Insect* hath gained so much courage, and boldness, that it dares wage war with the strongest of Birds: also whence it hath means, forces, faculties, and patience, that it can contend so many years with the Eagle, without any recombination. But if any man will unfold this secret, and view this contemptible creature nears, and it were at home, he shall observe so many rare proprieties of it, that when he hath consider all, he will desire to be a Beetle rather than an Eagle: yet that no man may flory: flay me before he knows the matter: First of all, it exceeds the Eagle and men too in this respect, that it yearly renewes its old age, and grows young again. This is so great a matter, that I think all earthly potencies, when they come to that immuable old age, that they must part with all, would rather with Beetles change and cast off their eres, than they would receive a seven fold Crown. Again, what huge courage of the minde is there in so small a body? what an heroicall magnanimity? what a force it hath in batten? that *Homies* fly nothing to the Beetle. It hath not a wit so common, but it was of old reputed for it, and commended in all places. Hence was that Greek prove *Bartocidlosius* more than a Beetle: whereby they acribute to it, a singular and incomparable witcombe. Nor doth that concern me if any man will cavil and say he dwells ill favouredly in an uncomely houfe, for I shall rather juftly condemn their household government, who being ill favoured themselves, and of filthy conditions, do build their houses curiously and loitily with fo great care, and charges of King *Attalus*. Moreover, thar it ueth the excrements of living creatures for its own commodity is no fault, but a commendation of its wit and ingenuity. As though we that are Physicin did not the same things, as often as we apply the blood, the fluxes, the irises, and somet
times the orde and dung of living creatures to our patients, and sometimes we give them in Potions. Nor are Alchymists ashamed (who would be divine men indeed) and not mortals, could they obtain what they aim at) to use dung to draw forth that quincuncia, Nor are husband-men (a lot of people that of old time none were more honoured, none more feared now) ashamed to dung their fields. And it is probable they first learned their Art from the Beetle called Pilularis. For why should it chiefly include its feed in dung, unless God had there that should be in that a great deal of vegetable heat and moisture, whereby principally generation is perfected? Hence it is that wise Farmers dung'd their fields to make them more fruitful and to conquer that horrid leanness, barrenness and poverty of their grounds. But you will say that the Beetles Pilularis like the smell of all flinking a thing. It were a folly to look for a man noise in a Beetle, for that is peculiar to man to be displeased with the scent of his own dung; and is it not with any other creatures; therefore the Beetle is more happy than we, but not more unequally: yet men are not so much offended with it, as it is, but as they conceive of it. For of old time it did not seem abominable to them as it doth to us; for they called it by a lucky word, Letames and they thought it to call Saturn the dunghill god; for his honour, if we will believe Marcellus. For Pliny faith that Stelarcus the son of Panus got not only the name, but also immortality by it in Italy. Moreover the same thing in Greece procured to two Kings great glory; to Aegus who invented it, and Hercules that spread it abroad. Lastly the memory of that old King will never be abolished, whom Homer (as Cicero in Fane commended) commended to posterity for dunging the ground with his hands, and to no other thing, but that the Beetle is delighted in. A Roman Emperor was nothing offended with the smell of urine, if it brought profit with it. Wherefore then should we be offended with the Pilularis, who hath so many good properties, for one small inconvenience? If we call that an inconvenience that is most commodious for the forthing of its young. Lastly, when we see the Beetles, though in the dungs alwayes clean, and his shell alwayes near; compare him with men polluted and infected with flies and bawdy houses; and I shall ask which of the two is more clean? And I think it had its name Vide from kingly, pure and clean. If any man thinks their guts to be trivial and vulgar, yet no man but will think that a magnificent thing, and worthy of great honour; that of old time the Beetle was the chiefe amongst their faced images and mysteries of their Soothsayers. It is the most apt Ensign of a famous warrior. For (as Plutarch reports in his Comment of Isis and Osiris) in the hieroglyphical pictures of the Egyptians an Eye was the Emblem of a King, a Scepter being added to it, for it signified a right and judicious administration of things. But he faith, that Thokos their Images that wanted hands, those represented Judges, who ought to be free from bribes; and amongst these there was one also that wanted his eyes, which represented the chief Judge, because he ought to be free from all pitties, and to look on the business, and to hear or respect no mans person. It was not Pimpernel amongst pot-herbs (as the proverb is) but a Beetle ingra- ved in a Seal amongst the faced Images. And what did those wise Theologians intimate to us thereby? no common thing indeed, but a valiant and invincible Captain. For Plutarch faith as much, that no man may foppete that I invented it; as your common Theologians use to invent Allegories. But some ignorant fellow may say, what hath a Beetle to compare with a Com- mander in an Army? Truly they agree in many things. First you see the Beetle is all in armour, and there is no part of its body but is guarded with plates and harness, that Mary in Homer cannot be said to be better armed when he is in complex armour, and fenced cap-a-pie. Add to this his warlike march with a horrid and terrible humming; what is there more unpleasant than the sounding of Trumpets? what more loath'd than the bearing of Drums? for the founding of Trumpets that Kings now to much delight in; the Bursides could not endure, because it seemed like to the braying of an Ass, and the Ass was held abominable amongst them. Add hereto into the wonderful patience of the Beetle in driving on its burden, its invincible courage and contempt of life. To this, men say there is no females amongst Beetles, but they are all males. What can better become a valiant General than to have no female in his camp himselfs nor allow others to have them? Moreover this is fit for the matter, that in those delicate bals we speak of, they exclude their young ones, fodor, cherith, and bring them up, and they have no other place to breed in than they have to feed in. But this secret is not easily for me to open; Son简历's in war can better do it, who know how to lie in their armours or on the bare ground, that in a fierce have undergone hard winters and harder hunger; that have fulfilled their sad life nor with roots of herbs, but with filthy food, who have for some moneths lived in want at sea. If any man consider the beellines of these mens conditions, the Beetle will be a cleanly creature; and consider but their miseryes, and you will think the Beetle happy; yet this is the fo and condition of Generals that no man may despise it. But by the way, I wonder what ails our great men that hold all their Nobility to lie in their Scarchron, that they had rather have Libards, Lions, Dogs, Dragons, Wolves or any other creature that they choose to meet withal, when as their proper symboles is the Beetle both as the figue, and was so used and approved from earliest times, which is the only parent of Nobility? As for the form of its body (let go only prophetical judgement and opinion) and there is no reason why the Beetle Pilularis should be despised, or can be; for if Philosophers fay true, that a spherial figure is the most comely and the belt, why then shall not the Beetle seem comely, which from the judgement of Dem- argus is nearer to it than an Eagle or a man himself? Clem. Alexandr. 1. 5. str. 1. And though

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The Beetle have a face like a Cat, a creature familiar with us, and more useful, than it is desired for its felt, yet in that respect the Egyptians adore it, and prefer it before all other Insects by many degrees. Calacatumus. Lately, it is horridly beautiful in his kind, and a dog in his, why should not the Beetle be so in its kind? unless we measure the forms of all things by our own, what is not like us must be held to be ugly. No man of a found mind will find fault with the colour of it, for it is forth some jewels, and in special the Diamond that is the chief-felt jewel. Lately, no man will think the Beetle at all delpicable, who shall consider with himself, that Magicians and Physicians fetch remedies from this creature for the greatest diseases; for they are not only carried in men's purifies, but also hang'd about their necks, and offittes that up in gold against all children diseases. What will you say in the most effectual and incredible remedies almost, (for Pliny is the Author of it) with equal force with Antidotes? for that terrible Beetle engraven on an emerald, yeilds a present remedy against all witchcrafts, and no leis effectual than that of which Mercury once gave Ulysses. Nor is it good only against there, but it is also very useful, if any one be about to go before the King upon an occasion: so that such a ring ought especially to be worn by them that intend to beg of Noblemen some jolly preferment, or some rich Province. It keeps away likewise the head-ach, which is no infmall mischief, especially to great drinkers. Who then can despise the Beetle, whose very image engraven upon stones hath so great value? The mentioning of precious stones puts men in mind of adding this also: that if the Eagle delight in the precious stone of her name, the Attires; the Beetle comes not behind her in its share of the same honour, for the Stone Canthar. also owes its name to it, wonderfully resembling the whole figure of the creature, to that on we should say it is not the shape represent'd, but a living and true Beetle incloset in the stone. Moreover this impure and filthy creature (fortoorth) boyled with worms in oyf of Roes, doth very well cure the pains of the ears. Plin. Attines prescribes the Beetles called Bilubarias being flamed alone, to be boyled without worms, which the Author of the Book ad Pifonom, approves also, chap. 12. Syntacinius chap. 94. writes thus out of Attines: The Dung-Scarbates help the pains of the womb, they provoke urine and monytermous, they procure Abortion; with Cordumen: they are good to heal the Harmorrhoids, and they help that benemmunition which comes of venomes infixed by living creatures; and the oyf in which they are bruited takes away the pains of the ears. The later writers commend these Beetles dried among the remedies for the Stone: especially Alexander. Benedic. Laurenzicus makes for the cure of the Stone this kind of powder, which is no ordinary one: Bun the Dung-beetle or any other after the same manner as you do Grasphoppers, or Scorpiions; Take of the ashes of them grains v. of Hippocrates j. dram, of Pigeons dung j. dram and a half, let them be dried and a powder made of them. The Dope is j. dram with water of the decoction of Radish, Brabham, or black Chiches. For the Harmorrhoids this ointment is very much commended. Take of oynment Populeum j. ounce, of oyf of Roes in which 20 Beetles and as many Chilleps have boyled a good while j. ounce and half of Siffon gr. iiiij. let them incorporate and be made into an oynment. Arnol. de villa nova Briqiar. l. i. c. 25. reports that he had gotten of his matter a singular oynment against the Convulsion, made of Beetles after this manner: Take of Pepper, Euphorbium, Pellitory of Spain; each a little, of Beetles to the weight of all the rest; let them all, being brought to a powder and mixt together in a bath with juice of Spear-wort as much as sufficient, be macerated and made in the fashion of an oynment, with which let the pulses of the armies, feet and temples, with the navel and back-bone, be anointed. Moreover, f. 4. c. 11. he prescribes for the awakening of such as are troubled with the Dead sleep, and with the Lethargy (when Cantharides and Caueries have done good) two or three Dung-beetles alive put up together under half a waltteri, to be made fall about the nape of the neck, being first well swathed and after the muscles of the forepart of the arms (on every muscle one) and under the sole of each foot one, because this doth wonderfully rouze up such as are in a Lethargy. And Mr. John of Florence (Sir Ambrose) awakened one that had been held with a Lethargy for seven days, with this remedy, having tried all others in vain, and cured him afterward with Cantharies laid upon the nape of his neck to bluster it. The Dung-Beetles are best for this purpose, they are next which use to be found under stones, and then those which are found in a bath. The Solar Beetle cures them who are sick of a Quaran Ague, Sir John Allen. Pliny and Traulium shew us the way of using it; which is, when it is hung about the neck alive, and wap't up in a piece of red cloth, and this they testifie they have seen confirmed by many experiments. Yet the Magicians will scarce finde credit, when foolishly rather than truly, they report and imagine that the precious stone Chelomitaris which is adorned with golden spots, put into hot water with a Beetle, raitheth tempefts. Plin. l. 37. c. 10. If nothing of the Eagle, the Woodcock, the birds called Lani by Gesner, in whose nests Beetles stuck upon thomes (which our Brnerus first observ'd) are an argument, that they serve for this use also, to feed Birds. Nay Bellonius affirms that many other living creatures, especially Frogs that are in Marsh grounds, feed upon them. And indeed though the Eagle's proud and cruel enemy, do no less make havoc of and devour this creature of so mean a rank, than our lordly Storks use to do the peasant Frogs; yet as soon as it gets an opportunity, it returneth like for like, and sufficiently punishteth that spoiler. For it flyeth up nimblly into her nest with its fellow-foudlers the Scar-a-beetles, and in the absence of the old the Eagle bringeth out of the nest the Eagles eggs one after another, till there be none left, which falling
ling and being broken; the young ones while they are yet unihapen, being daft mutually against the stones, are deprived of life, before they have any sense of it. Neither do I see indeed how the should more torment the Eagle than in her young ones. For some who flight the greatest torments of their own body, cannot endure the least torments of their foes. We see Affes, (those flagellant and almost senseless creatures) run to the help of their foes through fire, if it be in their way, with a strange contempt of their life. So that I cannot but admire and magnifie the Beetles ingred widome in the choice of its revenge. But enough of this, lest I should seem to have made (not an Elephant of a fly, but) a Gyan of a Beetle. I will contenst indeed, that as I was loath to make a great volume about a small thing, so I accounted it a sin to bury in flence what I had read. I wonder at Pennin's brevity and empricins in this argument, since in Lucian, Pliny, Homer, Aristophanes Theorvirm, Alexandrinus, Erasmus, and infinite other Authors, wonderful things are recorded of the Dung-Beetle, well worth our mentioning.

There is another altogether like the Dung-Beetle, but of a darkish bright blew colour, with a notable shning. This in the moneth Angulf is troubled with lice hanging between its legs, and at lait kill'd with them. I should rather take this for the cat-fashoned Beetles, because an egge is not more like to an egge, than this is to a cat. It is met with everywhere, but I have more often seen it about Colchester. Let us go forward,

That which I should call the Emerald coloured or greenih Beetle, the Greek comick Poets all of them call μαραθόν, the Attick μαραθόν and Κρυλλία. Eusith, Some likewise call it Κρυλλίανιαν and Κρυλλινιος, but without right. It is taken by some for the Tree-Beetle, but its place tells us it is a nutlaker. The Ruthicks in Lombardy call them Gallusacius, as much as to say, French Palmerworms (as Niphos interprets it) though yet they agree in nothing with Palmer-worms. In Dutch it is called Greven-Odor, Gehuwdeker; in Italian, Mariola; in Polonian, Zielonakorka; in English, Greenesher. The opinions of writers are divers about this little creature; both because this kind of Beetle is not every where easy to be found, as it seemeth to be very near the Cantharins. Some have it to be the Cantharinae, but for the most part there is wanting in it that cautlck virtue. The Scholast upon Aristophanes calleth it Καθαρις γαλαξία, a little creature of the colour of gold like a Beetle. Eusithins calls it a great Wapf, Pollux affirms it to be a little creature which flies, but sets not down its kind. Gata translates it Gallusacius but it hath nothing like it; and they who contend that it is a Tree-Beetle, have either left their eyes, or either cannot distinguish varieties of colours. Hefchius makes it a Beetle, but of a golden colour: as the Scholast upon Aristophanes, yellow: Later writers call it the greenih or Emerald coloured Beetle, but shning as it were with gold. Marcellus Empiricus intimates as much in these words: the green Scarabee (the Greeks call it μαραθόν) is of a lively emerald colour, by reason of the pleasanterit, whereas, it is so delightful and benefatical to the eyes, that they can never be weary of it; for the longer you look upon it, the more you would be in love with it. Pliny also faith the same. l. 30. c. 70. & c. 9. The male is green all over, except the eyes which are tuddy: the feathers of the males wings (which is the biger) seem to be of a cheynr colour, shning with a delightlome and beautifull shnitcnes: otherwise it is like the male. The brot of them both standts out with a sharp point, which I have not observed in other Beetles. P. Quickeberg in an Apothecary of Anwors, but one who was to be preferred before many Physicians for his studiousness about things natural, lent to Pennin a male and female of them, painted as it were with Apollo's hand. Aristof. l. 9. de Respirationis, attribut to it a thrill found, which perhaps gave occasion to some to call this the Tree-Beetle. They are generated (faith the Philosopher) in Κεννακον, Νεφελων, Μαραθών, Λεύκων, δε Ζωον, ζωον, that is, of worms which are in cour- dung, and of self-dung. But Stephanus out of Theophrastus faith otherwise, γόργιον καθαρις ον τοι Κρυλλίανιαν, Νεφελων, Λεύκων, Καθαρις, Περικοιαν, Καθαρις, Ωροις, Ωροις. The Melonthe is bred of the blossoms of Apple-trees or at least it flies to them when they begin to blsse. We are beholding to Charles Claxton for another kind of this Beetle, whose feet are black, as like- wise its head and shoulders, but from belowth. It hath horns in appearance, but not so indeed (wherefore we reckon it amongst the Καθαρις, or hornless Beetle) its sheth wings seem to be furrowed: but about the edge they are some-what red. Theslomus tells us of another notable kind of Melonthe (and I have here represented to you the figure of it), in these words: it is green all over, except the eyes (for those are exceeding black); its belly from golden is a little red, and its thighs; the middle of its
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back is beautified with a half Moon of the same colour with its sheath wings; for which reason it is elegantly called by the Latins, Equus Luna; the Moons Horse. Thistleau writes that Aristotle makes mention of this, but I cannot yet finde where the Philosopher does it. Thistleau while he speaks of this among the Dung-Beetles (for which reason also I have added it to them) describeth it thus in verse:

Whichs rolling beds of dung this potter frame,
Some blacks like the fcorch'd Moor are seen,
The nobler sort are deckt with green;
Whose back both (to compare great things with small)
A mark you may the half Moon call.
The English call't the Moons horse, fo renown'ds
But had there e're fo fair been founds
Many a Semiramis would love us then,
And Centaures had their numbred men.

And indeed most of the Beetles are hideously black; yet I make no question, but some of them have their case shining with a blacker others with a more pleasanfe green. These are also that shine like gold, and those very great ones, which dig up the earth, and make their nefts there. Some there are which fly about with a little humming; some with a terrible & with a formidable noise, so that they would not a little frighten one that is not aware of them. There are other differences also of shapes amongst them: but their breeding in dung, their feeding, lie, and delight in the same, this is common to them all. Another Beetle of a purple colour was brought to us from Constantinople, which (only that its eyes, belly, and feet were like pitch) was all over of a purple and violet colour. The black one, which lives in dry wood, is formed after this manner: It is all over black, or ruflet rather, as if it were clad in mourning; its mouth is forked, its shoulders almost square, its legs and homs somewhat short; it felde flies, but goes for the most part, and murmurs while it is going, as lewd servants use to do. The Tree-Beetle is very common, and every where to be met with especially in the moneths of July and August, after Sun-fer: for then it flyeth giddily in mens faces with a great humming and loud noise, and vexeth carrel. Thefe Beetles spoil the leaves of trees, which they do not so much eat as tear in pieces out of an inbred malice; for they feed upon gnos. We call them Dorry in English; the Dutchmen, Bawnekfer, Loubkfer; Fr. Agricola l. de Sibieten, Anim. Senkfer; the Frenchans Hametons. The feathers of their wings are of a light red colour, and covered as it were with a very line flower, otherwise they flame but a little; their legs, feet, and prickly tail are of the fame colour: its other parts are all over brown; only that the circle about their eyes, and their little horns are yellowish, and of the fame colour are they a little above the beginning of their tail; the joynts of their bellies are whitish. In Normandy they are much more numerous every third year and therefore they call it L' au des hametons. It is recorded in our Chronicles, that in the year of our Lord 1574, on the 24. of February there fell such a multitude of them into the River Severn, that they loppt and clog'd the wheels of the Water-mills: and indeed, unles together with the industry of men, the Hens, Ducks, Goat-milkers, Catsells, Bats, and other Birds of prey (which seem to make these their dainties) had afforded their help, the Mills had even to this day been choked with them and stood still.

There is another taken to be of kinto this, of a colour all over between brown white, its belly gray and as it were hoary. Of what use it is in Phyfick I confefs I know not. Fowlers indeed when they hunt for Ducks, bait their hook with two or three Dors or Tree Beetles, and ye a heavey stone to their line, which they cover with flags, that their wifes be not discovered: the Dusk for greediness of meat pretendly swallowes the hook, which sticking fast she is punished for her folly. How Cranes are taken with these wrapped up in a goard, he that hath a mind to know may read Gepfer de Gru.

The Beetle which Pliny calls Falsa is more rare, and not everywhere to be met with. It is not any where to be seen here in England, so far as I have heard or read,
read, Gaza sometimes translated that which Aristotle calls *Cerastes* Fullo, whereas he always intended that the Dung-Beetle only should be known by that name, and he gave proper appellations to all the rest. Neither can the Fuller-Beetle be called the red Beetle (as Frugiurus contrahit) nor is it a creature with a forked tail, which Hadrian *feminis* puts upon us for that *Fullo*; for the forked tail is not of the sheath-wing'd kind, as it still appear more at large in the history thereof. This Beetle certainly is a fair one, bigger than the Tree-Beetle, but somewhat less than the female flying Hart: it hath a head almost horny, beautified with two little horns; its eyes and hairy breast are of a yellowish white; it hath feet coal-black; its belly and tail are like to Cranes feathers; its shoulders and wings are so beautifully wrought with black and white specks, that you would easily swear it were a cloathing of Damask embroidered after the Phrygian manner. Magicians say, that this Insect is a singular remedy against Quartan Agues, being bound to each arm, if we may believe Pliny l. 30. c. 11. *Pennis* first had the picture of it from Carolus Closius; but *Quickquellbergius* afterward sent him over the creature itself.

CHAP. XXII.

Of the lesser Beetles.

All the lesser Beetles are either spotted in their body, or unspotted: the Greeks call those *Asceius*, divers coloured; and these *Paréotis*, of one colour. The spots of some of them are of a black colour inclining to white, others of them are yellow, others red. Of those that are white from black there are seven kinds, of the yellow ones thirteen, of the red ones twelve; which we have here ranked every one in its several order.

Those that are unspotted, are observed to be all over of the same colour: and of them we have seen six blackish ones; two of a bright bay, one round, one of a ski colour inclining to black, another between yellow and black. And one was very lately observed by us painted with a light red, another seem'd drencht in the juice of the purple fis. We have five which are as yellow as gold, very little ones indeed, but coloured
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of the Oyl-Beetle, and the Water-Beetle.

It is called Proscarabæus in Latin; in Paracelsus, Molius; Agricola, Pingoiculus; from the
fat sweate like honey which plentifully drops from it. The Greeks call it Paragogus and
Dromophyes; it is called by the Germans from the month which it is seen in for the most part,
Mayen Wermlein and Mayen Kafer. Those of Heidelberg have put upon it the name of Schmalz
voghel, those of Dirhmaria, the names of Exer and Kadden Viscus tellus in his Book de
Morb. incogn. in English it may fitly be called the Oylbeetle, or the Oyl-clock. But why it is
rather called Proscarabæus than Scarabæus, contrary to the
intention of Gynus and Peninus. I could allledge many rea-
sons, but this especially, that they are distinguished in sex,
and that they couple together. You see here the bignefs
of the female, and you perceive that it is bigger than the
male, and for the most part of a divers shape; for its
mouth is not at all forked as the females is; this also upon
the lightest motion or touch, runs with an oyl, (like liquid
honey) the male is alwaies observed to be as it were dry.
They couple, as we have often seen it in Heidelberg
fields, tail to tail; the female in the act drawing to it the male
(after the fashion of dogs) so that it is forced to creep
backwards; they have both tender bodies, betwixt black
dark blue shining; upon whose shoulders these grow
two wings, or rather beginnings of wings, as upon the
Eltrich, to help the swiftness not so much of its flying, as
of its going; those circles that compas the belly and the
back, appear green in the young ones, in those that are
more grown, blew rather. If they be bruised, they yeeld
a most pleasant smell, as Taxites affirms in his Nomencl.
it feeds especially upon violet leaves, else upon the leaves of
tender young grubs. They are seldom seen but in the month
of May; all the rest of the year they keep their holes, or
having first wrapped up their feed in round bals of dung, they
die. At Heidelberg and Francford we have seen many of
them in the fields in the paethe grounds, among the corn,
and even in the very gardens and streets. But I have
found none yet in England alive and bred there. Only Agricola hath made them four-footed,
whereas indeed they are all six footed, upon the mitake perhaps, or chance of having met with an
Oyl-beetle, which had had two of its feet pull'd off. Wierum's Oyl-beetle, if you see it tie upon
its back, seems (unless this old man makes sport only) to be made after the figure of a man's
face. It hath gotten longer wings than the rest, and is marked with more rings or girdles going
round its body; otherwise it differs not from that spoken of before. The most noble Knight

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coloured all over with glittering gold, which, left we should
seem to have envied our posterity (the knowledge of) we have
called to be cut and described here. But for what use every
one of them serveth, was declared when we spake in general
of Beetles.
Of lesser living Creatures.

Sir Edmund Knave affirmeth that he saw in England the former kinds of this Oyl-beetle, and sent us the picture of it; but could never finde that oily humour which the German one is full of. It comes short of this likewise in all its dimensions, either because it hath a claramer, or because it hath a foil leaf fit for growth. John Wierus writes thus of the use they serve for: In Dithmaris towards the south they hang the May-worm (for so he calls the Oyl-beetles) about the neck with a thread, especially in the month of May, when that moisture like hony (which is taken to be venomous) drops from it most plentifully: this Beetle (or sometimes two or three) being dryed and beaten into powder they give with beer, puts the sick person into a sudden and great sweat either with labour, or with many coverles upon the bed, or in a stove or oven after the bread is drawn. They upon follow grievous symptoms, as a pain of the heart, an overthrow of all strength, a weakness of the whole body, which for the most part last no longer than half a day: this they repeat every other day, or every third day (as the case requirith) untill the ninth. This drunk they call Anticanthariniun or Kaddensrank, because it is made of Oyl-beetles. And truly for that epidemical head-ach (which Placentius at the end of his Chirurgery, and Borpatia cap.de Vapors, and perhaps Avicen. 4.1. 3. Tex. Tr. 2. e. 9, do define) it is said to be an excellent remedy. The Saxons call this efficace Efieras or Kadden. Paracetum l. 3. c. 6. de morbe. Tartar, recordeth that he cured a Dropie by a medicine compounded of those Meloes and Radith feed: the making of it is after this manner: Take of Beetles called Meloes ten duns, Radith feed one ounce, make a liquor of it: the Dose may be from one ounce to three ounces, if necessity require. He used also Oppidan Melum against head worms, like vit. long. c. 12, which after other medicines he prescribed to be applied for the space of twelve hours. If they be taken before the rising of the Sun, and distilled (faies Agriculta) they are very good for swellings under the eyes, if the places affected be washed every day three or four times.

That oily fatness also health the chaps of those about Heidelberg, who have more than once commended their wonderful vertues to us. They do strangely expell urine, but withal, blood. They close up veins, and nerves, and wounds; they thoroughly cure horse's galls and bruises in the back which come by the badness of faddles.

Galfrinus Reglerus l. de Pestes, adviseth to gather up twenty Oyl-beetles, yet not with your hands, but with two little twigs: then being put into an earthen pot or glasse, let them be mordered in as much of the sweetest Oyl-Olive as will suffice, and keep for use. He affirms that by being anointed with this Oyl Sore in the Groyns, Carbuncles, Petullentiel Sore of Boysles, and wounds made by a mad Dog are cured. In another place he prescribeth that we should draw a circle about the fore with a Siphir Iones, and then anoint the place with the oyl of Meloes, or of Juniper, as being that whatsoever the venome is wonderfully drawn out, and the part affected presently reduced to its natural temper. Marcellus Empiricus mentioneth a certain hairy Beetle of the colour of a Lion, and like one indeed in all things else but his roughnes. He contends that it is called by its proper name Callio; it is found in old hedges, and ungarished ditches and banks: this he writeth is wonderful good for scabby eyes, and eye-lids which have been long fretted with a falt and sharp humour, or eaten away with lice. Thus he fleuther the way of using it: first gather betimes in the morning a colewort leaf wet with the dew of the night, and wrap it up so that all the dew run together to the bottomle of the leaf, then having take up his hairy Beetle with your fore-fingers and thumb, put it up instantly within the leaf; that its urine (which it pretently makes upon its being bruised) may be mingled with the dew of it; for otherwises its pifs in which all the secret lieth will be lost.

If with a probe you shall search the eye-lids, and anoint the places, which are scabby and eaten away, with its dew when it is now impregnated as it were with the piffe of this Beetle, you will confes its strange and wonderful vertues. But what kind of what manner of Beetle this is, I am altogether ignorant, nor can I call to minde any other Authors who have made any mention of it.

The Water-clocks do now challenge to have some room allowed them, which the Greeks' call aetherides the Germans, waffer-kaffers; the English, Water-clocks. All these have their bellies coloured with a light red, and their backs coal-black, except that in England, in whole picture if you darken over all that border which compasseth about its shoulders and its whole oval body, and make its eyes of a silver colour, you cannot define more toward its description. They have every one six feel, the hinder feet exceeding the others in length and bignes, which they use as it were for oars when they swim; under their shelly wings which are very black,
Lye hid their membranous wings at a silver hew, with which by night, having left the water, they nimbly fly through the air, which by day they very seldom or never use. But the least of all are those, which with a restless motion run about in a multitude this way and that way upon the surface of the water without order, and play as it were together, and when the water is troubled, either they dive down to the bottom, or hide themselves in holes of the banks: but afterward, as soon as the waves are still and calm, they leap about it again for joy. *Christophorus Linsternus* writeth to *Gefaur* that he found a Beetle in a certain place, with a leathery crust (as they use to have) which had a head like an Ant somewher yellow, and many wings on the hinder part of the belly it had fins, such as are upon Craps: thus, which they used as they wand ed up and down (like rowers upon the water) it had a little tail flicking out for its defence, but which was parted into very long hairs, being thrown out of pond water into fountain water, it died within a few daies. And thus much of Beetles: which of countreys only *Olympos* of plants only the wilde Lillys produce not: whereupon which is called by *Pliny, Theopompos* and *Antigens, Cantharides*: this by *Discolides Anticantharos*.

**Chap. XXIV.**

Of the Fen-Kricket, the Eve-churre, or the Chur-worm.

Give me leave here where names are wanting to make some. The creature which we have described is that which *Cordus* calleth *Spondylus*: *Dedonius, Buprestes*, both of them amis & without reason. For the *Spondylus* no wings you see this, insect is winged. The *Spondylus* is said by all to be like the *Cantharides*: but this creature neither in figure nor colour nor biggest, overturneth any thing near it; to say nothing of its having no leathery wings, which all wise men will grant the Cantharides have. [If we may make names, we may call it *Gryllodes, a Mole-kricket*] a Kricket because it makes the most thrill noyse which a Kricket doth towards midnight, a *Mole*, because it diggs the earth continually; the Nethelandes call it *Weelmel*. It is an insect ugly to fight and monstrous, four times bigger than the biggest of the Cantharides: especially when it is pretty well grown. The shape you fee before you: I will tell you the colours. The female is paler, the male of a deep brown; that hath besides 2 long ho ws, 4 knobs hanging out as it were of it nostrils and lips; it hath also bigger eyes, and the root of its wings is bedecked with a red spot. But the male is without those buttons, and in stead of them hath two bistles twice as long

as those buttons; it seemeth to be of the same colour all over, and without any spot; both their claws are as black as a Raven; with their fore-feet which are very strong and bending inward they both dig through hillocks, and make holes under ground: they stand upon their middle feet, and with their hinder feet, when need is, they leap; their tail is fork'd, their wings longer than their body, and membranous; their body variously jointed. The young ones for the most part are all over black; the old ones seem to be without hair; it liveth the greatest part of its age under a smooth and moist ground, yet in the night it cometh abroad. It is a very low-paced creature, and its flying is like leaping; whereupon it is reckoned by some among Locusts. It begins to come forth as Krickets do when the Sun is going down, and pleaseth itself with its singing, which is loud enough and may be heard above a mile off; which as soon as the husbandmen hear, they are glad at it: as though they knew by its coming, that the earth now seemed with moistness, and were brought as it were to maturity by the heat of the Sun. It gathereth together grains of wheat, barley, and oats, and carrieth them into its nest being to live upon them perhaps in the winter. Some affirm that it feeds upon Horrie-dung. *Dedonius* relates that this little creature killeth cattle with its biting; falling into this mistake, because he took it to be the *Buprestis*. Whether it do any hurt being taken inwards I know not: but *Pennins* hath often handled it in his bare hands, and without harm, never observing in it any inclination to bite. Our *Brauer* signified as much to *Pennins* who hired Countreymen with his money to observe as often as might be its condition, and to make relation of it.
CHAP. XXV.

Of the Fire-fly.

That which is called by Ἀλίκος ἀποικίσως, other Greeks call μεγάρας, Ἑρμολος μεγάρας, some θροικος μεγάρας. By the latter, they mean those little creatures not proper names, but signify that which is not to be named; which Gaes tranlationeth Bestiales fornacum, Furnace creatures. Strabo reckons them among Gnats, they are called μεγαρας, by Snidas, and by the Sequicymi, as we read in Lactantius 1. 9. Solinus calleth it Carphilsus l. de mund. Mirab. Jul. Scaliger, Ignatia: Gaes, Furnarum, and Bestiis Fornecum, or Ariflois, which he maketh bigger than the greater flies and winged: Pliny affirmed the fame l. 11. c. 36. Antiquit. l. 11. 10. meghas, faith from Ariflois that these Fire-flies are bigger than Mice (not Flies only); where it is evident he fouly misseth μωρον for μωρυν, Mice for Flies; which Xiander his Transtlator took no notice of. In shape it is somewhat like a very big Gnat, of a bright fire-red colour, glittering with a kind of fiery rays; it leaps, goes, flies, and lives in the flames, as Ariflois reporteth, l. 5. hist. c. 19. For I can scarce give credit to Ἀλίκος l. 2. hist. c. 2. when he saith that the Fire-fly as soon as it hath come out of the place where it was bred, and flown into the air for food, dieth presently: for I cannot believe that any thing bred in the fire, goeth out of its element to seek for food; nor is it likely that Nature, that most loving parent of all things, should prescribe any creature such a way of getting its food, by which it should presently lose its life. Neither is it, as it seems to me, so hard to judge of the reason of this, the sudden dying in the air (which Ἀλίκος leaves to be searched out by others) for being bred in the extremity of heat, how should they live in a temperate place? For it is evident by daily experiment, that some Flies dye as soon as ever they are taken up out of the water into the air; much les can those creatures that are bred in the fire, endure the air, since it differeth so much from the air, and indeed more than from the water into the air. These Flies are bred in the Brats of Furnaces of the Isle Cyprus, where the Charitos (or Brat-s-) flame is burnt for many days together: perhaps the sooty vapours which goe up with the flame, while the flone is continually burnt, are the matter and cause of their generation. Strabo speaking in his 12 Book of Works bred in the soves, addeth this which followeth: θαλές άνων δέ βίον των τόνων φάγησιν, θώρακας εέαν έν πεντε χρόνοις πολύς εέαν, ή santa: They conclude that the generation of those creatures is like that of Gnats, of the flame from metals and plates of brass: where any man may see the error of the Interpreter, for he rendereth it thus: Αριστο n. animalium generationem salmum putat ut culicem ex flammea & braueta metallica. For they are bred in the flame (as Scaliger saith) not in sassa, as (I interpret it) in the fire which is condemned together: nor doth any thing forbid but that the most dry animals may be generated in the most dry element (for there is mixture there) as the most ift about the most ift; for we have no pure fire with us. But what hindereth but that living creatures may be generated of matter ready for them, or what natural reason contradiceth it? They answer, that fire devoureth all things, comprehath all things. But they which have had but any taste of the secrets of Philosophy, do evince that to be false by clear demonstration and experience. For so far is our fire from destroying or consuming all things, that it even perfecteth some. It doth not corrupt nor consume gold, nor some sorts of metals, nor all, nor the stone Amiantus, which is very like Seel Alum; nor some other things which I will now stand to reckon up for those Coral men sakes. What then should hinder fire from having the power of generative, so it be in a fit and convenient matter? Its very dinnes cannot hinder the generation from coming to effect; because it proceedeth from the same; but fire is the matter and the forms instrument for some operations. Besides, our fire hath alwayes some moisture joynd with it; for it would not take flame nor burn, if it were not furnishd with a fat moisture; for certainly those things are neither without earth nor water, which are generated in our terrestrial fire, G. Agricola. But if it were not so, because fire prieves not; yet there is no reason we should doubt but that generation may be effected by the fire, as by the form in p. oper metrite. For unless there were moisture in metals they would not melt; what therefore should hinder nature, but that it may give this a form? Aristotele maketh the question. Whether in the sphere of the fire (which is next to the Moon) there be generated any living creatures? and he seemeth to be in doubt, and questioneth the question another time; but when he affirmed that the Fire-fly is generated in this fire of ours, I see no reason why any should doubt of it; yet there are some very learned men, and eminent writers of our time (who seem nevertheless to excel rather in this reading and Language, than in the solid knowledge of things natural) who confess and reject not only the generation of these little creatures in the fire, but this whole history as frivolous, false, and unworthy of a Philosopher. My readers expect now, that I answer their mean arguments.

They object that Aristotele doth in plain terms affirm, that the fire produceth no living creature. The Philosopher doth there compare the heat of feed with the heat of fire, affirming that the is not a very heat in feed; for (faith he) if there were, it would produce nothing. But this hinderth not, but that a living creature may be generated in the fire without feed; but of some other fit and convenient matter, as we shall see anon. Besides, the Philosopher seems here as
likewise elsewhere) to speak of that fire only which is under the sphere of the Moon, that that particular living creature, not of ours, where there is both mixture and no pure fire. But you urge: Our fire is Subtilitas mutabilis, a substance not of the kind of the general fire, but such as is found in the motion of the air, and which is by no means able to consume or turn into its own substance. This was anticipated before: when we intimated in some things which are rather perfected in the fire, and which fire is by no means able to consume or turn into its own substance. It is Laugiis (a man of much reading, and a most learned Philosopher) and from him Cardane gather that some Animals may live in the fire, but not that they can be seen there; for in this they yield to the Philosopher. But who feeth not how absurd this yealding is? for I cannot see how things generated in a temperate place, should be able to live in that extreme. For that which they say of the Salamander is as good as nothing. The Salamander (as Dioge. hath observed) doth not live long in the fire: for as soon as that matter, which runneth down on every side from its yellow spots (as I conceive) while it itareth in the fire, is consumed (which is quickly done) it is presently brought to ashes, as Pennins hath made trial with our Brunens in the Country about Heidelberg. Erazmus a most learned Philosopher, disputing about rotten Feavers, endeavoures to overthrow all this History with these arguments. First, because Arifotes compiled the History (faith Erazmus) who, it is confessed, writ many things from hearsay; I grant it: but then he adds, ipsius, as it is reported, or some other word of the same importance (as Niphus hath well observed) even as in that very place, speaking of the Salamander, he addeth, qui eum. We may observe that this is the constant practise of the Philosopher when he speaks according to the opinion, or from the relation of others; but grant it to be, that he from others related it; they were deceived (faith Erazmus) who related it to him; imagining those creatures bred in the fire, which fell by chance into it. But the circumstances of the place make it appear that this is false. If they had fallen from elsewhere into the fire, surely by his own condition they would be consumed by the fire. And unless they had been bred there, (as I said before) how should they be able to live in such an extremity of flame? Besides, spectators have observed the motion of their feet, the number of their wings, their flying, yet their death, and the cause of their death viz., their flying somewhat too far out of the fire. These things and the like evidence that those relations were not at all deceived, but that they related what was true and unquestionable. But no Author either before or since Arifotes affirms this, but one or other perhaps who hath transcribed it from him. This is more (Erazmus) than you know, you have not read all Authors Books: the greatest part of books is lost, as it appeared plainly out of Athenaeus, and Histories bear witness. But how I pray you, came Pliny to be assured that Fire-flies have four feet? He did not learn this from Arifotes, nor is there any such thing to be found in his writings which are extant. Wherefore either he learnt it from others, or else the History was known in Pliny's time. Pliny therefore added this, that he might make up the History compleat. Nay, if you had read Ciceron de Nat. Deo. you had found him affirming for certain, that there are little winged creatures bred in the middle of the fire. Neither did I before think you so ignorant in Theology, as not to know what S. Augustin (l. de Civit. Dei c. 2.) hath observed of thete Pyribia: There are, faith he, creatures which live in the midst of the fire; and there are found some worms at the Spring of hot waters, whose heat no man toucheth without harm: while these remain there not only without receiving any hurt, but are not able to subsist out of them. And Vincentius his, Nat. l. 20. c. 68. In some waters which are naturally hot, there are certain Worms which live as well as Fishes in cold; may they go out of those waters into cold they die. Solinus also confirms it c. 17. who calleth thee kindes of Flies Carypeis, and reporteth that in Crete they fly into hot furnaces without harm. Yet and Seneca (qnst. natural. l. 2.) affirmeth that some living creatures are generated of the fire; and therefore these Fire-flies likewise; as lately Marfilus Cognatus reacheth us in a large Discourse Varr. obserr. l. 1. c. 23. 24. Do not then any longer contend, that no Author either before or since Arifotes affirmeth it; since besides those pious and grave men already named, I can bring others also, who would convince you either of plain falshood, or of a levity not hard to be discerned. But Theophrastes makest no mention of it in his Book de Ignes. What do you conclude, Erazmus from thence, that the History is false? Very fine. Perhaps he believed it; is it therefore false? But it is probable. I grant it. There are many things probable, and yet false; as experience teacheth us. Erazmus wrote many things against Paracelsum, which are probable, yet not all true, unless those things which he understood not, be true. Certainly he endeavoured to confute many things, which I know he never understood: I will not now descend to particulars. Well, but the heat of fire is not poison, fit for generation. This, Erazmus, you apprehend not; but I told you before, that if it were in the lead, it were not, which was the Philosopher meaning. For it is obstinato, corruptivo, according to Arifotes. I have answered before, that fire doth not corrupt those things. This bareness is therefore, or (if you please) destructiveness of the fire is to be limited. Nor truly can I consider this to be done miraculously, but by the power of Nature; neither do I take it for a tale, but for a History agreeable to nature. And as for what he writeth of the Salamander, he adds ipsius, as I said before: there was no need to add it. But I beseech those who believe nothing but what they see, to tell me, Have any one of the ancients found fault with this History, or confuted it? I speak of the Greek writers. No, not so much as Galen, who otherwise is a most sharp reprehender of the Philosophers, and would have laid hold on this instantly, if he had had any
any such opinion. Therefore it is likely that the history is true, because none of the old writers found fault with it. But come now to Matthiolus, who of all men hath contradicted this history most unhappily; for in his margin he inveigheth against the vain opinions of the Philosopher (as he thinks) where he appears in some things vainer than vanity it self. But I will return to the business. It is unjust (as he) the work of nature, Is it enough for Matthiolus to say for though he prove nothing? If the story had been true, Galen would never have omitted it, which hath fetched out all things else so diligently, furnaces, and metals, and what not? Tullus Scalliger will make anives to what end should he repeat a thing known before? Sooner would he (as he was a famous and a malicious character) if he had not found it so, have repressed it, as he doth in some places make it ridiculous. Which continued so few dates, did not understand the whole matter; they were not, they are not always at hand; he never enquired of the Bakers. But if I should say that a little the colt newly foaled should have plenty of milk in its eider, and that it did illue forth in great quantity, what would they say then? yet nevertheless I saw it at London about six years since, as also many others of good note and credit, who with their own hands did milk it out of its teats. They will say perhaps, we do not believe it; let them chuse, it makes not much to the matter; there are many productions of nature, the caues whereof it is impossible for any man to know, much less to flew to others. And that certainly not without great reason, that we might both admire the infinite power of God, and acknowledge our own blindness and ignorance. For these and the like did God create only for his glory, that he might both confound the shallow understandings of men, and also learn them to acquiesce in his wisdom only for so much as in searching out the natural caues of things, it is impossible to go any farther. For this is amongst the works of God that may pluck down our ambition, and makes us with all our wit to fly to that common Anchor of fools, namely hidden caues and the whole substance. What have we then to do? barely only to apply our selves unto him, from whom all wisdom, knowledges, and perfection doth proceed; for whilest we relie on our own wits, and do pry into the Majesty of God, we must needs (as Solomon in his Proverbs speaks) be confounded by the same. What then remains? this surely, that they which think these things to be impossible, do keep their opinion to themselves, without medling with those that think the contrary.

The Author of the Geoponikis (if I am not deceived) calls this little animal a Salamander: his words are these: Σαλαμανδρος της ερημης αυτος ειναι μην η εστιν ωνη, or, that is to say, The Salamander that little creature is begotten in the fire; and living in the fire is not consumed by it. Here he tells three events together. For neither is this the least of creatures, but oftentimes bigger, sometime less, neither is it generated by the fire, nor doth it live long in the fire, as I said before; out of Diosteres. Thus much I thought good to add, lest young students reading the Geoponikis should errre fouilly with Zoroafles. For what purposes it serves, I cannot boldly say; yet by its place of growth and principles it seemeth to dry and cleanse powerfully. It is also of very thin parts and body; it pierceth to places very distant; and truly if the Grailhopper which feedeth upon air, be of so burning a faculty, what shall we think of the Fire-fly, which eateth and drinketh flames? But the Fire-flies are of this use to our minds: they represent to us the understanding the wonderful power of God, who hath made the greatest of all the Elements, Fire, subject to so small, so dry a creature; vouchsafing to be vanquished by these while it craweth, I do not say to be vanquished (as we may say) to make the leaeth of the Tipula, Dis. Cane. Colog. 5.) but even so much as to be touched by men, or the greater Animals.

Chap. XXVI.

Of the Water-Spider.

The Water-Spider is next, a little creature of exceeding nimbleness, whose History Authors have so slightly handled, that we can hardly pick out any thing of weight or moment towards the illustration of this History; we shall yet perform what we can.

I utterly deny *Anser* in Aristoloe to be the same with Tipula in Plantas (as Gaza interprets it) for I am not persuaded that Mule-gnats can come of them.

It is called in Latine Tipula: Plantas, Felius, and *Nomine* Marcellus write it Tipul; others, *The Name, Tipula; Guillerinvs de Coutvs reads Tapula; Albertus and Vincensius in his Speculum, call it Tappula: none of them ariight. By Plantas it is called Tipula; in Greek (as I found in Gefner's papers) γατυλ, which word truly I finde not any where any footleps of, nor can I tell what it properly signifies; some High-Dutch call it Wafer-gemor, which is to say, a Water-goat; others Wafer-pin, which is a Water-spidere; the Nether-lands, Wafer-pin; with us it is called the Water-spiders as with the High-Dutch and Netherlands, for likenes sake; in Spanish, Gufano que corre sopra el aquas a worm that runs upon the water; in Italian, Capra di aqua; in Poloning, Wood ny ciceluck.

There are two sorts of Water-spiders, the greater and the less. They differ in signets only, or perhaps in age; the greater are more common in coldt waters, the less are somewhat more blackish and of a more compact body,
The greater more inclines to an all-colours, being of a larger body.

Although several men write severally, and neither tell any certain marks whereby it may be known, nor agree in the number of its feet, yet I hope we shall so clearly and periphrastically explain in the History of the Water-spiders, that there will be no occasion of doubt left hereafter.

The Water-spiders: a little creature, in shape very like a Spider, of a body somewhat long and fatter: it hath four feet, or to its body, and two little arms stretched out before near its mouth, perhaps in head of one: which if you reckon with its feet, it will have six feet; which yet (so far as we could observe) it used not when it runneth: they are as short again as the reit of its feet, neither have they any knots or joints like the other feet. Therefore Albertus and others allow but four feet to the Water-spiders: but Fēlius, reckoning these little arms together with its feet, It hath four wings, very feeble ones, which seem not to be made for flying, but for leaping. They are also ter than its body, and the uppermost of them a little thicker and larger than the others, but yet not of leather (like those healthy cases) they are between a brazen colour and a black; the inner wings are lighter and thinner, and of a silver colour. Whether they fly by night like Water-beetles or not, we are uncertain; they leap sometymes upon the water so lightly, that they scarce do much asflit the surface of it. Hence grew that proverb among the Ancients, Lighter than a Water-spiders. So Petrus being to express the lightness of men; and Virgil, the nimbleness of Camilla, compare them to the Water-spiders. Plautus likewise in his Perīs Néq: Tīpula levissimi pondus quam fides lenonis (for to Lambine reads it, against the content of all copies, even that of Nonius) A Πανδάρρη βελτίωτα is lighter than a Water-spiders: It runneth not in a continued course, but with intermission. It goeth not under water, but when it is driven thither by force: its body is never wet. They are found all the Summer time in standing waters and ponds which are free from the wind, and quiet: sometimes also they are met with in rivers, especially close by the banks of great rivers, and for the most part under the shades of trees (as of the willow, or any other tree, (which is not over tall): most commonly multitudes of them are together in companies. They are seen sometymes to couple leaping on one another backs, but they make an end of engendering very quickly. One shall hardly find any one of them in Winter.

Whether they be of any use in Phyfick, besides the common use Flies are of, we leave for others to make experiment: for we know of none; nevertheless we utterly deny that their little creatures were brought forth by nature to no purpose. Certainly the Grudgeon, the Rochet, the Perch, and other inhabitants in the dominions of the waters do sufficiently declare how useful they are for the feeding and fattening of Fishes. Without question Fēlius, Nonius, Marcellus, Sipontius, and others, mean this Water-spiders now described, as it will appear by their words. The Tīpula (faith Fēlius) is a kind of little creature, having six feet, but so light, that in running upon the water it seemeth to take no steps. Fēlius faith upon the matter: the same, The Tīpula (faith Nonius Marcellus) is a very light creature, which doth not swim but go upon the water. Varro thus: Leves Tīpulam levissimam frigidos transit lacus: for to the place which is corrupted, is to be read and corrected: The light Water-spiders very nimblly passeth over the cold ponds. Albertus Guillerius de Condisc, and Vincentius call it Araeolum Aquaticum, interpreting the Dutch name (for it hath some likenetis with the Spider) ascribing but four feet to the Tīpula, not reckoning the little arms which are before, among its feet, since it doth not use them in going. Others (as I said before) reckoning those little arms among their feet do allow Water-spiders six feet. Hence it does most certainly appear, that we have described that very Tīpula which Plautus mentions, so that there is no room left for any one doubting hereafter. But before we go any further, the truth requires of me, that I confute two notorious errors of Guillerius de Condisc. The first error is, when he faith that the Water-spiders live alike upon the water and upon the land: the other, when he faith, that it runneth very swiftly upon land; both which do evidently contradict experience: for upon land it doth not live long, nor run at all, but move with a very slow pace, and sometymes leap, but that very little.

Whether Catarab in Aviceon, which is called by Silvestrianus Catarbus and Eckemnbur, be the Water-spiders (as Wierus thinketh) I cannot say for certain: although indeed I am easily persuaded by reason of the circumstances, to believe that Catarab in Aviceon is not the Water-spiders. But let us hear Aviceon description: Catarab (faith Aviceon) is a little creature having its being on the surface of the water, which moveth upon it divers wates without order, and divers ever and anon to the bottom, and presently appeareth above again. Silvestrianus hath almost the same word for word: only he adds, that whenever any thing happenes amiss to it, it runs away, and by and by appears again. From this little creature by reason of its restless and disorderd motion, hither and thither, that kind of melancholy which the Greeks call νηστήσια, the Latines Infania Lupina, is called by Aviceon Catarbus and Aleaturbus: with which when men are taken, they fly from the living, and go out by night, and frequent graves (as Wierus writes) and think indeed that they are turned into wolves, as Wierus writes he believeth a certain husbandman in Germany in the year 1541. The Ancients (faith Wierus) call a fly which is common in moorish grounds Tipula. And we think Manardus made mention of this somewhere in his Epistles. Wherefore I am fully persuaded that Catarab is not this Water-spiders, but some other little creature,
Of lesser living Creatures.

CHAP. 27.

They are the least of the kinds of Water-beetles, which with a radius motion move not almost continually upon the surface of the water hither and thither without order (as we said in the History of them) and upon the least disturbance of flitting of the water, goeth to the bottom, and presently hides it self in the mud, but by and by alone as the billows are down, fifth up against the surface of the water. This little creature is seldom seen but many of them sport together in the same place, running up and down several times. I was once wont to behold with great delight these little very black and shining Beetles pulling one another, and as it were wrestling together. But of these we have spoken at large among the Water-beetles. And we shall take Caesar's Tipula into our consideration among the Water-worms.

The word *Tipula* which they interpret *Tipuli*, makes nothing toward the illustration of this History.

CHAP. XXVII.

Of the Forficula, or Earwig.

A *Romanus* his *Forficula*, is called by the later Latin writers, *Auriculata*; by the more Ancient, *Mordella*; *Neplius* calls it *Velicula a vellicando* from rending; the French call the Earwig *Aurelii*; *Ocrea-vire*; the Germans, *Oren-worm*; the Low Dutch *Ooremetel*; the English *Earwig*. *Haustrinus pennius* thinks it to be *Fullo*, which notwithstanding much differs from the form of a Beetle. *Is this the Greece *Orobinon*? truly both the original of it and the biting agree thereunto; for this is bred also in the hollow stalks of herbs, (as of the wilde Partipip, Angelica, *Fennel Gigant*) and is frequently seen in Coleworts. The Northern English by an obscure name call it *Twick-hullock*, as if you would call it *Scrotomordium*, or *gaz-saw*; for where ever it finds a rivetled plated skin, it will cause very great pain, either by biting with the mouth, or by wounding about it with its forked tail; which *Pennius* faith once hapned to him being a boy. For we fell upon two sorts of Earwigs, both were with wings, contrary to the opinion of many. For if you force them here and there back again with a bull-rush, when they are hemd in some place or upon a table, (which the most illustrious *Knivet* taught *Pennius*) they will presently open their wings that are hid under their covers, and fly away.

You must take diligent heed that you pref it not too hard with a straw or with rushes, or wound it, for then it would never so long be fly away. The more common is seen with a light red colour; his foreyers, feet, and forked tail are yellow. The other (which is more rare in England, and was seen by me but once or twice) is greater than the former, and of a blacker body, hath a fiver ring about the neck to adorn it; the outward covers of the wings are of a reddish colour: the mouth is forked and yellow; on the back on both sides near the sides, there are five yellow spots, the fork of the tail is short and black, and the fist this toward her head and flies, being angry, into the air.

They are oft found in Coleworts and hollow Reeds, and in the little bladies of Elm leaves. They breed of worms that breed in the stalks: they yearly call their old skin, and that being gone they look white as snow. But with age it grows again, and is died with its ancient colour. The English women hate them exceedingly, because of the flowers of Clove-gellicflowers that they eat and spoyl, and they lay innes for them thus: They set in the utmost void places Ox-hoofs, Hogs-hoofs, or old cast things that are hollow, upon a staff fastened to the ground, and these are easily float with clothes or straw: and when by night the earwigs creep into these to avoid the rain or to hide themselves, in the morning these old cast things being suddenly taken away and shooed forth to the great multitude of them falls out, and are killed with reading upon them.

*Romanus Breviar. 1. cap. 25.* bids us to boyl them in common oyl, or oyl of Hearts-ease and with that to anoint the arteries of such as are in a Convulsion, both their temples and wrists, to cause a Fever, which is a remedy for a Convulsion. *Josepbus Michaelis* an Italian and a famous Physician, is wont to collect a great number of them, and to bring them to a fine powder in a glass very close stop. Then he mingles as much powder with Hares piffles, that he may pour into the ear morning and evening. He often proteted to *Pennius* that this was a secret to cure deafness. Others mingle the powder with oyl of Cloves and use it as before. The smaller *Galldinga* (which the English call a Suite) and Hens feed on Earwigs: and I well remember that I have found a great number of them in their Mawes.
CHAP. XXVIII.

Of the Scorpion, the Ant, and flying Lice.

Aristotle, 4. de partih. c. 6, denyeth that Scorpions have wings; Scorpions (saith he) move not flying but going. But latter ages since him have seen and acknowledged some of them to be winged. Apollodorus (writeth Pliny) relateth that some of them for certain have wings, which Nicator also hath recorded, Panemunis in Basiiic, speaking of winged Serpents; but their words: Neither ought any one to too forward to believe those things, which Nature more rarely representeth; nor yet to be altogether incredulous concerning them: I never saw any where flying Serpents, yet am I candidly persuaded to believe that there are such, because a man of Phrygia lately brought into Ionia a winged Scorpion of the Locust kind. Paramenon also l. de Best. Venenatus in aegypti. reporteth that he saw, not with other mens eyes, but with his own eyes, Scorpions with wings, and armed with a double sting in their tail. With whom Aelian agreeeth l. 16. c. 425. 43. Megaphenes hath recorded that there are some in India among the Paphis, which have wings, and are verae ontos addontes, exceeding great ones. In Apollon likewise there are some winged, and others without wings; having seven joints in their tail, faith Strabo l. 15. Geogr. c. 17. The Pythi (faith Pliny l. 11. c. 25.) have often endeavoured to bring them over into Italy but they were not able to live beyond the climate of Sicily: Yet there are seen of them sometimes in Italy, but hamlitt ones, and in many other places, as about Pharsus in Aegypt. We read also in the History of Navigations, that Ambulus the Portugals, while he layed at Palmyra (it is a City faruate by Ganges towards the East, and according to Diodorus Siculus built of old by Hercules) saw there great frote of winged Scorpions. It might be called in Latin, Nepales usque Nepa alatae, for so Plinius calls the Scorpion in Cosmographi, when he faith, Recellum cedam ad varietatem omnis formae. So again Cicero 5. de Finis. Nepas usque us videtam. Vater alio et COLUMELA do frequently call the Scorpion by that name, although Paphis underlayd by it a crab. Aelian writeth that that name was borrowed from the Moors, by whom Scorpions were first calleth Nepae, and brought into Italy. Thou feest here its ordinary bigness and shape: It is of a colour very like honey, whereupon it is called melipomene. The last joint of the tail in this kinde is black, armed with a double sting, as if one could not do mischief enough: it hath wings like the maxible of the Locusts, it goes obliquely and after the manner of a Crab; it is very hump- full to men, especially to young men and boys. Aelian attributes to it a glittering red colour, and calleth it flame-colour. Its poyson being hot, caufeth extreme heat; which happeneth otherwise in the Scorpions which have no wings. It kills Lizards, Adders, Spiders, Whirls, and all kinde of Serpents. Aelian l. 8. c. 13. This kinde of Scorpion likewise being applied to a wound made by it itself, healeth it, as others do: and if the smell of one of them burn to come to other Scorpions, it driveth them out of a house.

Its Generation is after the same manner with theirs that have no wings, of which we shall treat at large in the second Book.

The Ant is called by the Latines Formica, to serenis meonis from carrying grains of corn, faith Lidor. The Greeks call it μυρμηγκας, μυρμικας, βυξαντας, εριφωνικας, and εριφωνικας, by Hesychius and Varinius; it is called in Hebrew, נפתס; in French, Fourmis; in English, Ants, Emmett, Pismire; in Spanish, Hormiga; in Italian, FORMICA; in the Slavonian and Polonian Tongues Mravenres; in the Illyrian, Mpowka; in Low Dutch, Mieren; in Flanders, Labets; it Dutch, Omay; Ommes Eims. Now some Ants are winged, some without wings. The Greeks call those that are winged (of which only we treat in this Book) αντιες; another calls them πτερωμαι; they are named by ARIosto deli irontiori, and simply irini, l. 1. de Anim. part. by the Latines Equites, because of their exceeding swiftness, wherein they excel the others. They are of a larger body and bigger limbs than those that go and have no wings, (whereupon Pliny, if I mistake not, calleth them Herculanas) and of a middle colour between black and swart: they have four silver coloured wings; their uppermost bigger and longer than their whole body; their inner wings half to big. I have nothing that I write for certain, concerning these Indian flying Ants. For Authors themselves are uncertain, and many late writers, having travelled over almost all India on foot, have yet found none of those gold-hordes and devoures of flesh; Of which Megaphenes hath recorded thus much: There are found (faith he) among the Darda certain winged Ants no les than Foxes: Now the gold-dealers understanding that they feed upon the flesh of wild beasts, threw pieces of it along the waves, and so while the Ants are over- borne about their meat, they take away without danger all the gold they had all this while stolen. Onegerius writeth that he saw some of their skins like Panthers skins. The Book entitled De Natura rerum, so describes this winged creatures, with hooked claws, a winged body
body, and a crooked beak, that one would take it for a Griffin rather than an Ant. That Ethiopia also breeds such, we read in Philostratus, who placeth Ants and Griffins also in India; which are not very like one another in shape, but both trusty keepers and diggers up of gold. The horns of the Indian Ants let up in the Temple of Hercules at Ephesus, were a wonder, as Pliny testifieth, or rather lieth. He that desireth more dreams concerning them, let him read Herodotus, Ariannus, Teuctes Strabo, Alian and Pliny, who gave so much credit to lies carried to and fro and entreated, that they were not ashamed to put them down even for truths. But passing over the Indian Ants, let us treat of those in Europe only: whole course of life, fights, victories, policies, prudences, sagacity, patrimony, cunning, frugality, industry, economy, charity, fidelity, civility, valour, and labours. I would to the fame of men represent here; but that it would be necessary to repeat the same things in the second Book, when we shall treat of those go, with which they agree in nature, and belong to the same Common-wealth. With these Herculean Ants brutified, and Salt and Pepper put to them, the Magicians, the Leoprocus, and the Scurie are cured. Pliny made of winged Ants, provoketh and strengtheneth Venus. Wecker. To conclude, whatsoever differeth other Ants are good for (and they help very many, as you shall read) the winged ones have the same or greater virtue in curing of them.

Agatharchides tells us, that the Acerophagi or eaters of Locusts are not far distant from the inhabitants of the Red Sea; which nation are of a lower stature than others, lean of visage, and extrem black. About the Vernal Equinoxial, when the South-west and West winds blow with the Italians, an unpeakeable multitude of great Locusts is brought to them with those winds, out of some place unknown, which differ little from birds in their faculty of flying, but in the shape of their body very much. With this sort of creatures they are nourished all this season feeding upon them fairest or otherwise dead. And they catch them by fetching them down from the air to the ground with a smock. And these people are reported to excel in nimbleness and swiftness of foot, but taking a very dry nutriment, they do not prolong their life beyond forty years, nor can they move miserably than they lived; for when old age drawes nigh, there breed in their bodies certain sorts of flying Li-e, in figure indeed like Dog-flies, but otherwise less; they begin at the breast and the belly, and in a short space eat up all the skin of their face. Others of them are taken like those which have the Ithch, thereupon they tear themselves grievously, and at length the disease being at a flay, and thin hours humouring at the coming out of these little creatures, they are lain poor wretches to undergo intolerable torments, and so by reason either of ill humors, or of their feeding, or of the badness of the air they die. Hieron. Mercuellial. de marb. cont. ex Dier. doro Sicula 4. Antiq. lib.
The Theater of Insects: or, Book I.

Pliny, denieth that they have any vertue in them. But Pliny many waies commendeth the garden Wall-lace, being reduced to ashes and infused in oyl of Roses, against pains of the ears. Pallasinus writhe the with the Lees of Oyl, an One Gall, Ivy-leaves and Oyl, for an oynment for the bitings of venomous Horleeches. Let the head of the yard be put into Oyl of Camomil pretty hot, in which Wall-lace have boyled; then let the head of the yard when it is taken out of the oyl, be anointed with pounded Garlick, and the patient will certainly make water. Arnaldus de villa nova l. 2. Breviaris e. de stranguria & dysuria. Are not these to be taken for those Wall-lace, which the Dutch call Knolters and Sualfiers? And hitherto hath been said what we know of winged Infects; ye Plutonis, Comenravins's, Clibus's, Quiekgelbergin's, and ye later and more laborious fons of Esclapius (whom Phoebus moulded out of richer clay) if you have any thing which is here wanting, make addition of it, according to your wonted courtesie and ingenuity, remembering that of the old Poet:

Kal Re vi, & rete vi, & deporte al Mavens Angel.

When you receive, you ought to give withall:
The Muses gates are wide, and liberall.
Of the Division of the Second Book.

The Preface.

By the clew of Dedalus we are at last got out of the Camps of winged horsemen; where should I relate with how many stings the Insects of the lower ranks have assailed me, how much they have troubled my brain, my right hand, my eyes, whilst I accurately dissected and observed all their parts, truly I should either faint in rehearsing the wounds, or what I was resolved in my minde to finnish, I should not be able to do. Wherefore, what valiant Souldiers are wont to do, whilst the wound is yet fresh and hot, we will break forth into both Armies, and with better undertakings, so far as may be, strive to overcome them. Thou O great God, who in the Inventory of these smallest Creatures, makest the most excellent understandings to stand amazed and stupid; give me strength, that as by thy goodness I have mustered those Insects that fly, by the same I may be enabled to draw forth all those Foot-forces that want wings; so that in all my labour, I may seem to have no other end than to seek thy glory, to advance learning, and nothing that concerns my own particular, but that I may finde thee in these thy works. Go to therefore bold Atheist, who art ignorant of God and the Divine Perfection: endure, if thou canst, the biting of the Spider Phalangium, or of the Scorpion; abide the pain of the Worm Scolopendra; swallow down the Pine-tree Catterpiller, contend with Worms, despite with Herod, biting Lice, so much as thou art able, at last thou shalt finde that there is no foot Souldier so mean in this Army, that will not quickly overcome all the forces of thy body and minde, and will make thy foul mouth to confess, by their ministris, that there is a God. Thus then I draw forth my Regiments, so I muster the Souldiers.
Some with Feet: The Catterpillars, Beetles, and such as are called Scaphylyni.

Some with eight feet: The Scorpion, the Spider.

With six: As Wasps, Glow-worms, the female Meloe; also Worms in woods, trees, roots, fruits, meats, garments, chambers, humors.

Some without Feet: As Orpns, Maw-worms, Earth-worms.

All Insects without wings are either belonging to the Earth or Water.

Some swim with six feet: as the Shrimp, the Lake Scorpion, the Notoneum.

With Feet: As the Sea Scopelopods, the many-footed Shrimp.

Without Feet: As the Horsetail, the Hair-worm.
We thought fit to place in the Front, Catterpillers, the devourers of 

Peaches, or, Telphic; for some of them are excellent for their use and worth. It is no fond conceit to maintain that Catterpillers had their name in Latin from devouring, for they eat up leaves, boughs, flowers, fruits; which also may be observed in the

Field-worms that weave their hoary thread on boughs; we finde

That they with painted Butterflies do change their kind.

The Greeks call a Catterpillar σπυρος, from the waving and vaulting motion, when it creeps, whereby it lifts up and contracts it self. The Hebrews call it Ghazem, because it sheareth the fruits of the earth, as Kimhi faith on Joel the first. The Italians call it Rugga-worms and Bruchi, for so faith Marcellus Virgilius upon Dioscorides. In our times, faith he, our whole Country calls all kinds of Catterpillers Bruchi. The Spaniards call them Oruga; the French, Chenille; Catter-pilercs; the English by the name of Catterpillers; but the Northern people call the hairy Catterpillers Oxbuts; the Southern call them Palmer-worms; in the Poles language, a Catterpillar is called Rup hasenka; in the German Tongue Eim Rupp; in Low Dutch, Ruppe; in Scolvinsith, Gachenica; the Pendants call them Cervus and Cedrooa.

I should be endless if I should add all kinds of Catterpillers; for some feel rough, others soft, some have horns, (and that either in their head or in their tail); some are without horns; some have many feet, some fewer but none have above fifteen feet. Most of them move twilly in a waving posture; yet others there are that go even and flowly. Some do yearly change their old skin, and others do not. Some are changed into Aurelia's fixed above the earth, whence are bred your ordinary Butterflies; others are transformed under the earth, and become Glow-worms. Also some of their Aurelia's are smooth and equal; some again are hairy and wrinkled, pointed at the ends, sharp; some (namely of the harder kind) naked, but others (namely of the tenderest) are covered with moss or fellen down. The most of them are bred of the eggs of Butter-flies and are changed into Aurelia's: some are bred on the leaves of trees, of the proper feed left there in the web in Autumn; or of the dew or air that is up in it, and corrupting there, as Vine-berryers. Some again feed on leaves, some on flowers, and some on fruits. We, to express both kinds of Catterpillers, shall divide them into those that are bred from other things, and those that are bred from their own kind alone. Such as are bred from other things, again are either smooth or hairy; as also those that proceed from their own kind, Amongst the smooth Catterpillers, the Silkworm defervently challengeth the first place.
A worm, that is, a Fly transformed, and then transformed back, once more is made a worm again; twice it both dies and lives anew, is wasted, or "beaten twice into the Elision pure."

Its successor is left half living and half dead.

Which gives this silk-worm makes, why do they labour thus? It is not for her self nor labour, but for us.

Her issue was formerly an ornament for Kings, but this prodigious age confusion brings:

So prodigious, silk, that bile, rabble, cloaths, Gossip-wives, herb-women, singing silk suits and gowns: Nothing more common now for all silk, attires, which waste and burns men's hearts with continual fire.

In which words, though our divine Poet, who was more clear than the ancient Birds, doth something approach upon the Silk-worms, and paint them forth, yet he doth not describe them so fully, that it may suffice for the History of them. For Silk-worms are smooth Caterpillars almost of a milky colours, with small black eyes, and as you see, with a fo toed mouth. The snow white ones are bred of Butterflies eggs, which growing by degrees into little worms, produce Silk-worms of the same colour with Butterflies, And that I may not repeat this again, let it suffice that I have once said it; the butterfly is almost always of the same colour with its Caterpillar; That Butterfly taking its Aurelia, as many eggs as it leaves, or seed (if you will) like to eggs, they become so many Silk-worms after wares; which, if you cherish them, when they are fostered by the Sun's heat, and full fed with Mulberry leaves, they will repay a reward worth your care and, namely, a silken fleece. They breed first in May, in which month and the two following months, they devour a multitude of leaves, and in eating as it were by sucking, they harden; when they are grown up with plenty of nourishment, being become able, they spin a most fine web out of themselves, like to a Spiders web. Then against cold weather, they grow rough with hair, and make themselves new thick coats for Winter; by the sharpness of their claws, pulling down the lower of their skins, into fleeces; then they thicken and close it, carding it with their feet; then they draw it out amongst the bushes, and make it small as a comb: lastly they take hold of this web, and warp their body in it, making a round fold. Then men take it, and put it on in earthen vellies, and feed them with bran, and so they spring up feathers of their kinds; which so soon as they are prepared with; they are set to perform other tasks. But the spinning work they began, grows pliable by moisture, and is spun into threads on a full spindle. Some women do use to draw it forth into yarn, and then they weave it. Pamphila the daughter of Latona was the first that was reported to have woven in the island of Co .. At Pho reports that Silk-worms are bred in that Island, Plin. lib. 11. cap. 22: the flowers of the Cypresses, Turpentine, Aths, Oak-trees, being beaten down to the ground by fowiers, whence they receive life. Though women were the first inventors of this Art, yet men are not ashamed to wear these garments for lightness in Summer. The cutom of men are so far degenerate from Arms, that their very cloathes are grown burdensome. The thinner and softer the leaves are they feed upon, the finer Silk theye Silk-worms make; whereof amongst the people of Sera in Syria, the most foil garments are made; which we call Silken, as Marcilinus Wuntellius, lib. Hist. 23. In India also and in Egypt there is great plenty and use of them, and are brought from thence to the Spaniards and Italians; being the greatest source of Wantonness amongst mortals. So often as I consider, that some ten thousands of Silk-worms labouring continually night and day, can hardly make three ounces of Silk, so often do I condemn the excessive profus on and luxuriosness of men in such costly things who defile with dirt, Silks and Velvets, that were formerly the ornaments of Kings, and make no more reckoning of them now, than of an old tattered cloak, as if they were ashamed to esteem better of an honourable thing than of a base, and were wholly bent upon waste. The Greeks call this Caterpillar Spin, and Bombyces, which name is become Latine. The Italians call it Ligato; the Spaniards Gnafione della feda; the French, Ver à Seye; the Germans, Ein Seide woomer: the English, Silk-worm. Amongst whom a Silken habit is so much loved and valued, that they despise their own Wool, (which compared with Silk, is not contemptible, and is the most profitable and the greatest mercadishie of the Kingdom.) But time will make them forget this Wantonness, when they shall observe that their moneys are scattered up in Italy at that time, when they fland in need of it for their private or publick affins. This is a pleasant thing and worthy to be noted, that the head of the Silk-worm, makes the tail of the Butterfly in that golden coloured Metamorphosis, and the tail the head; which also happens in all other Caterpillars that are changed into an Aurelia.
CHAP. 1. Of lesser living Creatures.
Of the rest of the smooth Catterpillars.

All the other smooth Catterpillars, are either green or yellow, or reddish or dark, or various colours. The chief Catterpillar of the green is that which hangs upon the Privet; a circle surrounds the face of it, and all its feet; and it hath a horn turned backwards in the tail. They are black and red, spots are made athwart their sides, they are half purple, half white; the small spots are red, but their whole body appears green. That upon the Elder-tree differs not much from it, but that it is altogether green, except those overthwart spots very white and some little points like milk. It chiefly feeds on the reddish coloured Elder.

The third, that is all green, when Autumn comes is transformed into a blackish case: it feeds on the softer Pot-herbs, especially on Lettice, whence we call it the Lettice Catterpillar.

The fourth upon the Medlar-tree is less, all over green, drawing itself into an auburn-coloured case, all besprinkled with most black spots.

The fifth is leaf of all, spins its threads on trees, (especially upon the Oak, and descends by them upon the heads of those that pass along, and intangles their hats and cloathes: a very little creature, most noted in Summer, and obvious every where, when the fall of the leaf is at hand; he wraps himself in a course web, and being shut up in a red and green cover, he dieth in Winter. He hath but ten feet, as all the rest that went before had.

We call them yellowish, that are most part yellow: such these figures present you with, which is kept, wherever they are void of black, overcast that with a paler yellow, and you have their figures painted. They live on softer leaves, especially on the Tiel-tree.
Vinula is next in order; which is a most delicate Caterpillar, and beautiful beyond belief, we Vinula, have found it on the Willow feeding greedily, the lips and mouth of it are a pale yellow, the eyes are fiery, the forehead is purple, the feet and the lower body green, the tail is forked, blacker than grapes, the whole body is spotted as with thick and dark red wine, which paling from the neck crofsway to the very tail, a most white line doth wonderfully adorn it.

Three various colours are chiefly observed: the first hath a bleweif face, and very black eyes, the outward skin of the back is grayish, much beprinkled with black and yellow spots: it is changed into an Aurelia of a bright bay garnished with a white small membrane: it loveth Cabbidge and all kinde of Turneps.

The second hath the head and feet and tail very black, being chequered with yellow; the cheque-rings that are painted on them inwardly, are distinguished by channels black and gray, drawn long-waies by turns. It loveth Fennel, and Anifieed, and Cummin.

The third is green from white, bunch as it goeth along, for it hath only fixe feet on both sides, as those before. It is changed into an Aurelia fee with pricks, of a dark colour. It consumes Olives.

The fourth feeds on Dragon-wort, and resembles a spotted Viper: it goes alwaies with the head upright, and leans chiefly on its breast. It loves Bulrushes, and plants that bear down, and are bred in rivers.

If you paint the ribs descending of the fifth kinde with old Minium, there will be few things in the picture that will not agree with the truth.

In the fifth what you see white, paint with Ocre. Both of them delight in the black Poplar-tree, and feed greedily on it.

The Caterpillar called Porcellus Dark, 2c. is black, brown, especially the greater, but the leffer hath the circles white. Frequently they are found on the leaves of meadow Trifolie, and they devour them with wonderfull swiftness.
The chamberings bred in the seventh, must be white from yellow; all the rest of the body is of a dark colour, and changeth it felt into an Aurelia, of a light red colour.

The eighth seems of the colour of anhes, waving out of black; it makes a cape between black and a bright red, whence grows a daily coloured Glow-worm.

The ninth is various, and dreaded by thought for: the roundels of the incisions are green; the horn of the tail is bent backwards; and of a bright shine; under which a red coloured spot serves to make it beautiful; the middle part of the incisions is anhes colour. Lastly, an Aurelia is included of a smurfy colour. We found this in the high ways; it delights in the field Crow-foot.

The tenth is gray and black; for what is here white, lay gray upon it, and it will represent the creature. It is changed into a spiral case, of a weak blow colour; the roundels being somewhat red; and it comes next to the form of a horn fashion peri-winkle.

The smooth Catterpiller comes from the wilde night-shade (which the Italians call Bella-domus) of a green and yellow colour; it hath a horn in the forehead as long as ones finger, which Cardani relates that he saw often.

**CHAP. III.

Of Catterpillers rough and hairy.**

Hoig with hairs are the most milchievous of all: some are very thick of hair, others thinner; whereof I here afford you the kindes. Amongst those of the thickest hair, are walkers up and down, such as are upon Nut-tree leaves, Pine-trees; such as have sayl-yards, such as are called Neufries; Pear-eaters, such as are upon Nettles, Cabbage, Hedges, feeders on Poplar, such as lose their skins, such as are amongst Marigolds, black and green, &c. Those that have thinner hairs are Echini, dwellers amongst Fennel, eaters of buthies, half white: of which we shall speake in order.

Pityocampes, that is, Catterpillers on the Pitch and Pine trees, are as thick as a mans little fingers, and as long as the breadth of three fingers. They have eleven incisions between their heads and tails, and they have sixteen feet like the rees, namely about the head on both sides three, on the middle of their bodies on both sides four, and at the ends of their tails on both sides one: but the hirt are crooked and small, wherewith they try their way, the tett are broader and jagged like sawes; that they may lick the fatter to the boughs. The head is like an Are, the feet like common Catterpilrs; they are rough with hair and encompassed on all sides with straight brittles; the hairs bred on the uides are white, they shine on their backs; the middle part whereof is adorned with spots like to eyes; the brittles being flaved off, there is a black skin underneath, their hairs very tender, yet they prick more sharply than a nettle, and cause very great pain, heats a Fever, prickings, inquietnes. For the poylon enters suddenly without any lethe of the wound, and is carried to the parts next the bowels. They spin fine webs like to Spiders, drawing and disposed their threads with their fore-feet. Towards night they go under thefe, as they were tents.
Chap. 3. Of lesser living Creatures.

...tents, that they may escape the inconveniences of cold and storms. The matter of this tent is so fatal and fine, that it is not in danger by the greatest winds, nor is it fob'd with rain: and it is so spacious, that a thousand Caterpillar may be under it. They make their nests in the small boughs of the Pine and Pitch trees, where they live not solitary as others do, but by flocks: which way so ever they bend their course, they spin and carry their thread for the web along with them; and at break of day, if it be but fair weather, the great ones accompany the lesser by troops, and having made the trees void of leaves, for they consume them all, they labour hard in weaving. Only these plagues of the Pine and Pitch trees do not meddle with other Cane Apple trees. In Mount Aetius the woods of Trevis and in the valleys beyond the Alpi they abound very much, by reason of plenty of leaves for their nourishment, as Matthiudus witnesseth. They are truly most venomous creatures, whether you touch them outwardly with your hands, or they be given inwardly. They were of old esteemed to certainly to be poisons, that Ulpius interpreting the Cornelian Law concerning private murderers, set down amongst them to be punished those that give a Pine Caterpillar to drink. Selii, Aetius, f. ad leg. Corn. de fe. When one hath swallowed a Pine Caterpillar, the pain grievously afflicts both the mouth and palate; the tongue, belly and stomach are greatly inflamed by the corroding poison: also a wonderful pain vexeth them, though at first they seemed only to feel a pleasure kind of tickling: great heat followeth, loathing of meats and a perpetual desire to vomit, but ineffectual. At length if it be not helped, they burn the body, and make the stomach crusty almost like to Arsenick. Dios. Aetius, Plin. Cels. Gal. Albo 15, S. 5, and deuc. 2. 25. Hence it is that Aetius and Aegina held it dangerous to set the table for meat under the Pine tree, or for to lay there, lest perhaps by the leak of the meat or vapour of the broth, or by noise of men, these Pine Caterpillars should be moved and fall down upon the meat, and should let fall their seeds, that are as deadly as themselves. They that are hurt by these must use the remedies against Cantharides, for the same means will cure them: but properly oyl made of Quinces, called melium, and oyl Olive, is to be drank twice or thrice to cause vomit, as Dioscorides from Aetius hath prescribed. They are bred, or rather regenerated, as Vine-fretters are, from Autumnal feed left in the web in certain bladders, or from the Vine-fretters themselves corrupted, as Scaliger thought.

Now we proceed to walkers about. We call these walkers, who have no certain houses or food: wherefore do something supefstitiously wander like pilgrims, and like to Mice, they always feed on other meats, wherefore the English call them Palmer-worms namely for their wandering life, for they dwell no where, though by reason of their hair they are called Bear-worms. They will not be tied to any kind of flowers or leaves, but they pass on boldly, and taste of all plants and trees, and feed where they please.

First those white spots which we see in their sides, must be such really; the whole body is black, all the inward hairs must be somewhat yellow, but all the uppermost on the back must be hoary, except tho' three ranks that are bred in the neck near the head, for they have the same colour with the hairs of the belly. Out of the Aurelia of this comes forth the Butterfly which you see here: whose colour, figure, and nature, we described in the Book before.

The second, if you make the neck and belly, and the hair there growing, yellow, you need do no more. The cover of it feems dusky, the eggs are pale. We explained the Butterfly that growes from thence in the former Book.

The third is, the whole body and hair, dusky yellow, but that the spots on each side being obliquely made in each incision lie hid, and the head being of a light red, is adorned with a certain white fork.
The fourth hath his belly and lower hairs chiskly; the back and upper hairs are yellow from dusky, a double forked line in the face resembles the colour of whey, or milk mingled with water.

The fifth hath a bright bay colour in the face, the sides of the belly hoary; a body various with small yellowish spots, and above these with black; yellow hairs come forth like small rags; they are sharp, and growing more sharp pointed from the middle: it hurts much the neighbouring herbs and the corn.

The sixth is a brown colour'd, if the incisions were not died with black and white spots here and there; the hairs are bred above and beneath, and yet after a few fashion; they are very rough and hard, but they are of the colour of the body.

The seventh hath a black skin, yet it hath hairs something of a dirty colour, I use to call it the Penfill, because on both sides of the forehead, and also in the rump a sort penfil breaks forth of a crown-black colour: but those wedge fashioned eminences that you see in the back, are white as milk at the root, otherwise somewhat black.

The eighth holds forth a Mouse colour, on whose back those seven joints resemble it.

The ninth is a strange and rare colour: for all the incisions are painted with various colours one from another, yet mingled one with another, which a silver fish doth adorn severally one by one.

The tenth is amongst the sports of Wanton nature, not less elegant than it is rare, being streaked with black, green, blew, yellow ridges, and smooth strings; which some golden spots do wonderfully illustrate: it hath very soft hairs, of an admirable and most pleasing freshness; it hath a purple cover fortified with a small membrane.
Suppose the white incisions of the eleventh to be green as Leeks, and paint the skin and hairs half green.

The Nurtree Caterpillar is of a pale green, except three black spots between the joints, and that horn at the end of the back, and growing as it were on the rump, which receives a fresh roze colour. It especially fits on the leaves of the Hazel-nut whence we call it Curelaris. I saw two kindes of them, one was a full, the other a paler green.

The manifold delicacy of Nature shines forth in these, to which though it giveth them the face of a Moor or Egyptian, yet it affords them a garment that is of changeable colours shining in divers woods and real art; in the forehead, the hairs are knit as into knotty locks, and resemble the tailyard: the like are found in the extremity of their backs. The skin is like the rain-bow, and thines in circles deeply died with purple, which nature hath lined to the sides like broad flats; the hairs bred in the skin, shine like the Sun, and dazzle our eyes in a clear day.

We received two Nenfria out of Normandy, the first had a face of a blewe colour, and the body ridged with white red and gray streaks; the hairs are comely with a golden shining colour. The leffer rolled together is like an Urchin; the head is cole-black, the body is variably spotted with little blewe spots; the hairs resemble a Saffron lute.

This compts the buds of the pear tree, having a black smudged face; the body is adorned with some black red white ridges; the middle is were of the shoulders, and to the end almost of the back, little swellings or bunches arise of black and bleue colour, sprinkled with white spots. The Eggs from whence they breed are a bright bay colour, which is also the colour of the Aurelia, and of the hair. We saw another of the same kinde, but only it had a bunch on the back.

We call that half white, which is by nature yellow from the head to half the back, and the rest white as a Lilly. The belly is yellow and ash-coloured, adorned with fluds, and chequed in the middle.

If you touch the feer of the Nettle Caterpillar lightly with a fading yellow, the figure will differ little from the natural; it hath hard upright hairs growing like thorns, they wound with a small touch; and at first they cause a pleasant itching, but venemous; but after that a pain hard to be endured. Some maintain that it is more venemous than the Pine-tree Caterpillar.
On a Cabbage a Catterpillar breeds with a bright blow head, his body is marked with two yellow branches on both sides; between which a grayish plat as it were seems to be spotted with some black spots: the hairs obtain the colour of the Aurelia, which is ashes colour.

Here we show you two hedge Catterpillars, the greater hath a face Saffron coloured, but that triangle you see in place of its nose, was Lilly coloured: the body is variegated with spots, white, yellow, red and black (which we have expressed) placed in no order; it is rough with yellowish hairs: it devours the leaves of hedges and makes them naked: where at length, leaving a bottom of yarn of counter silk, the draws herself into a case of a bay colour, as into a sepulchre. The lesser hath a countenance blewifh, as also the whole body, except that it hath spots black and white; it hath hairs of the same colour with the former.

These have fewer hairs: namely: Cranesbill-eater Catterpillar, St. James wort Catterpillar, Sayl-yard, Urchins, Bramble Catterpillars; and that little born beafe, which the Germans call Horn-worm.

We have here set down exactly the form and magnitude of the Cranesbill-eater, you must make the white spots that adorn its black girdles of an iron colour; and paint the belly and feet, and the white space between the girdles, with a Leek-green colour, Cameraria tent this to Penninus, with this subscription: A great Catterpillar, feeding only on wild herbs, and is especially an enemy to Crowfoot Cranesbill in the Marigots.

The body of the Sayl-yard is various: from the head to the third incision, you would say he were smeared with chalk, in the five following with any dark colour, and on the three half with white lead; the hairs are made of hairs as it were placed together, the lie stand up at the end of his back like a crest: Those four tufts on the back are made of hairs also growing in order like to teeth.

St. James wort Catterpillar, or that which eases the greater Groundel; with the head and feet of a decayed purple colour, the belly of a pale green, hath the body of an unpleasant fading green, and adorned with black yellow and fiery coloured spots; the colour of the hair agree with the belly.

I have observed two kinds of Urchins, one of a blewifh green, the other a mingled white.

The first of the Urchin Catterpillars hath a chequered body, varied with black and yellow; the thorny bristles seem yellow, when Autumn comes it is transformed into an ashly coloured Aurelia.

The second is perfectly like an Urchin, half the back, namely the first half, is black from yellow, the latter is white from yellow; it hath pricks very sharp and thick, of a grayish colour.

Nature hath painted the bramble Catterpillar ashly black, on both sides with three ridges of a pale yellow colour; the hairs are very thin, and altogether black.
Chapter IV.

Of the original, breeding, nourishment, and change of Catterpillars.

Dear book, the faithful witness of my pains,
Let not the purple red thy fair cheeks stain,
Whilest I in tables paint the rude worms race,
And such as change their skins into a cage.
For these by Gods wise hand created are;
Which in small things is wonderful and rare;
And more to be admired in Worms, than Whales;
Or Elephants, Leviathan with scales;
Arm'd as with harness, strong as iron bars;
And roars like thunder terrible in wars;
Who drinks the seas, and spews it up again,
Compar'd with worms, will be admir'd in vain.

So I shall begin with our Poet, who observed a divine power in Catterpillars from their Original; which while't divers Authors have diversly expressed, I know not into how great a
darkness they have call it. Aristot. 5. Hist. 19. writes, that they begin from green leaves of herbs, as from Cabbage, or Rainbow: namely by a feed like Miller left there in Autumn, whence little Worms proceed. From these Worms in three dates space Caterpillars breed at the end of the Spring; which being augmented and nourished sufficiently, they leave off moving, and at the beginning of Autumn they change their form and life to an Aurelia. Pliny that dew thickened by heat of the Sun, is left upon the leaves, whence he derives all kinde of Caterpillars, to whom Arnoldus agrees: others say they all come from Butterflies; which so soon as they come forth of their Aurelia, they shrift forth (above or beneath the leaves hard by) some eggs (the barbarous call them Tarts) and there are greater or less, according to their bodies (some of these have blew sheenes, some yellow, some white or black, green or red) in fourteen dates they are hatched by heat of the Sun, and the shell breaking, they shrift forth small Caterpillars like very small Worms, but coloured: at first beginning they are very hungry, and do nothing but devour leaves and flowers, especially of those herbs and plants where they were left in eggs. But I should maintain that they are not bred only one ways, but all these ways: for though Aristotles doctrine seems to some not acute enough, that the lesser wild Worm grows to be a Caterpillar; yet it is not against reason; for as nature from an egg, so from a worm the producer a more perfect living creature, as perfecting, not as corrupting. For though the worm be not that it was before, (as is clear to fence) yet as much as can be perceived, it is both what it was, and is now somewhat more; for a Worm doth not dye that a Caterpillar may be bred: but adds a greater magnitude to its former body and feet, colour, wings: to life remaining, it gets other parts; and other offices: so off-parts the man (I mean Sculigers words) after some dates at first of a man in puf, is made a man actually; you must understand its generation, in which time the intellecfive soul doth not yet act, but it bears the same proportion to a man that shall be, as a Worm doth to a Caterpillar or Bee. So also Pennius decided the opinion of Pliny, when he witt that Caterpillars we e bred of dew, yet all Philosophers with one consent agree, that the more imperfect small creatures are bred of dew. And not without cause. For the Sun by heating acts, being like the form, and the humour is like the matter. The Suns heat is different from the fire, for it gives life, and it preserves the fire in their likenesse. For the dew hath the proportion and softness of the air, where Theophrastus alledgeth the affect of softnes (in his Book of Plants) as proper for generating air. Alfo nothing is more nourishing than dew by which alone some little creatures live: which also the divine Poet said; How much doth dew lay up in the night! Therefore as it is humous, it is the matter, as it is thin, it enters, as it is drawn by the Sun, and concocted, it is the fitter for generation; for the preparation of the form carries the matter along with its, and these going together it falls out that a living creature is generated. And it is not only an off-spring of dew, but the daughter of Butterflies, as we said, and as experience testifieth: and the greaft part of Caterpillars come from them, besides the Cabbage and Vine-fretters, few are bred otherwise. For these that the Greeks call ήμενε are made of dew, or a humour flat up in beds and purifying, especially when the wind is East, and the air warm, that hafkes corruption. For then in a mighty army of them breaks forth in our Countrÿ, that we cannot truly say or think so many could be bred any way but from corruption. They are all glutinous devourers of herbs and trees: whence Philip the Parthian boasts of himself in Athenaeu in his Pythogical, for feeding on Thyme and Pot-herbs, I am a Caterpillar. Martial speaks to the same purpose; One garden will hardly feed a Caterpillar. When their time of eating is over, they wander up and down here and there hungry, and by degrees growing lean with hunger; some within, some above the earth, seek for a air places, whee e they are transformed into an Aurelia covered with a Membrane, and hanging by a thread or into a bare cave; if this happen in the midst of Summer, after 24 days the shell breaking, a Butte fly presently flies out: but if Autumn be well spent, the Aurelia lasts all the Winter, and shuts out nothing till the heat of the Spring. Yet all Caterpillars are not changed into Aurelia's, but some are contracted (as Vine-fretters) and corrupt, from whom off-times three blackish eggs fall, that are the mothers of Flies or Camharides: when your Butter-flies copulate very late, they bring forth eggs (even until the next Spring) that have life, (if you take diligent care of them) as it is usual in Silk-worms, whose eggs are fold commonly amongst the Spaniards by ounces, and pounds, Theophrastus distinguishing the transformation of these Caterpillars rightly in these words, in his Book of Plants: First, of a Caterpillar is made an Aurelia, and of this a Butterfly, then of that a Caterpillar again. But whether this Aurelian Chrysalis be a living creature or not, we shall dispute when we come to speak of Insects without feet.

Of the quality and use of Caterpillars, and of their Antidotes.

All Caterpillars have a burning quality and pilling of the skin, and raising of blisters. The most deadly is the Pine Caterpillar, yet they are all venomous, but least of all those that are smooth and without hair. The daughter of Celerus sequens, being at Buzil (Basle Grefier) when

CHAP. V.
when she had devoured some Cabbage Caterpillars in the garden, after much vomiting, her belly swelled, the swelling troubled her many years, and no cure would be found for it. William Turner a Divine and a learned Phylician, the happy father of one Peter who was born to give physic to Physick it self, prescribed a purging potion for a noble Woman of England, by the help whereof the vomited up many Caterpillars, which being swallowed by negligence, had long afficted her with cruel torments; yet we may remember (faith Marcellus Virgilius) that there are beets in the set of the same names, and called Caterpillars, and are far from being poison; and amongst those men that live by the seaside, are the last dish at their tables. We have tried remedies against the mitchievous and venomous ones before, in the Histories of Cantharides, Buprestis, and Pirycocampes, for they admit of, and require the same cure. If you would have your garden or trees free from them, what webs you see hang on the naked boughs you must sweep off in Winter; for if you let them remain till the Spring, they will breed before you can remove them. In a short space they devour all green things, and consume the flowers; some amongst their trees with the gall of a green Lizard, or of a Bull which as it is commonly reported, they cannot endure. The Countrymen use to little them with some brimstone and straw let a fire under the trees. The earth dug up under the root of the great bearing nut tree, if it be thrown in a garden, drives away Caterpillars, faith Hildegard. I should pass over the Remedy Columella hath prescribed, as a shameful delusion of Democritus, did not Pliny and almost all the rest approve of it, who meddle with husbandry: the words are these:

But if against this plague no Art prevail,
The Trojan Art will do's, when others fail.
A woman barefoot with her hair untied,
And naked breasts must walk as she cries,
And after Venus spared the most surround
Ten times, the garden beds and orchard ground.

When the bath done, 'tis wonderful to see
The Caterpillars fall off from the tree.
As salt as drops of rain, when with a crook,
For Aconite or Apples the tree is shook.

They touch not Plants that are besprinkled with Wine: Theophrast. They presently dye with the smoke of the herb flora. Artium. Hence it appears (faith Silvius) that the vulgarly called Scabions, is not flora. The Cabbage is free from Caterpillers, if it be fenced with Vetches. The Worms found in Fullers Teseils, make them fall if they but touch the Cabbage Caterpillars. Pliny. Srew your Cabbage with Nitre, or salt earth, whilst it hath lost but three leaves, or strew it with ashes, and by the saltneis of it, it will drive away Caterpillars. Gespon. Palladus in this matter prefers the Fig-tree ashes. If Crabs or river Crevils, were hanged up and exposed to the Sun for ten daies, they will drive Caterpillers from Pot herbs. Cardian ou Palladus. Others wer the feeds just before they get ther, in the blood of a Caterpillar, or the juice of Marramot, to free them from Caterpillers. A tea Onion set or hung in a garden, hinders the Caterpillers from breeding. Some low Mints, others Vetches, others Wormwood about their gardens to drive away Caterpillers. Some not without caufe, have Coleworts and Garlic leaves in theirs gardens, by the humane whereof spread every way the Caterpillers fall down. Palladus, where any man may easily-read of many remedies against them. If a Horfe devour them, swellings arise, the skin of him grows dry and hard, his eyes hollow, faith Hercules, and he prescribes this remedy: You must take the sharpest Vinegar and Nitre three quarters of a pint, Vitriol a fourth part; mingle them and anoint the Horse body: be careful that it enter not into his eyes. Now we shall speake of the use of them in Physick, and in the Common-wealth. The Caterpillers web and covering (like to folk) being drank stops a womans courtes. Math. If it be burnt and put into the nostrils, it stops bleeding at the nose. The Caterpillar feeding on Privet, doth not only in a strange manner allure the Carp, if it be put on the hook for a baits, but also the dung of it put into the nostrils, preferently helps the falling sickness in women, that proceeds from the Maris; as I was told by a Midwife that was very experienced, and worthy to be believed. The Caterpillers that are upon Sponges (in the opinion of Hippocrates) are very good for purulent wounds, especially if they be dried in the Sun, with the double weight of pounded Worms, and adding a little Annice, bringing them into powder, and infusing them in the best white Wine, and so giving them to drink. But heavines following in the belly with numbness, let the Patient drink a little water and honey after it. Hippocrates, lib. de saperata, prescribes these ordinary Caterpillers that are in troops to be given in drink against the Quinsey. Dioscoris, lib. i. cap. 50. But unless they do profit by their secret quality, I think they are to be rejected for their open quality, especially in that disease. The Germans know that the hairy Caterpillar dried and powdered, stops the flux of the belly. Nicander also utter them to procure sleep; for so he writes. And Jeremy Martinus thus translates him:

Stamp but with salt those Worms that eat the leaves
Whose backs are painted with a greenish hue
Against your body with't and whilst that cleaves,
You shall with gentle sleep bid cares adieu.

There are in prickly and hairy plants, such as the Nettle is, some downy and hairy Caterpillers, by tradition are held to cure children, when they cannot swallow their meat for straight
nests of their jaws. A Catterpillar that lives on Pot-herbs being bruised and anointed where a Serpent hath stung, is very good, *Avicen.* If you rub a rotten tooth often with a Cabbage Catterpillar, it will soon fall out of it *self*; faith the same Author. Catterpillars mingled with Oyl, drive away Serpents, *Diogen.* If you anoint your hands or other parts with the same Oyl, it will keep them from being hurt by Wasps or Hornets. *Acetum. Pliny* citeth many superstitious things from the opinion of Magicians concerning the vertue of Catterpillars; which because I see they are call’d forth of the Schools of Divines, and I in my judgement do secretly disavow them, I will not repeat them here. They are meat also for divers Birds that we eat, and are useful for us, as namely Coughs, Starlings, Peacocks, Hens Thrushes, to say nothing of Troues, Robin-red-breasts, Tenches, Carps, Pikes, which are easily deceived by a Catterpillar bait. And if you desire to know the ways of deceiving them; see *Terentius in Geopon.* who is there (that I may not overpa’s the Physick of the soul given by Catterpillars) that hath not sung of Gods mer¬cies shewed to the wandring *Israelites,* when all *Egypt swarm’d* and was even drowned with the deluge of them? Alto amongst the *Romans* there was twice in one Summer such a cloud of Catterpillars, *Anno 1570.* that put them in great fear, for they left no green thing in their fields, but devoured all. Though the fruitfulness of the next year did blot out the memory of this griev¬ous punishment, yet we may not doubt but it put many of them in mind to lead better lives, God grant that we may escape by being corrected in the punishment of other men. Let us think no creature of God to be contemptible, for God can, if he pleases, make the smallest the greatest judgement.

CHAP. VI.

Of the Whurlworm.

The Greeks call it *Sporadus,* which *Gaza* interprets by *Verticillus:* *Pliny* changeth not the Greek word, but calis it *Sphondylam,* the Germans *Engelri,* as *George Agricola* teareth. *Geisser* writes it was called *Tracer,* because it goeth diversly with fawed feet. The Northern English call it *Anower,* the Southern, *Whurlworm,* that is, a *Whirl* or little hairy *Worm* with many feet; *Vincentius* calls it *Zvawcales,* because it hath guards; *Pliny* was in an error, that makes this a Serpent, since the kind of life and reason it left numbers it amongst Insects. Should I here add the differences between *Gaza, Pliny, Theophrastus, Aristotle, Plowman*, and the Schola¬list on *Aristophanes,* and *Erasasmus,* concerning the nature and form of this Whurlworm, I should indeed trifle, and rather bring fire to quench this fire amongst wits, than water. But I rather collect out of their diversions, that there are two kinds of Whurlworms; one about hou¬ses, another in the fields. For so *Aristotle* and *Alcimus* write. *Spathinus* is like to the Whurl¬worms that are about houses. For faith he, your house Whurlworms copulate backward, and that in our sight, as Beetles do, the male coming upon the female, and they stick long in copulation. Away then with these trifling of *Pliny,* that would have thee to Serpents, which never copu¬late backwards. *Hefcibius* and *Favonius,* that follows him describe them thus: *Men say that the Whurtsworm is like to an Insect called Siphium,* making a smell, *if any one touch it. But Ari¬stophanes* and his Scholiast paint it out thus: *A Whurrworm is an Insect like to a Blood-fucker.* *Cameronius* of *Aristophanes* faith, a *Whurt is a worm like a Leech,* smelling most strongly. Whence I collect that there is a house Whurt like to *Siflinus,* and smells so scurily, which if you touch, runs away, and thinks for fear; for so *Aristophanes* hath it, *opim.* As the Whurl flying from you breaks wind singingly. In which verse I cannot but wonder that *Erasmus* (I know not by what Articilm) calls the Whurl *Telem Chil. Adag.* 3. cent. 7. *Pliny* faith it is a very small body, and blackish, which it is be touched while it lives, and after it is dead, sends forth a most terri¬ble smell. I confess ingenuously, that I never yet saw it nor know whether it be by a contra¬ctery in our land or climate. Concerning the field Whurl, we read thus in *Theophrastus* as *Gaza* hath interpreted, of small wide creatures that are bred outwardly, that is not in the roots but without them, none of them will feed on roots except the Whurl, and that leaves none un¬touched; for it is the proper nature of this Insect, *George Agricola* a most learned Philosopher, writes thus of Whurls that feed on roots: The Whurlworm is found under the earth wrap’t up next the roots, (which truly I could never observe) and hence it hath its name *Spathyle* from a little where or whurl. It is so long and thick as one’s little finger, a red head, the rest of the body white, but that it is black above, where it liveth when it is full. This Plague of Or¬chards, which wants not feet (for it hath six feet) and doth not creep, eats up the *pils* about the roots of young trees; nor doth it at all forbear the roots of wilde Cucumers, black Chameleon, Centaury, hogs Fennel, Birthworts, Bnony, which no other Insect whatsoever will touch. This Whurl without all doubt is the Insect that *Malthus* in his Book of his filthy Exorcisms brings in these words: There is, faith he, a certain worm which the Germans call *Engar or Ingar,* it liveth under the earth, is so long as one’s middle finger, of a white colour, a black head, six feet, which by turning about, furrowing and turning up the earth, and eating the roots, makest plants barren.

The
The third year after its generation, it breaks forth like flying Pismires, which like their predecessors stick about trees, and confume the fruit. Then they call it a Whirligig. In the Diocletian's time there were such multitudes of them, that all remedies were attempted in vainly, they were driven away by charms (for so Miltius reports) Cordus also speaks of them. Spodoptery are worms under the ground, the Germans call them Engar or Ingar, called so from the Greek Ἠγέρον, Ἴγαρον.

The next year after they are bred, they are always transformed into May Beetles: they hurt roots much, and feed on all kinds, (be the bitter or venomous) of young sprouts, and trees roots, so that suddenly the whole plants, or at least the leaves shall fade. When the Gardners see this, they dig about the roots of trees, and fetch forth their Worms and kill them. They do us most hurt in the months of April and May; in July and August many are found with us in marish grounds, but there are no May worms but in Devonshire and Cornwall, and in the west of England. This we must note diligently, that it falls out with Insects as with Plants, that they change their colour with the climate and the earth. I have seen and I have by me a Whurl like a Caterpillar, that is of colour white from Ash-colour, with a black head, if it be touched it collects itself into a ball and it fully resembles the Whirl in a woman's spindle when they spin; whence it hath its name. It is bemumped out of the earth, and cannot endure the air; being wounded, a moisture comes forth of a pale black, whereby one may write Letters as by enamelling. I have also a reddish Whirl that lives in the earth two foot deep, whose head is exceeding black, his mouth forked, the neck is reddish from yellow, the back is carter dye, the fix forefeet are red-led colour, and all the belly and the whole body are perfect yellow but that on both sides near the belly there are eight red spots, for ornament. It is long as one's middle-finger, and Summer coming, it is transformed into a Fly. I have seen one also clear coloured, with a thicker body, bloweth from the middle of the back to the tail. But from the neck it appeared more grayish, the head and feet were yellow, the mouth was forked and red: whilst it is young the whole body is white; in age it grows yellow and blew, and it begins from the tail. It is wonderful how it will carry its body long and broad waies by a waving motion, and yet never change the place, and in moving it often changes colors. For whilst it lies on the earth it is all white, but when it is forced to move, as if it were angry, it appears black and blew. It is altogether like to the great Worms in wood, as for the form of its body, but they cannot wreathe and twit themselves round. I have seen a great Fly bred from this Worm that hath four wings. We have another that was found at the roots of Onions; and almost of the same magnitude with the black and blew one, with a green head, and fourteen feet; it hath horns, and a tail green from white: the whole body is green, white, blood red, noted with mingled colours; we call it Onion Caterpillar, we here represent the figures of them all. Now we shall add the opinion of Ioseph Cattermarius concerning Whurlis, whose judgement I always commend. It may be, faith he, Whurils are those Worms that are found in the earth at the beginning of the Spring, that are almost white, or rather somewhat black and blew; which in Autumn become dark green, and with a shining skin, are coloured with a dark dye: their head is a light blue enlining to black, and something hard, that it can easily gnaw roots. Catterpillers soon rowl themselves up and die, and take other forms of Flies or Catterpillars. They are a finger thick, and an inch and half long, they have eight feet in the middle of their body toward the head. Our Countrey call them Earthworms. Guandinus faith that Whurils are Worms so called, that like a Whurl they are round about the roots of trees. Also other Worms that are black, somewhat reddish, and have shell covers, with many feet, like the Serpenta (and they seem to be of kind unto its, but that they are rounder, and not so broad) are found in the earth, and are dug out at the beginning of Summer, and roll themselves up the same way, as I said, if any one touch them. They also call these Engerin, in Germany, that are yellow Worms under the earth with a black head, and near to that small feet, but have none in the rest of their bodies. These when they are dug up turn themselves into a round form, and being laid in the Sun they presently confune; for they live only underground and eat the roots of Plants. Who would not account all these Worms that turn themselves round, to be amongst Whurils? See Ioseph. Catterm. But this of the Iosephus upon Aristotle, faith that Whurils are a round
The Beetles, others but firefly tail. Were sufficient. or two him pier; hath. it their remedy, as it is probable: Cordus holds them to be venomous. In Egypt the Scorpions that they call Si- fyles, eat Whirlworms, as Elkan testifieth: but we shall pass from these to those called Staphylini.

**Chap. VII.**

**Of a Catterpillar called Staphylinus.**

Gaza translates Staphylinus, a Partinip, either by sleep ye carelessness, or rather ignorance; but as it appears in the their expositions of Nicander, the ancient Physicians knew it not sufficiently. For the Scholiast writes that Staphylinus is a little creature like a Whirl: others say it is like the Spanish Fly. Hippocrates speaks once only, but describes it not.

Aristotle treating of the diseases of Horses, calls it an incredible disease, the horse swallows a Staphylinus, that is like to a Whirl. But Abyrtus writes thus: A Staphylinus is like to a Whirl that is about houses, but is greater; it is bred every where in the fields, and goes holding up the tail. Whence I perceive it were no hard matter to know a Staphylinus, if the home bred Whirls were not unknown to us. But that I may do my part and satiisfe my Reader, I will produce two Insects with their figures, which I cannot tell whether they may be called Staphylini or not. But that they are not far different from them is more than a conjecture. The first (as you see) is all shining black, not much unlike to Beetles, but the body is more slender and longer. The whole body is two fingers square or somewhat less in length, the tail is with two forks; which while he flies away (for it will fly away and run very swiftly) it lifts up, as it were in its own defence, and thrusts out like two short stings very white: but we never saw it sting or bite with them; and the stings are too small and soft to enter: when he pours out these stings in anger, it pours forth with them a white and thick substancie, but softer than a moist cement. It lives most under ground, yet it is often seen amongst corn above the earth. But I cannot say that it is like to the Whirl that Aristotles or Abyrtus speaks of. The country people in Kent hold this to be a venomous creature, and that Owen are swolne by this poyson as they are with eating Long-legs. It appears indeed that this Staphylinus is a venomous creature, not only from their report, but by the authority of Aristotles and Nicander. I received the second kind of Staphylinus, a Worm of a wonderful form, from a Nobleman Edmund Knvett, exactly deciphered with his own hand, and they are very common in Norfolk in England. He hath a small head, of a dark colour from red, almost round; the mouth is small and forked. Next the head it hath three feet on each side; the two foremost of them are short (like to Caterpillars) the other four are almost of a bloody colour, four times as long. In the middle of the body under the belly it hath eight feel that are blunt, as also a Cater- piller hath. The tail is burchy and forked with two hair. We learn hence that both these kindes are naturally venomous, because two horses eating hay and swolven them down, were swolven all their bodies over, and died by them. In which disease it will not be useless to know Abyrtus his remedy, that in the like case we may have it ready, and cure our horses. For if a Horse eat a Staphylinus whilst he feeds on hay or ears, he presently calls him out again, by reason of the sharpness of the spirits of it, and as it were Vipers blood. But presently he swells exceedingly. first therefore foment the swellings, largely washing and rubbing them with salt water very hot: then take vinegar Lees, and put into them fine linen cut, and boyli this with water, and anoint him all over: but when he takes his physic, let him remain in a hot house, and a soft flannel.
red well with clothes, and let a good fire be kept continually by him. Anoint him abundantly in the morning, then the third day wash him well with hot water, and dry up his sweat, then rub him in a close place, and having rubbed him, anoint him with Nitre. And fear not though his lips and eyes livid, (for it ueth so to fall out) for the Horse will certainly recover suddenly by this means, and be as well as he was before. But whether these be the fame with Staphylus of Cordus, or the Cniphylles in France let indifferent men judge. They are found in Orchards sometimes to long as ones little finger, and they make hillocks like to Moles, and there they sleep. They chiefly do mischief to Thyme and Elders, yet not so, but they hurt other plants and herbs also. If there be any that knew any thing more certain concerning Staphylus, they are to be desired, for Physick and Philosophy sake, that they will not refuse to add their talent. So at last the natural History of Insects shall be enriched by their labour, and shall repay them not only great thanks, but also their part in a large increase.

Chap. VIII.
Concerning the Scolopendra and Juli.

The Scolopendra and Juli, and Cheesefly march in the last rank. They far surpass in the number of their feet, Catterpillars, Staphylus, and Whutworms, and all kinds of insects, wherein they are called Manyfeet by a peculiar name belonging to them. Aristotle calls this Scolopendra; Theophrastus Scopia; Dioscorides (from the destruction of Serpents) calls it ophiolion; Varicus and Hystoccius call it Amyster phagonus; others, 20.* and some call it Thousand-feet, or Many-feet; the vulgar Greeks call it Scolopera; the Latines also call this Scolopendra and Sepa, and dirty-hog; and hundred-feet, thousand-feet, many-feet; which three last names also they give to Juli. In Hebrew they call it Ghacan; in Arabick Alcempita, and Alamanda, as Silvaticus testifies; Albertus calls it Albamo, Altapa; in the Polish Tongue, Stonogroback, Gaflauka; in the Hungarian Tongue, Zones, Hiragopap, Matzkaia; in High Dutch, Ein naffel; in Italian, Centopee Vermi; in French, Cheville, Milipied; in English Scolopender and Manyfoot. In my judgement it differs as far from Juli as a sea Lobster from a Cow. They are indeed like to one another, but these are alwayes lefs, nor are they so michtieous when they bite, nor so venemous.

The great earth Scolopender is as long and thick as you have it pictured; the colour of the body is black from brown, and shining. To every incision a yellow little foot is joyned, that is, in the several sides sixty. It goeth forward and backward with equal ease. For it goes with the head forward, and with the tail forward; and therefore Ricas and Rhodoginus call it two heads, it hath the part between the head and belly not single, but manifold; whence it comes to pass that this kind can live though it be cut in funder. This Scolopender being provoked bites so sharply, that Ludovicus Armarus (who gave me one brought out of Africa) could scarce endure him to bite his hand, though he had a good glove on, and a double linen cloth; for he strok his forked mouth deep into the cloth, and hung a long time, and would hardly be shaken off.

Another was brought from new Hispaniola, which had on the midst of the back a flame coloured line to adorn it; and a red side, and colour of the hair set it forth. It had feet like to hairs, and lifting it self upon them all, it ran very swiftly; this is worthy of the greatest admiration, that Nature having given to this creature a small head, yet it hath given memory to it, and the rule of reason, not in pines and pitchers, but in the largest measure. For seeing it hath feet innumerable as Rowers, and many of them are from the Rudder the head at a great distance, yet every one knows his own office, and as the head directs, so they all frame their motion.
The Theater of Insects: or,  

Book II.

Another was brought to us from St. Augustine Promontory out of India, something greater in body and feet: which had 70 black and blew incisions; and twice as many light red feet,

I doubt not but more forts of Scolopenders may be found, of almost all colours except green; yet Ardosius makes mention of one that was green. Each of them hath an inbred property, to go to the roots of tword grasses (as Theophrastus thinks). But Robertus Constantinus deliveth to be whip, and doth Stephanus that follows him, and Ardosius himself, who invent that a Scolopender is first a Serpent, then hath eight feet, then a horn in its tails, and lastly, it is a fly goer. Albertus Rhodoginos Aurecens is to be blamed also, who affirm rashly, that no Insect hath above twenty feet, and they put the Scolopender in that number. Yet Nicander calls him two headed in these versets:

The Scolopender hath each end a head;  
And flings with both untill that men be dead:  
With feet like ores he walks himself along, &c.

Yet by the favour of so great an Author, I might say that he hath but one head; though he can as easily move forward or backward with his tail conducting him, as with his head. And this I believe deceived Nicander and others. But he faith farther, that he bites at both ends; which is as falfe as the former; for he bites only with his forked mouth, and hurts not with his tail, otherwise than by a venemous touch; and by putting forth poysonous blood.

Oppinus holds it to be more fierce than the fest Scolopender, and so it is indeed: and I greatly wonder that Gervinus Parvissifus, upon no authority, in his Book of Venomes should oppose this.

All Histories testify that this creature is dangerous and venomous, and so much the more as it is more hairy. We read in Aelian that the Rhytistis were driven out of their City by the multitudes of these creatures: and Theophrastus affirms the like concerning the Obierites in Phleg: therefore though we have ranked the Scolopenders in the last place, yet in executing divine vengeance, they may sometimes challenge the first place. Courteous people do judge of fair weather by the frequent coming forth of the Scolopenders; and when they hide themselves they forecast rain, as Marcellius Virgilius hath noted on Dioscorides. They have these uses in Physick. If they be boiled in Oyl, they take off hair with a little pricking, Gal. 11. Simpl. and Actius lib 7. They are enemies to Wigs; these are most flinking creatures, and kill them with their breath, or eat them alive. Again, Wiglce being either taken inwardly, or anointed outwardly, are a remedy for their bitings, by a reciprocal; and as it were emulating antipathy, as it is manifest from Phleg and Ardosius lib. 6. concerning poisons. When the land Scolopender hath biten, the place is all black and blew, purpled and livelled, and looks like to the dregs of red Wine, and is nicerated with the first bite. Ēgineta. Actius adds that the pain is intolerable. Dioscorides faith the whole body pricks. All hold that this bite is incurable, and will admit almost no remedy. It hath (faith Anazarbus) symptoms, prevention, and cure, the fame as for the stinging of a Viper; lib. 6. c. 23. Against this disease some things are taken inwardly, some things are applied outwardly.

Amongst inward Remedies, Ēgineta commends Trifoly that fmelts like Bitumen, drank with Wine. Dioscor, approves much of wild Rue, the root of Dragons bruised, the root, seeds, and flowers of Aphodilus, the branches and leaves of Serpol, Calaminth, the roots of Fennel and Birthwort, given with pure Wine, or Wine and Oyl. Altharius gives Nix with Wine. Pliny commends Salt with Vinegar, or rather the froth of Salt as being the better. Also he highly efeems of Hogie-mines, or wide Penntroyal taken in Wine. Actius bids give Wormwood and Mins with Wine.

As for inward Remedies, first charifie the place hurt, make deep incision, and draw out the venom by Crippping-glaizes; then put in the juice of the Ieffer Century, boyle with a third part of sweet Wine to the confidence of Honey, and binde a leather over it for eight or fourteen days. Then foment the place with a springe dipt in hot Wine, and this is a certain cure for the bite of a Scolopender. Anonymus. Pliny also prescribed divers remedies for it, as the dregs of Vinegars, walshing the place with Vinegar, the flower of Miller with liquid pitch. Butter with Honey, the green Figs of the wilde fig-tree with Vetches and Wine, the Urine of the patient hurt, and of a Wether, burnt Salt annointed with Vinegar and Honey, wilde Penntroyal with Salts, Salt with Tar and Honey, wilde Cummin with Oyl; and all kinds of Maiden-hairs. Dioscorides commends Garlicks, with Fig-leaves and Cummin, and with Vetch Meal and Wine, also the leaves of Calaminth, and burnt Barley with Vinegar; also he commends a Fomentation made of
Of lesser living Creatures.

The kindes of the Juli follow next; which the Greeks call Ῥαβδιας and that as I think not from their down, but from the tails of Walnuts and small Nuts, whose hair being faftned in a hard substance, represents thee Cats-tails, whence they had the names of Juli. I know the Latines call them Julis, but I should call them Galley-board. For Lyconphon called the Galleys of Paris that were fitted with many oars, Λαμβάνεις. Nicander applies the same similitude to Scolopendres; whence it may easily appear that Juli and Scolopendres are like one to the other. The Spaniards call these Centopias; the Italians, Cento gambi. It may be the English after me will call them Gally-worms: Numinibus also called earth-worms black Juli, as Athanenus witnesseth lib. 7.

Black Juli that feed on earth are called the earth's bowels; yet unlesse they have many feet, they cannot be numbered or named amongst the Juli. Juli are as I said, short Scolopendres, that for the number of their feet, exceed not Hoglice, and all Caterpillars, but also all other Insects. Some Juli are smooth, others hairy. I saw a smooth one in a Cabbage Latice as thick as a small river bulrush, and of the same magnitude; and that it was here: it had a very black head, the back was of a golden colour, the belly was silver coloured from gray, the inclusions and hairy feet were so many that they easily overcame both the eyes and memory. The second was all black, except a white line, which was drawn down the back, straight from head to the tail. The third was a decayed yellow, his head and feet were red, the failyards, and the hairs growing near the tail, were black and blew. If you paint the fourth with a body blackish red, and his feet and failyards lighter, you have righty set him out: we caught some of these coming forth of moss growing on the banks of trees, and others lurking under trees and rotten logs. I could meet but with two hairy ones. The first was white of this form and figure; it crept on a wall, the short hairs that grew on t were black. The second had a black and blew with belly, and a back spotted with an uncomely yellow. The mouth was red, a black eye, the hairs were hoary. It lies hid in old decayed trees between the bark and the wood; and also amongst stones that are overgrown with moss and thick downy hair. All these Gally-worms, if they be touched roll themselves up, and become round. I cannot tell whether they are venomous or not, but if they be, Happy Bennius, who divers times with his bare hand provoked and killed them, and yet was never bitten nor hurt by them. George Agricola tells us of a Gally-worm of a brazen colour (but he calls it a Scolopender) his words are these: A little Scolopender is bred and lives in the logs of trees, or in pots driven into the earth, (whence it hath its name) remove thee or flir them, and it will come forth; otherwise it isways lurks there. It hath no feathers, but hath many feet: when it creeps it lifts up the middle of a body like a vault: if you touch it with a little wand or any other thing, it rolls it self together. It is of a brazen colour, a slender body, not broad, but three fingers long, or at most four.

Also it is found in another form, almost in the very same places, with a slender round body, the thicknes of almost of a thread, of an allied bright bay colour, the feet are so many and so small, that it is impossible to number them. It is four fingers broad in length; it remains under rotten trees and planes. Avicenna makes the Scolopender (which is also a Gally-worm) to have 44 feet only; and to be the palm of one hand long; so small and slender, that it can creep into the cars. Lib. 4. Fen. 6. trait. 5. cap. 19. This creature, faith he, hath no venome, or but very weak; and causeth no great pain: which is presently taken away with the flowers of Alphodis or with Salt mingled with Vinegar. Our Gally-worms (faith Glycer) if they be in the houses, they will come together to St. Thomas Sugar, that is the most pure, (as Mice do to the best Cheese). Our Countryman Bruenius (a skilful and laborious searcher of Nature) reports that he hath seen here in England Scolopendres, and kept them, that shined in the night, and in mossy and broody grounds shined with their whole body: who was no fire, and I willingly give credit to him; and so much the rather, because Ovidius faith he observed the fame in new Hispaniola in the fields, and Cordus did the like in Germany in mossy cellars. It seems strange that Plutarch relates, Lib. 8. Symp. problem. 9. that a stripling at Athens cast up a small ragged creature, together with a great deal of seed: it had many feet, and walked exceeding fast.

The Galley-worm found in cellars, burnt to powder, doth wonderfully provoke Urine. Mr. The Use, vula. The blood of Galley-worms, with the moisture pressed out of Hog-lice, is a divine and excellent remedy to take away the white spots of the eyes. Arnold. Brev. 1. cap. 18.
And thus much for Galley-worms, concerning whose Nat"ures, I pass over the opinions of Hesychius, Aristotle, Nicander, Lycon, Ardosius; because they are various, but not true.

### Ch. IX.

Of Chileps.

Aristotle calls them ἄφες, the Greek Physicians, αἷμας; Theophrastus, ἀγαλματικαὶ; Dioscorides, άγιος ἔρευνας; those of Asia called them αὐραμές, from the likeness of a Bean, faith Galen for it looks like it, when the Chilphe rolls himself up into a round body. Or, because, as our most learned Cowperman Stafford faith, (who was president of the Minories at Wors- cetter in the reign of Richard the second) they are wont to come forth of the leaves and tops of beans, and to grow from thence. Pliny calls it ἄφαμα, from the brawny hardness of the skin, Others call it ᾳραμες, though for the fewness of its feet (for it hath but fourteen at most) and because it cannot arch itself, it seems to be a different kind from a Scopendry or Galley-worm. Farewel then all those dreams of Galen, Innes, and Pliny, concerning this matter; for we deny that these are Galley-worms. But it is called ἄφας, not from the form or finenes of an Alle, but because it is of the same colour, as Fensius writes: For it is a little creature with many feet, Alle-coloured breeding in moist places. Dioscor. lib. 2. cap. 37. Gal. 3. de loc. offic. & 11. de simp. fac. cap. & 6 Spanius. The Latines call it Affulium, Cuscinum, Porcellum; Pliny said not well to call it Centipèdes, since it hath but fourteen feet: The English from the form call them Somes, that is, little Hogs; from the place where they dwell, Tyler-houses, that is, Lice in roofs of houses: they are called also Thernes, or Joval Lice, from a spirit that was not hurtful, to whom our Ancients superstitiously imputed the sending of them to us. In some places also they call them Choroum, and Chilpius, but I know not why. The Germans call them Elbus Eufelgen, Holzmehlen, that is, Wood-lice, because they are oat-times found between the bark and the tree: George Agripola calls it also Stefflein, and vulgarly Keller Elf, as if you would say a Cellar-hog. The Saxons call it Elfehman from its Alle-colour, as the Greeks, μαυσίς, the Latins, Porcellito; the French, Chlopice; the Spaniards, Galium in the Arabians, Harbun Haureu; Gauda, Schabalschada, Kirren, Gris, and Sylvia. The Brabanders call it Piffe de Snegue. It is indeed a very small Insect, scarce a fingers breadth long, and half a finger almost broad; (I speak of the greater) of a colour wains black, especially that is found in dunghils and in the earth; but that which is under yltes and buckers is a perfect Alle-colour. It hath fourteen feet, seven on each fide: every foot hath one joynt, hardly to be perceived. It hath two short fialyards, that it may prove its way. Being touched it turns it self round or (as Galen faith) into the form of a Bean, whence it was called affumé. The fides about the feet are denued like a Faw. It is bred under yltes, water-velletis, in the pith of rotten trees, between the bark and the tree corrupting, as also under rocks, growing from moisture purifying. Then they copulate, and after copulation they lay eggs (whence comes a worm) that are white, shining, like to small pears; they are many, and heaped up in the same place, as we observed in the year 1583, they live on warm moisture, and pass the winter in the chink, or wall, or secret places of houses. From these eggs first somewhat hard Worms are thrust out, which for some time stick almost unmovable, and are white; at length like their parents, they stick the dew and moisture. They are found also in hot and dry Countreys; but where they remain by the dew of the night and vapours, what moisture was consumed in the day. Galen describes a Chilphe thus: It is a house-bred living creature, with many feet, bred under watry veftis, and dunghils, and if you touch it with your fingers it rolls it self up. It is clear that Aristotle knew it, because he compares a Sea-loufe unto it, when his tail is taken off.

Chilpe are temmre, open and discurs, as Galen hath taught us of Aelopias. They seem contempable to the sight, but they are excellent for diifes of the eyes. Also inwardly (for they are free from all poyion) they are of great use; for being bruited and drank in Wine, they help difficulty of making water. Dioscorides. To which Medicament he adds this: Take, saith he, 2 or 3 Chilpe, boyl them in a little fih picke, & drink of the picke with water in two fimal cups of an ounce and half api"f. Pliny with them for the Stone and difficulty of urine thus: Take Mouse and Pigeons dung, of each half a dram; two Hog-lise or Chilpe bruited, drink it, and the pain will cease, and you shall void either the Stone, or much fmal land. We finde in Gesnis papers, that Marcius Bardisanus affirms the fame: Galen gives them drink in sweet Wine, and so he cured many of the Kings Evil. Aelopias most succésfullly used this kind of remedy against the Althma and short windednes: Take Elariterum four grains, three Hog-lise from a dung-hill, well bruited, and drink it with an ounce and half of water. Gal. 3. 24. 14. Aelopias also, building on the authority of the ancient Physicians, much commends the Hog-lise burnt in the fire, and taken to a spoonful; for by their property they cure Althma. Fullerius and Johannes Agripula make good this opinion by their prouife. Some do rotisfe it in a dish a small quantity of
them into moist white Ashes, and then give them with Honey. 

*Pliny* saith they cure short breaths as being bruised with Athenian Honey, and with little hot water, drank through a reed, that the teeth and mouth may not grow black.  

*Actius* for the same infirmity, gives five or six with Hydromel. And *Marcellus* the Empereur reports, *ib. 35*, that 21 Hog-lice flayed into the said Honey, and drank with water, will cure short windings, putridness, and such as are almost choked, and the Leprosie also, beyond belief.  

*Pliny* writes that they are good in drink for Consumptions, who farther maintains, that a penny weight of them given in three ounces of Wine to drink, will cure the pains of the loins and hips.  

*Alexis of Pimou* subscribes to this; but *Calclus Aurelianus* dislikes this, and the like remedies from Insects; being so perverted from the usualness of such remedies, rather than from any hurt or inconvenience that proceeds from them. Experience confirms that many freth Hog-lice well bruised and drank with Wine, Ale, Beer, or any convenient liquor, or applied but outwardly, can cure almost all diseases of the eyes that arise from any thing growing in them, or growing to them, (except the Cataract) which we observed in the former Chapter out of the Breviary of *Arnoldus*. For a Quinsey, faith *Galen*, &c. they must be lidded with Honey, and the outside of the throat must be anointed with the same. Hog-lice boiled with oyl of Roes and heated in a Pomegranate shell, and poured into the ears that are pains, do cure them. *Dioscorides*. *Gal. lib. sect. loc. &c. Enaur. commanded to boil 2, 3 or 4 in oyl, and to press out the oyl and drop it into the ears of those were, deaf, or had pains or tinklings in their ears. Oyl of Chilipes dropped into that ear is next an aking tooth takes away the pain certainly, that ariseth from a hot caus. *Actius* 24, 27. Some mingle them with some convenient unguent and drop them into the ears. *Severus* (faith *Galen*) poured them into ulcerated ears with good success. *Faventinus* prescribes 21 Chilipes boiled in lowr Oyl, for pains of the ears proceeding from cold; in which he shews that they must be anointed about the ears, and a little must be dropped in. *Curdam* justifies the same remedy by experience. For Wens, *Pliny* takes a fourth part of *Rolin* or *Turpeniente* to the danghi *Chilipe*, by which Medicament (faith he) swellings under the ears, Kings-evils, and all such tumours are cured. *Marcellus* *Empereur* hath the same, and *Avicenna* 2, 2, cap. 739. and from the authority of others, he adds, that Chilipes taken in drink, cure the Cramp, and Alcures, which we have never known any to have fail besides. If you often apply Oyl or Butter of Hog-lice to a painful head, you shall cure the pain. *Gal. Enaur. 2, 91. and Aburins de quadrup.* Bruised, they cure the Tonsils, and the displeases of the chops, *Dioscor*. A live Chilipe laid to a whitooscuris it, and it takes away swellings, if it be laid on with a third part of Rolim or Turpeniente. *Pliny*. Take *Uniguer* populion 1, ounce, Oyl of Roes wherein Hog-lice have been boiled 1, ounce and half, Saffron 1 grains, mingle them and make an unguent, that is a most noble cure for the Hemorrhoids, that swell and are painful. Others (faith *Alexandrus* Benedichus) boil these Chilipes with Fat or Butters, then they put to it the yolk of an Egg; and with this they assuage that cruel pain. *Pliny* saith, they cure all hardness of wounds, and Cancers, and Worms in Ulcers, being mingled with Turpeniente. And to conceal nothing from you, I thought fit to add, that *Pennis*, himself lying sick of the Afflimes, used for a long time Hog-lice steeped in Wine; but having done it always to no effect, by my advice at last he did twice or thrice take in the smoke of Brimstone through a tunnel, and he grew perfectly well from that horrid symptom. Take oyl of Violets 11, ounces, wherein let four Chilipes boil till a third part be consumed; it restrains a fall humour, being outwardly anointed. *An uncertain Author*. Hens, water Lizards, Land Frogs, and Serpents feed on Chilipes, as *Theophrastus* writes. *Ambrose Parasus*, a Chirurgeon of Paris, relates that one vomited a small living creature like to a Chilipe: and such a like thing *Solenia* hath written concerning a certain woman, upon the second Book of *Actius*.

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**CHAP. X.**

Of Land Scorpians.

It is called *oikuros* in Greek, from scattering its venom, or as others will have it, because it creeps lame-ly. *Alfo* *De* signifies a Scorpion, or a kind of Scorpion; whereas *Nicander* speaks in his Theriacs, the burning Scorpion must be pressed down when he creeps upon his feet, being a deadly creature. It is doubtful whether this be a kind of Scorpion; it hath legs or claws, and a sting in the tail. The Latines call it *Scorpius*, and *Pliny, Scorpius Cicerius, Plautus, Varros, and Nominis*, call it *Rapam*, which name *Collineta* ninth often. In Hebrew it is called *Acros*, and *Capharab*, because it pricks those that tread on it. In Arabick it is *Natrab, Athrab, Nicharab, Hakarab, Acerb, Rashi* calls it ٠٠٣. *Couches*
Couches, Pandalarius, Satelles; in Spanish it is Escorpio or Alacranc; in Italian, Scorpione, Scorsifile; in High Dutch, English, French, Brabant, it is called a Scorpion; in the Scyrian language, Niedaradeck; in Illyrium, ifir: in Danish, Wellcovan; in new Hugniola, Alacranc.

But that which hath a bunch on its back and draws the tail after it rolled up, Silvanicus calls Algaratas. It is an insect with a body of the fashion of an egg; as it were smocked all over; at the bottom a tail comes forth, joyned with many round knots, the last as it seems longer than the rest, so that only is armed with a simple or double fling, and fomereth bended backward toward the end: it hath eight feet, and legs forked with claws; and strong piniers; it hath a head at the others have, lying hid in the top of its breast, wherein you can perceive very small and almost no eyes, that Authors do scarce mention them. All Scorpions have tails, or no tails. Some of the tailed Scorpions are fenced but with one fling, but others with two; yet they do not differ in kind and nature. Nicander describes seven kinds of land Scorpions. The first is white and not deadly. The second (faith he) hath a red mouth, from whose fling ariseth vehement heat, feverishness, and intolerable thirst.

Alban faith the same. The third is wand and blackish, whose fling causeth a flaking palie, and a Sardonian laughter and vain; like to that of scutels.

The fourth is of a colour inclining to green; this is soon as it hath flung a man; a cold and shivering poifeth him, so that in the hottest Summer he will fuppoie himself covered with froth. This kind hath many knots between seven or nine, which is also the cause that he wounds so deep, by reason of the length of his tail. The fifth is black and blew, or of a pale colour, of a large stretched out belly, for it feedeth on grails, and is un BASatable. It not only flings with the tail, but also bites with venom'd teeth. Nicander calls its poifon Scorpion, because a Bubo flieth on a man that he flings. The sixth is like to a marled Crab, yet not without a tail, but with a greater body and almost round, so that it represents a Crab with a tail. Matthias faith that he faw of this kind some that were black, murrey and green in the County of Arcinus, not far from the River Sarus. The seventh is like a Grampel: also it hath claws greater than that; and this kind is produced by Crines on the dry ground, that are rent in some hollow places to escape the Fishermen: in which places if they die or corrupt these kinds of Scorpions grow from them: as Ovid most elegantly hath set it down:

Take off the claws of Crabs that nfe the flores, And from their bodies with earth covered ore, A Scorpion grows threatening with crooked fling.

Alban calls this the flame-coloured, for it is like the Crab that becomes red by boyling. There is another kind of Scorpion which we call Rhab- fis, and the Arabians Scorpion; for Nicander and the Greeks never say it; it is very banchy, and runs twifteft of them all: it hath a tail for its small body that is very great: it seems to be pale, but the fling put forth is very white: Rhabis calls it faraves; Alonchis Grati; Aviceenas, Algaratas. It is found in the Eastern Countries, especiaily in Cys and in Hafcaris, as Gordius notes. Philosophers say that the flings of other Scorpions infufhe a cold poifon: the Arabians say that only this one, intueth poifon that is hot. I saw one brought forth of Barbary, and we here give you the picture of it. The fling of all the tailed Scorpions is hollow, whereby they call poifon into the wound: as Alban reports, l. 9. c. 4. To which Pliny subscribes, lib. 9. cap. 37. and Nicander in his Tho raricks. Yet our Galen is of another minde, lib. 6. de loc. aff. e. 5. where he speaks in these very words almoft to those who ascribed a specific quality of hurting or helping to humours or vapours. But the fling of the Scorpion deserves much more to be admired, which in a very short time causeth extreme symptoms; and that which is infufed when it flings, is either very little or nothing at all, there appearing no bale in its fling: And indeed, when we fee that from the teeth pricks and flings of some creatures, fish or plants, there is solid poifon conveyed into the wound by them; what need we fly into secret bladders, and piercance such as were never seen, that lie hid under the root of their flings, such as fruitful wits have rather invented, than solid judgements and those that were judicious for the truth? As I saw, they have all six, besides the claws that are their fore-legs, as crabs have; (which I should more willingly call arms) some of them (if you look narrowly) are forked: their tail consisteth sometimes of 65 or 7 or 9 knotted jointes; in the end of the tail is one hollow fling, two sometimes, (but that is more feldome). If it had its fling any where but in the tail (faith Aristote lib. 4. Hislori) because it moves it self by leaps, it were unmeet to fling with all: Alban faith, that its fling is very small, and scarce visible: out of whose invisible pipe, if there be any such a venomous spirit, or noifter humour is poured in by a wound made, that is faince perceived or sensible. It walks side-ways as Crabs do, alwaies moving the tail ready to strike, that no opportunity may be let flip. The Males are the fiercer, flenderer, longer, and more spotted on their bellies, claws and flings. The Females again (as Aviceenas well observes) are greater, fatter, greater bellies, and milder. The poifon
Of less living Creatures.

of the Male is also more dangerous, as Pliny thought, the Female is more gentle; but all their venom is white, unless Aplidomus deceive us. It is apparent that they which have seven or nine joints on their tails, are the most curi: many have but six, it strikes afteward and bendingly, All of them have their portion more violent at noon day, and in Summer, when they are hot with the Sun-beams, and when they are thirsty and are unfatible for drink. The plague of it seems intolerable, and which with a heavy punishment destroys a man with a lingering death in three days. Their stinging is always mortal for maids, and most commonly for all women: and for men in the morning, before they can cut out their venom by some accidental stroke, and are new come to their hold. It is the property of Scorpions, that they will not sting the palm of the hand nor smooth parts; and none unless they feel the hair. Scorpions, as Pliny tupporeth, wilt hurt no living creature that wants blood: which Dr. Wofius of Turn a most learned Physitian hath proved to be false: for he saw, as he reported to Pennius, a Viper flush up in a vell, with a Scorpion, and they killed one another with mutual biting and stinging. And Aleian writes, l. 8. c. 13, that they do fight and contend with Vipers, and all kinds of veno-

mous Insects for their meat: Gepinc faith it is certain that a Viper will devour a Scorpion: and from thence his bite will be the more grievous. Alfo Thoephratius writes that by the thing of Scorpions Serpents will dye, and not men. But Galen depending on experience, hath proved it to be false; and apprehend it for a lie. Pennius sleeve the fraud of Aleian relating stil. 6. c. 23, the wonderful fraud of Scorpions; but since I observed the same in Italy, I will maintain the truth of the Author, and free him of it. We know that the skill men have in that Countrey, they employ it all to escape from the Scorpions: whereupon they use fands to defend themselves, and hang their beds on high from the ground, they place the props or supporters of their beds far from the walls, and sees them in vessels full of water, and many other inventions they have to de-

cease or to destroy the Scorpions. But the Scorpions get up to the roofs of houses, and if they can finde any lefe broken they will remove it, and one of the strongest of their Captains, crus-

ting to the force of his claws) hangs down by this chink, and his tail hanging down, then anoth-

er upon his back comes down as by a ladder; and takes hold by the other tails, and a third takes of the hold of the second's tail, and a fourth by his tail, and so the rest, until such time as by links they can reach the bed, then the last comes down and wounds one that lies asleep in his bed, and runs back again by the links of his fellows, and to the rest in order: thus away, unloosing as it were the chain, until they are all got upon one another backs, Alfo Clem. Alex.

1. formis. makes mention of this property. But they are not all venomous, no do they hurt or sting all men alike. For they do not live in Sicily, and if there be any there, yet they do not hurt; and therefore the Philis kept their labour when they undertook to free Italy from this mischief that was a stranger to them, in hopes of gain. Plin. lib. 11. cap. 25. Arifotole writes of the fame thing concerning Phars lib. 8. Hisp. c. 29, of the Island Malta. Diodorus lib. 4. cap. 3, of the Country Noricum. Joseph. Stalifer exerc. 189, 5. where you shall come in no place but you shall finde abundance of them, and yet they either sting not at all, or else there is no danger unto men by it. But now in Egypt, Sicily, Africa, and Albania, they wound mortally, as we read in the Books of Alexander de Alexandro. Pliny, Dioclesides, Strabo. In England, Scotland, Ireland and Gaff-

ony, Scorpions cannot live, nor in the colder Islands more Northward. For though they cannot well bear the heat of the Sun by day, and therefore lie under fones all day; yet it seems they want no lefe heat in the night, for love whereof they come not only into chambers, but get into feather beds, and lay themselves down sometimes close to thofe that are asleep. Men report many things concerning the Country of Trent let free from the deadly sting of Scorpions by the prayer of St. Viflium. But is it that the Readers chooe to take it for a Truth or for a Fable. In Scipia it is far otherwiffe, for the e f a Scorpion sting a Man, a Hog, or any Beif or Bird they are certainly killed. Cardan faith that such as wound mortally are feldome bred. But Matthius teckons up an army of desperate fymptoms that happen there, especially in Heterius by the stings of Scorpions, sometimes joined with death. And Aleian l. 8. cap. 13, reports that in Ethiopia men live are not only endangered by the sting of the Scorpions; but if they do but tread on their excrement, their feet blifter, and they can hardly be cured. He calls those Scorpions Sibifita, They feed on Vipers, Blind-worms, Lizards, Spiders, and other veno-

mous Insects: whence they are fo forcible with poifon, and have a kind of gradation (that I may use Paracelsus) in the like of it. Arifiole speaks of some Scorpions in Caria that are very loving to franges, (Aleian reports that this is about Latmus a mountain of Caria, where they are facted to hospital fugiers, and do not sting any stranger; or if they do, they do them no great hurt, but they kill the inhabitants presently when they sting them. A Lion whensoever he fees a Scorpion flies from him as from an enemy to his life: wittens Philelupes and St. Ambrose gives credit to it. Men say that such are never sting by Wasps, Hornets, or Bees, but only are sting by a Scorpion. Pliny. Their General Generation is that commonly Copulation, more seldome, (to far as we know of it) from Patre-to-fian, felifion. Some maintain that they are not bred by copulation but by exceeding heat of the Sun, Aleian lib. 6. de Anim. cap. 22, amongst whom Galen must first be blamed, who in his Book de fas. form, will not have Nature but chance to be the parent of Scorpions, Flies, Spiders, Worms, Nats, of all forts, and he attributes their beginning to the uncertain constitutions of the Heavens, Place, Matter, Heat: but doubtless they do copulate, and they produce little worms alive (which I have
have been) they are white and like to eggs, and they sit upon them to hatch them. So soon as they are young are brought to perfection by them, they are driven away by their young, as it falls out with Spiders also, (especially those are called Phalangium) and they are destroyed by their young ones in great numbers. Scorpions are fruitful creatures, for oft-times they bring forth eleven. Some also suppose that they devour their young (namely Antigonus) but only one that is more cunning than the rest, which hides it left about the damp places, and so escapes the danger of its sting and biting. Thus afterwards revengeth the death of all the rest, and kills its parents from above. They bring forth twice a year, namely in Spring and Autumn. The original of Scorpions from pasture is more rare, and it is many winters. For they are bred from Crevis corrupted. Pliny lib. 11. cap. 25, and from the carasses of the Crocodiles, as Antigonus affirms, lib. de mireb. iij. cap. 24. For in Archelaus there is an Epigram of a certain Egyptian in this words:

The carasses of dead Crocodiles is made the feed,
By common Nature, whence Scorpions breed.

Arrietos adds further, that from water Mints corrupting: Scorpions are bred. And Kiramides and Pliny lay they breed of Basil. An Italian that delighted much in the smell of Basil, a Scorpion bred in his brain, which afterward caused most vehement and long during tortures, and lofty death. Helleurus, lib. 1. cap. 1. of his practice. Geiger heard as much of a French maid, as he tells in his own hand writing. Doctor Banchinus second to none for Anatomy, reported to Doctor Pennius, that he hid Basil in a wall at Paris, and after a certain time he found two Scorpions in the same place. Chrysippus therefore not without cause, dispraised Basil to many men. There are some that maintain that if a man eat Basil the day he is ill with a Scorpion, he cannot escape death. Others say, that if a handful of Basil be bruised with sea Crabs or river Crabs, and be left in a place where Scorpions haunt, all the Scorpions will come about it. Pliny lib. 20. cap. 12. But Diuiformes lib. 2. 135, and lib. 32. cap. 5, faith that Crabs will kill Scorpions, if they be put to them with Basil. Albertus Magn. lib. 19. anim. cap. 18. Some are of Avicenna's opinion that they breed of corrupt wood, and are made many ways. The place conduce them to their generation and production. For in Hispiana, the Canaries, Numidia, Scythia, Pefcar, Barbary, Ethiopia, there are such multitudes of Scorpions, that the inhabitants are oftentimes forced to forake their habitations: Ovidius, Thevetius, Leo Afer, Pliny. The Country about the Lake Arvhitia, in the East Indies near the River Ephemens is so fruitful and so favored with Scorpions, that the inhabitants not knowing what to take, left the place to them. Aelian lib. 17. cap. 40. When you are two days journey from Sufa in Persia into Medes, you shall light upon an infinite number of Scorpions, whereupon the King of Persia being to ride that way, commands the Citizens three days before to hunt the Scorpions, and dadgins a very great reward for those that catch most of them. If he should not do it, by reason of the multitude of Scorpions lying under every stone, there could be no passage. Aelian. lib. 15. cap. 26. The East Indies as Agatharches tells it, and Africa also, breeds abundance and very great Scorpions, which also wound with their stings as the others in Europe do. The Scorpions of America are the smallest of all, yet the most venomous, next to those of Africa: their poison works so suddenly, that it immediately flies to the heart and kills the party that is struck. The people of Narenum near the Alps, have in their Country many Scorpions, but (which is wonderful in Nature) they are all harmless, as Scaliger affirms. In Pharos also, and the Territory of Avarium, the Scorpions (as we said before) doe not hurt. In some places of Heretius (as about Raphioid) there are found very small Scorpions, and innocent. Geiger. So it is also in some Countries of Germany. In new Hispiana there are a great many Scorpions, but not very venomous; there is some pain that follows their stinging, but it is not great, nor of long continuance, and men are more hurt by the stings of Waifs or Bees: unless it were so that the Scorpions were fatting, or newly wounded. Manardus. But the Scorpions in the Island Ferreta (which is one of the Fortunate Islands) and Captum in Egypt, cause great pain, and their Venem is mortal. In Cafile a Country of Spain, the country folk oft-times while they plunder the ground, do finde innumerable Scorpions, clustered together like Pimens where they hide all the winter. Matthias. The colder Countries have no Scorpions, as Gascony England, Ireland, Scotland, Denmark, and great part of Germany, or if there be any there, they are not venomous. Aelian reports a wonderful thing concerning the Priests of Isis, which in科普, a City of Egypt, there are abundance of deadly Scorpions, they can tread upon them, and call them on the ground, and yet receive no harm by them. Alfo Cifis, a people of Africa cannot be hurt nor stung by Scorpions. For when they come to any venomous creature, it presently becomes stupid, as if it were charmed or struck dead, that it cannot move. Alfo all their Hogs, but not the black ones: (for if they be stung they die presently) are free from their stings. Laftly, a Scorpion nor any other venomous beast, doth not hurt a Stellio, an Ascabatoes, a Crab, a Hawk, as Galen ad Pifonom, and our friend Geiger have observed.

Their Food.

They live by eating the ground sand in some places they feed on Herbs, Lizards, Blinde-worms, Whirls, Beetles, and all poisonous beasts. Aelian. But he that shall tread on the excrement will have his feet blistered. The Hens, Ibis, Vipers eat abundantly of them, whence Arisftotle calls the Viper exsanguineus. And they are not more fit for their food, than they are a remedy for
for us. For being laid to their own wounds they made, they cure them, as is generally known. Their use in also a Scorpion bruised refists the poison of a Stellio, Pliny. Some bruise them and drink the fluid, in Wine, cutting away their tails. Others lay them on burning coals, and perfume the wound, and then strew the Scorpions ashes upon it. Some bind them to the wound, being bruised with salt, Linseed, and Marsh-mallowes. Against the Stone, Lanfrancius his Powder: Take 20 live Scorpions, close them in a pot with a narrow mouth, and with a soft fire burn them to ashes, which is a wonderful remedy against the Stone; A Scorpion torridified and burnt to ashes and taken with bread, breaks the Stone of the bladder. Author ad Phisicamen. Three Scorpions closed in a new earthen pot, and covering it with a cover well luted, with a fire made of Vine branches, bring them to ashes in an oven; the Dose is 6 grains with syrup de quinquie radiciis: it wonderfully drives forth stones of the kidneys.

New Authors exceedingly commend the ashes of Scorpions amongst the remedies against the Stone, and the oil of them injected into the bladder, and mounted outwardly. Alexand. Benedicitus Aggregator, and Leonellus Fahrenheitius, out of Galen (Ep. por. 3) teach us to burn three small Scorpions, and to give their ashes in Syrup, or a decoction, or some confection proper for it, to break the Stone. And lib. 2, he bids us to mingle them with fat, being calcined, and so to exhibit them; because otherwise the Patientes would abhor the eating of them, wherefore they may be given without fulpicion. That Medicament of Abolbians, Aridnus praieth so much, is made of the ashes of Scorpions, as you may see in 2. Breviaris cap. 18. as also the admirable syrup of the King of France against the Stone, which is described in the same Book and Chapter. Rondelatius capite de calcino, in his practice, maintains that a Scorpion is cold, and therefore to drive out the Stone we must use the compound, and not the simple oyle of Scorpions, Matthioli teacheth to make that compound oyl; Commentar, pag. 1427. 20. But before him, Luminare Maina, made that after this manner. Take round Birthwort, roots of Gentian, Ciperus, Bars of Capers, of each 3, ounce, oyl of bitter Almonds 3 jilt, let them stand in the sun 30 daies; then add to it 15 Scorpions, and shuffling the veflel again very close let them in the sun 30 daies as before. Then strain the oyl and keep it for your use. Others prepare it thus: Take old Oyl as much as you please, put as many Scorpions into it as you can take in July (for then are they most venomous and fittest for this remedy) add to them white Dittany, leaves of Wormwood, Berony, Vertain, Rosemary, of each, 7, handful, set them a-flaming for a long time, then distil them in balneo in a Limbeck. It is called St. Bernardis Oyl. It powerfully provokes urin. Anointed on the gout, it is prevalent against the bitings of Scorpions, how venomous soever. It drives out worms miraculously, Bfragralis. Of Oyl of Scorpions and Vipers tongues, is made a most excellent remedy against the plague, as Cennisus testifieth, t. 7. Manardus faith that Oyl of Scorpions is now made with old Oyl, adding many medicines thereto commanded against poisons, and it is admirable in the plague, and against all venome. I know a man that having only this remedy, made no reckoning of the greatest plague; and had not only preferred himself but his servants also, whom he sent to visit people that were sick of the plague; and I know very many that escaped only by anointing themselves, having drank the most deadly poisons. So says Manardus. A jiniment of Scorpions against the plague, and all poisons, is described by Euemanesius, lib. de cur. pest. cap. 12. A Scorpion is good also against a wound given by a Viper, faith Galen lib. de simpl. Samaonius commendeth them highly against pains in the eyes, in these verses:

If that some grievous pain perplex thy sight,\[\text{If that some grievous pain perplex thy sight,}\]
Wool we in oyl is good bound on all nights.

Carry about thee a live Scorpion eyes.

After of Colerworts doth make them apply.

Wth bruised Frankincense, Goat's milk, and Wine,

One night will prove this remedy divine.

If any one troubled with the Jaundies take Scorpions bruised in Wine and Honey; Galen faith he shall quickly finde help. Kiranides, against a Quartain ague, Quotidian, or Terram, prescribes a Scorpion put into a glass of Oyl about the wane of the Moon, and kept there; and with this Oyl anoint the whole body on the joints, and the soles of the feet, and the palms of the hands, very well before the coming of the Ague. Plinius secundus faith, that a Quartain Ague, as the Magicians report, will be cured in three daies by a Scorpions four Lift joynts of his tail, together with the gulle of his exs, to wrap up in a black cloth, that the sick parent may neither perceive the Scorpion that is applied, nor him that bound it on. But let these superstitions pass, and we shall speake something of Antidotes against Scorpions.

First therefore of Phyphilisicks, Magicians deny that a Scorpion can pafs over if he be compassed in with a branch of Turniole: and the herbe laid upon him kills him. Pliny. A smoke made with Brimtone, Gilbanum, and an Afler hoof, drives away Scorpions. Rhaps. Take Storks, Arie,

nick, Sheeps-dung; fat of the caul of Sheep, equal parts, dissolve them in Wine, and make a fume by the holes of Scorpions. If a Radish cut be put into their holes, they will not come forth. A Scorpion burnt is good, the live of an Afl, Sandarachis, with Butter or Goats fuet to make a fume. Varrigana and Dioptanes in Geopon. Rhaps commends the root of Elecampane carried about one.}

Men say that Honleek hath a sovereign a might,

Who carrieth but no Scorpion can him bite.

Preventes against the stinging of Scorpions.
If a man anoint his hand with an herb called Paris, or with the juice of the root, he may safely take a Scorpion in his hand, Flamininus. Grapes prefer men from the stinging of Scorpions, as also Filibers carried in their Purse. Aetius. Also the seed of wide Docks either drives them away, or their stinging is not mortal. Dioscoride. Who also stout from the Africans, that Basil will do the like. Larks purs, and wide Camplings also makes them stiff and atrophied: The same Author. And faith be, they report, as long as any man hold Cardius in his hand, a Scorpion will not bite him: or if he do, it will not hurt him, The seed of Wood-forrell drak, preserves one from Scorpions. Aviceina. If you lay Solomons Seal under you, it keeps off Scorpions. Jfdorns. And Plyy learned from the Inhabitants of Africa, that he that carries Radifh-root, or Turnfole, or a dried beet like a Lizard about him, Scorpions will not hurt him: So Dittany in smoke, or while Mints, or Oyl of Scorpions anointed about their holes, will keep them from coming into the Chambers. Rhafis. But these things will kill them laid upon them: Radifh-root chewed, broad leafd Basil that grows by the water side, Millows leaves, black Hellebores (but the white will quicken them when they are dying, if Plyy may be believed) Scorpions grate, Rose-root, Basil with a red flower, the spittle of a cholekine man falling. Rhafis, Plyy, Aviceina Democristis in Geopon. To cure the sting and wound Guilemus de Placenta, prescribes this in general, namely, to give and apply inwardly and outwardly, presently, good Theriac; then the part affected must be cut, and an actual Cautery set to it, and the poiyon drawn forth with Cupping-glasses. Galen bids binde the part above, and to cut off the parts affected, Gal. 5. de loc. aff. c. 5. But since that is a very hard and cruel remedy for the patient, I thought fit to write from the Antients what remedies are cures for this wound. You shall first know the stinging of a Scorpion thus: The place is presently red and inflamed, and by turns, (as in an intermitting Ague) waxing cold, and the sick is sometimes better, sometimes worse. He sweats all over, his hair flares upright, his whole body waxeth pale, his secretes swele, he breaks with hale, his eyes run with clammy tears and filth, his jouyrs grow hard, and he hath the falling of the Tuel, he seme at mouth, he is drawn backywards by convulsions, and troubled with the Hickop, and sometimes great vomiting, he is quickly weary of labors, he is vexed and troubled with fesse of horror, the outward parts of his body are cold a packing pin runs over: all his skin, sometimes he thinks that hail falls upon him; for Galen asking one that was stung with a Scorpion, what he felt, (3. de loc. aff. c. 7.) he said he feeme all covered over and almost frozen with hail. Aetius adde, mumauum, or waris of the fundament like Ams; after thefe pointing, then swelling, and finally death. Aetius writes, that if the lower parts be stung, the goines well felenfely, if the upper parts, then the Arm-pits. The wound being now known and viewed, and opened by section, and the generall cure we speak of applied, whereof Authors are plentiful, Galen amongst outward remedies reckons Balsamum, true Worms wood, or the juice of black Mistle-berries anointed. Alfo he diversly commends the spittle of one that is falling, and uereth it as a Charm, lib. 10. Simpi. And he bids give inwardly the Balsam with womans milky, the Sapphire stone in Powders Afla fatida, Scordium, Centaury the lift, Rue, Califorum. Out of Gaffon the Phisician he commends this: Take Afla fatida, Galbanun, each alone, make it up with the decoction of Scordium, and round Birthwort. The Doe is the bigg-nelle of a small Nut with hot water. Out of Andromachus he commends this, lib. de Theriac. Take Theriac two drams, Wine four ounce, mingle and drink them.

Dioscorides outward remedies applied.
Cyprus bruised and laid on.
Amomum used with Basil.
The Milk of the Fig-tree, or the juice of Sage
drop in the, the Scorpio it lert bruised,
Sow-chitlise beaten.
Succory.
Hawk-wood.
Balm.
Bath-flower.
Mull-berries.
Larks-heels.
The flesh of a Fish called Simarux.
The Barbil Fith cut in two.
A Fish called Laccota salted and cut in pieces.
House Mice cut afunder.

Internal remedies from Dioscorides.
Cardamomum.
Juice of Myntes.
Bay-berries.
Horfe or Afs dung.
Seed of Campions,
Mullens.

Chamelprys.
Scorption-grafe.
Turnfole.
Calantine.
Trifoly.
Scordium.
Lins rafica.
Basil with Barley-flour.
When remeal with Vinegar and Wine.
Marjoram with Vinegar and Salt.
Afis dissolved in Wine.
Sea-water.
Quick Brimstone with Robin and Turpentine.
Salt with Linseed.
Galbanum made for a Plaifer.

Other External remedies out of Aviceina.
Marjoram laid on with Vinegar.
Root of Coloquintida bruised.
Reed roots bruised.
The Shell of an Indian small Nut.
Rams flessh burnt.
Mummie four grains with Barket & Cows milk.
Decoction of Ameoz.

Bran


The Antidote of Andromachus, otherwise Braia, the King of Sicily.

Take Caltoreum one dram, Scordium two drams, Coftmary one dram and half, Afsa fataida three drams and half, make it up with Honey. The Dofe is one dram and half, or two drams with wine.

Another of the same.

Take Birthwort round and long, each one aureus, Cummin-feed three drams, Afsa fataida, Caraway, Rue-feed, each two drams, Caltoreum four drams, make it up with Honey. The Dofe is two drams with the hot decoction of Gentian root, or Birthwort, and wine; he gave also two drams of Afsa fataida and sometimis three drams, Wood Laurell with Vinegar.

A Medicament of Andro a Greek Philosopher.

Take Rue-feed, live Brunifone, of each six aurei, Caltoreum one aureus, Afsa fataida one aureus and half, Pellitory of Spain, liquid Saffron, of each one aureus, make it up with Honey. The Dofe is half an ounce with Vinegar of the beet wine.

Another excellent remedy.

Take Rue-feed one aureus, Caltoreum half so much, Birthwort round and long, of each two aureis, roots of Gentian, Afsa fataida, of each eight drams, or eight aureis) make it up with Honey. The Dofe is one dram and half with pure wine. The Elecuary of Zeno, or Diarura. Take Afsa fataida, bitter Collus and sweet, each five aureis, round Birthwort, Agrick, each two aureis, Caltoreum, Cinnamomum, Aloe, each three drams, roots of Osris, Saccocolla, each one dram and half, long Birthwort, Geranian, each six drams, make it up with Honey. The Dofe is three drams. He commends also the great Theriac of Andromachus, Estira, Mithridate, and the Theriac della fera. The description of it is this. Take Gentian, Bayberries, long Birthwort, Myrhe, each alike, make it up with clarified Honey. The Dofe is one aureus with hot water. Another against the bitings of Scorpions. Take feed of wilde Rue, Ethiopian Cumin, seed of Trufoils, Miminath, each alike, with Vinegar what may suffice, make a Confection. The Dofe is one aureus. Another. Take Garlick, Nuts, of each one part, Rue leaves dried, Afsa fataida, Myrhe, of each half as much, make it up with milk. The Dofe is three drams. Another. Take Caltoreum, white Pepper, Myrhe, Opium of each alike, make Troyches, The Dofe is three oboli with four ounces of wine. Another. Take Opoponax, Myrhe, Galbanum, Caltoreum, white Pepper, each alike, make them up with liquid Saffron and Honey. Another. Take roots of Coloquintida, of Capers, Whone wood, long Birthwort, wilde Saffon, each alike. Give children one scruple, men one dram, it is of wonderfull vertue in this disease. Another. Take green grasefowt juice with Cows milk, boil it like to an Elecuary, The Dofe is two aureis, they say it helps much. Another. Take Opium, seeds of white Hen-bane, make it up with Honey, and mingle it with hotter things to temper it. If any man will have more from Avicenna, he shall finde it Can. 4. Fen. 6. Trait. 3.

External remedies out of Rhasis.

The hot Oyl of Anacardi standing in the shell of an Egg, rubbed in, let the wounded part be first
first bound, then let it loose; and anoyn it with Jefamin Oyl. The third day open a vein; but after meat and sleep. Also anoyn the place with Caltorium, Melanacardinum and Garlick, laying on a plate anoyned with Quick-filver.

Sagpenum applied outwardly, heals the wound; and a Waffels flesh laid over it.

Rub the place with a Toppaz and it will be cured.

The wound is bettered by rubbing a Flie upon it.

It may be cured with water from Radifh-leaves, and Oyl of Miftard-feed, and Marjoram.

Serapis writes that boyled Butter doth good.

**Internals of Rhus.**

Sweat must be procured any way, by external and internal means.

Take Nuts, and Garlick cleansed, of each alike, bruife them.

The Dofe is one ounce, and an hour after let him drink wine. Others add to this a like quantity of dried Rue, Myrthe, and Afla. The Dofe is three dram, with pure wine.

Another. Take Nigella seed one part, Asa three parts, the Dofe is one Trochio, with one ounce of wine.

Another. Let him drink strong Wine till he be almost drunk; and in the morning open a vein.

Another. Take roots of Coloquintida, bark of roots of Capers, Worm-wood, Endive-feed, of each alike, make a powder. The Dofe is one dram, for children one trefpule.

Another Theriac against the flingsings of Scorpions. Take round Birthwort, roots of Gentian, Bay-berries, roots of Capers, Coloquintida, Worm-wood, Swallow-wort, white Briony, each alike, make it up with Honey.

Another. Take Myrthe, Opoponas, Smallage, one each dram and half, white Briony, long Birthwort, Pellitory of Spain; each fix dram, seeds of Rue, Gith, Trifoly, each three dram, Gum, Arabick, what may suffice, with Vinegar make Trochis. The Dofe is one dram to one dram and half. Another. Take Cloves of Garlick cleansed five dram, Nuts ten dram, Afla one dram, incorporate them well. The Dofe is two dram. Another. Take Gentian Birthwort, Myrthe, bitter Cofhus, Rue, Caltorium, wilde Mints dried, Pellitory of Spain, Pepper, Gith-feed, Afla feda, each alike, make them up with Honey, The Dofe is one aureus with wine, Also the powder of Eringo root is good with hot water, and the powder of Dodder, Also one aureus of Napeillus with water. Ivy and Polium with water are very profitable. If a fever come upon it, open a vein, Asfe three ducng drank with wine is very helpful, Thus much from Rhus.

**External remedies from Albucatus.**

Anoyn the place with Oyl of Ben, for many days, or Oyl of Jefamin, grinde Euphorbium with it, and Caltorium, or else Caltorium and Garlick ground together, with old Oyl for a plaifter.

A Frog cut and laid on is very good. Take old Oyl one pound, Wax four ounces, Euphorbium one ounce, melt it in the Oyl, and anoyn the place with it.

**Internals from Albucatus.**

Let him drink hot milk from the Cow with wine or Honey. Cinquefoil-feed, and lees of wine, are Therian in this disease, as also Rocket-feed.

Hierac Anacardina against the flings of Scorpions. Take Pellitory of Spain, Gith-feed, bitter Cofhus, black Pepper, Aconis, of each ten ounces, leaves of Rue, Afla fedo, roots of Gentian, long Birthwort, Bay-berries, Caltorium, Caufa lignes Mutard, Melanacardinum, of each five dram, make up the powders with Oyl of Nuts, and with juice of Radifh-root make it complex. The Dofe is one dram daily, it caufeth Sweat, The brains of a hen in drink is very useful.

Hatif Abbas brings nothing that is new, but only takes other mens preffcriptions, Concerning some Seals (amongst the hundred payings of Prodomy) and some fashions for Charms, both he and Kiranides make mention, but a Christian believes it nor, nor are they worthy to be recorded by him.

Pannitis mightily commends a Plaifter with Garlick and Butter, or to anoyn the place with Oyl of Peter, or pure juice of Leeks.

He preffcribes to give inwardly of the pith of the greater Spurge four trefpules, with warm water.

Rabby Mozof preffcribes one Sextula of Frankincence with Wine sufficient. Also he exhib- its Pigeons dung dried, and finely powdered with Butter and Honey. The Dofe is two Sextulas.

Gnis de Placeatia bids men give drie or green Marjoram inwardly, to drink it with mans Urine, and to apply it outwardly.

Conflantius A. Panceh. lib. commends Hens dung or the heart applied outwardly, and Pimp- petrel inwardly, taken with WIne, and powder of Gentian, Cinamon, Centaury.

Averyhow extolls Bezaur stone above all, the Dofe is the fourth part of an aureus.

Arifiales mea bayuacod deuadurn, describes a kind of Locutaft that is an Antidote against the Scorpion, which eaten presently cures the flingsings of Scorpions.

Serapis affirms the root of the male Coloquintida bruised and laid to the wound, that it will take away the pain. He commends inwardly Wormwood, Lettice-feed with Garlick, Mummy two grains, with the decoction of Sapamire, and leaves of Laiercwor.
Orithagium approves of the Lily roots, and leaves, bruised and applied, as also a Plaifer of Vervain, and it is thus made. Take Vervain three ounces, Roifin six ounces, Wax, Pitch, of each two ounces and half; Oyl half an ounce, make a Plaifer.

Inwardly he commends the athes of River-crabs with Goats milk, or juice of Agrimony two ounces, with a draught of Wine, or the root of Dragons bruised, with wine.

Asius commends water Calamints and Nip, which some think to be so called because it is an Antidote against *Nepas*, that is Scorpions. He faith, Garden-snails bruised and laid on drawers forth the venom; he commends also upright and green Vervain, if it be laid on for a Carapace. Alfo Sheeps dung laid on with Wine. He makes alfo this Plaifer. Take Wilde Rues bruised with Vinegar one dram, Wax one dram, Pine Roifin three ounces, make a Plaifer; it is admirable against the stings of Scorpions.

Inwardly, he writes that Garden Partnips cure beyond expectation, be it eaten green or dried, and drank with Wine. Take Caltoreum, Lazeron, Pepper, of each four drams, bitter Cofthus, Spikenard, Saffron, juice of Centuary the leafe, of each two drams, clarified Honey what may suffice, mingle them. The Dole is the quantity of a Hazel-nut with Wine and water; it drives the Scorpions venome from any part, as Asius proved on himself. *Agina* gives quick Brimstone bruised with a River-crab to drink in Wine.

None bids lay on Licharge or Silver presently upon the place stung, and he commends Brimstones, if it be taken the quantity of an *Egyptian* bean with eight grains of Pepper in Wine.

Anatolius commends this, to sprinkle Crows dung upon the stinging of the Scorpion.

Silvaticui out of *Half* commends a Want, or the greater house Loufe laid on, and out of Scarpin Pewter powdered and drank.

Orphes commends Coral in drink, and the stone called Scorpiones laid on with a Garlik-head, Oilavis, Arctes, Horatius, Zoraphres, Florentius, Apulius, Demonstis, and other Authors of the Geoponica, add but a few things to the Medicaments of the Ancients, besides some old wives fables, and inched prints that are hatefull to God and man. *Pliny* tells fuch a fiction, but no man can tell with what reafon or credit: *If faith* he, one that is stung with a Scorpion get uppon an Afe, with his face toward his tail, he shall do well, but the Afe will suffe.

Myrespin extolls the herb Flower-de-luce, well bruished, and then drank with Wine or Vinegar.

Quintus Serwus writes thus, and advieth,

_These are small things, but yet their wounds are_  
_And in pure bodies lurking do most harm, (great)_  
_For when our senses inward do retreat,_  
_And men are fast asleep, they need some charm,_  
_The Spider and the cruel Scorpion._  
_Are wont to sting, witness great Orions._

_Slaye by a Scorpion, for poysons small_  
_Have mighty forces, and therefore presently_  
_Lay on a Scorpion bruished, to recall_  
_The venome, or Sea-water to apply._  
_It is held full good, such vertue is in brine,_  
_And 'tis appro'de to drink your fill of Wine._

*Pliny* amongst outward means addeth thefe: Mustard-feed bruished, Pippemels, roots of Chameleon, Sea-weeds, wilde Onions, Hares renne, *Torrtoyse-gall*, athes of Hens dung, Colts-foot, and Mullen-leaves: It is exceeding good to purge the body within, very well, with the seed of wilde Cucumber, and *Elaterium*, and then to drink the juice of Lettice, and to drink the dried leaves and flarks in Vinegar.

Ammi drank with Lime-fod.  
Wildle Cumin.  
The third kind of Canila.  
Fennel-feed.  
Root of Cyprus.  
Great Saffron.  
Gelies.  
Yellow Camomil.  
The tender flarks of green Figs.  
Bay-berricys.  

The seed of Hyacinth with Southern-wod.
Seeds of Triority; and Rocker.
Four oboli of Agrick.
The juice of Jelly-flowers and Plantain.
The Athes of River Frogs.
Chamapiythe.
The herb *Nudia*.
Seed of white Thorn.
Flame-coloured Campions.

Arnoldus Villanovus hath thefe: Herb *Trinity* cures the wounds of Scorpions, and kills the Scorpions themselves. Let the sick drink one spoonfull of the juice of the root of Dwarf-elder with Wine, and it is an infallible remedy. Take of the roots of Cappars, Coloquintis, Worm-wod, long Arifolochia, Gentian, Bay-berrics, Yellow Ryn. White Briony, of each alike, make it up with Honey, *The Dole* is the quantity of a Nurt with Wine. *Another*. Take feeds of wilde Rue, Cumin, Garlick, Hazel-nuts, of each one dram leaves of dried Rue one grain and half, Myrrhe, Frankincens, each one grain, white Pepper, Opium, each three drams, Opoponas, Galbanum, of each half a dram, make it up with Honey. The Dole is the quantity of a Bean with Wine. *John Arden an English man* (he was in his time the most skilfull Chirurgeon in England) after his long practive in England and France, he affirms he could finde nothing more fast against the stings of the Scorpions, then to draw forth two or three drops of blood hard by

X x x x the
the wound, and presently to anoint the wound with the same blood. Cellus faith that those Physi- cians did some fuch thing, who were wont to keep the blood they drew forth of the arms of those that were flung. And this fhall suffice for remedies againft the stingings of Scorpions.

It any man chance to be bit by Rhabit Scorpion (which we called Bunch't-back) the first day a fmall pain is perceived, but the second, ftrangeness, heavines, and f Kındnes is zeal'd on the tick; the colour of the body is divers almost every hour, and changing from green, yellow, white, and red; whence it may appear, that all the humours are infect'd, the place burns by the confluence of pain, and humour, fwounding fowles, and trembling of the heart, an acue Fever, and fwelling of the tongue, by reafon of humour mel'd and corrupting, in the brain, and falling down on the roots and muscles of the tongue: sometimes alfo the mine is blow'd, by reafon of the armony of the venonous matter; and green choier is call forth by vomit, alfo the guts are torment'd with a fharl and vehement pain. Almost all fymptoms fall upon the nerves that can happen to them. Rhabit bids cure all fuch things this way: First, incisor being made on the place, and cupping glaffes, apply them with a ftrong actual cauter, then anoint the wound with the juice of wide Endive, or with oyl of Rofes, Bartley wine of a piece of Milk, and with all cold things. If the belly be not fpofible, make it fo with a gentle Clyfter, and the juice of Bilres, Nitre, and oyl of Violers, and let the patient take thus. Tharick. Take Opoponax, Myrthe, Galbanum, Catoferum, white Pepper, of each alike, make it up with liquid Storax and Honey. The Dofe is the quantity of a Jujube: the part must be funed with a piece of a milflone' heart, and sprinkled with Vinegar. Alfo foment it with water of wide Lertice. The uftal Tharick. Take the rind of the root of Capparis, root of Coloquintida, Wormwood, round Birthworths, Hepatica, wide Dandelin, dried, each alike: make a Powder: the Dofe is two drams; alfo fowle Apples must be eaten. For pain in the belly: Let him drink a piece of Rofes, with Bartley water, Critals, Gords, alfo give foure Milk. For trembling of the heart: Let him take juice of Endive, or fyrup of Vinegar, or fyrup of Apples, with troches of Camphire, or fowre Milk the fame way. If the wound be affift'd with great pain: Lay on a Coverall of Bole and Vinegar: for a defentative and for a sharp remedy, lay on Euforthbium, or Catoferum, Poly root drank with water, and a Rans flesh buns, is profitable. Therick, call'd Hafcarins fows in- vented in the Province of Hafcarum. Take leaves of red Rofes iv. drams, Spodium iv. drams, Citron Sanders iv. drams and half, Saffron iv. dram, Licorice iv. drams, seeds of Critals, Melons, Cucumers, Gords, Gum tragaat, Spike, each i. dram, Lignum Aloes, Cardamon, Amylum, Camphir, each i. dram, molt white Sugar, Mams, each i. dram, with the mucilage of Fleatworl and Rofe-water, what may fuffice, make it up. The people of Hafcarum was wont to draw blood from the tick (fairly holy Abbas) almoft till they faint'd: then they gave fweet milk to drink, and water dil- til'd from fowre Apples, Alfo they gave fowre Milk in great quantity. Thus the Arabians speak of this petifent kinde of Scorpions that Nicander and all the Greeks were ignorant of, and that was too common in the Courtrey of Hafcarum. Now we will speeke of Spiders.

CHAP. XI.

Of the Name of Spiders, and their Differences.

The Name.
The Latine name Araneus, or Arané is in Greek, Ἀράνε, from the flender feet it hath, or from its high gate, fome the cobwebes it spins: Others call him προπαδός, or Μαφ- κατρίζιον; Kiramide, Σχερός; Hafchima, ανθ; the Hebrews, Ακαβίς, Ακαβία, Σεμα- μίθις; in Arabick, Sıbth and Phibis, Aalbahis, and Aalbani, as it is called by Bélumofini: the Germans call it Spinn, and Banger; the English, Arterop, Spider, Spinner; the Brabant, Spins, and French, Araigne; Italian, Ragnà, Ragnà; the Spanish, Arana; or Tarama; the Scarvanons, Sparwuck; the Polonians, Palack; the Barbarians, Kranan, Krefmatis; Iδρος, κτ. c. 12. faith it is called Araneus, because it is bred and nourished by the air: a twofold error: for if they live by the air, wherefore are they so careful to weave nets, and catch Flies? and if they were bred of the air, wherefore do they copulate? wherefore do they thrust forth little worms and egges? but we will pardon the elegant Erymologer, becaufe who makes a cutome to play thus with words. There are many of their kindes, and all of them have three joynts in their legs:

A little head and body smalls;
With flender feet, and very tall;
Belly great, and from thence come all
The webs it spins.

The different.
Now Spiders are venomous, or harmless; of harmless some are tame or house-spiders, those are the bigget of all; others live in the open air, and from their greedines are called hunters or wolves: the smaller kindes of thefe do not weave; but the greater fort begins his web very sharp and small by the hedges, or upon the ground, having a little hole to creep into, and laying the beginnings of his webs within, observing whilst something makes the web, then he runs to catch
catch it. The venomous Spiders called Phalangia, are so venomous, that the place they wound will presently swell. These are of two kindes; for some are leis, some greater; the leis are various, violent, sharp, falacious, and going as it were rebounding, which as we read, are called *Actae*, or *Plinas* or *Apis*; others are called *Oribates*, which are found especially on trees in mountains; they are called *Hydroporums*, because they live under leaves. *Geminus*. It is a hairy creature; and breeds in the greater trees. The belly of it is moderately with incisions, that the cutting may seem to be marked by thred. *Aelianus*.

**CHAP. XII.**

Of Spiders that are hurtful, or Phalangia.

In Italy they know not the Phalangium (said Pliny) It is of sundry kindes; one is great like a Pumière, but much greater, with a red head; the other part of his body is black, with white spots running between. The Pumière kindes of *Aetius* hath a snaky body, an alë-coloured neck, and the back as it were adorned with spots. *Nicander* his *Actae*; *Actae* calls *Atenus* the Lynx calls it *Venator*; it makes a weak wound and without pain, but yet a little venomous; it is found amongst the Spiders webs, where (like hunters) it catcheth Flies, Bees, Horse-flies, Ox-flies, and Wasps also, and (unless you will not credit Loniceris,) Hornets too, and it spoils all that the nets can take and hold: that this is the fame with *Aries* is *Pulex* no reasonable man will deny. It hath a broad round volubulous body, the parts about the neck have an incision; and there are bred three eminences about the mouth. There is another Phalangium which *Nicander* calls *Pulicis*, *Actae* *Pulicis*; *Aelian* *Pulicis* (from the likeness of it to the stone of a black Grape) itis round, and black, and shining, and globe-like, the feet are extreme short, as if they were imperfect, but it moves swiftly; it hath a mouth but with teeth bred under the belly, and it moves with all the feet at once. Whether *Aries* Spider will bite, let the Reader judge. Truly it is not much unlike it, as Grevinus rightly conjectured. In this description, *Actae*, *Aelianus*, *Pulicis* do almost agree with *Nicander*. *Aelian* put long feet amids for small feet, and affirmed it to be only an African creature. *Actae*, were the same, unless it were distinguished by certain whitestars and lines, that are fat and transparent. Only Pliny after *Nicander* made mention of this, as if it had been unknown to *Aries*, *Galen*, *Aelian*, *Ebianus*. The bled with coloured Spider is worse than all these, called by *Nicander* *Pulicis*; going on both sides with very long and tall feet; the Scholaft adds *Pulicis*, that is downy and high, not high downy, as Lonicerus transcribes it. Pliny faith hairy with black down, though I can hardly be induced to believe that the bled with Phalangium is hairy with black down. *Nicander* calls that Phalangium *Pulicis*, which others call *Pomax*, differing only from the red Hornet by want of wings, and is wonderful red. It is held far worse than the blew, though that by only touching doth communicate her venom, and break a crystal looking-glass (faith Scaliger) by running over it. There are two kindes of *Tetragnathia*, the world is with a white line running along the middle of the head, and another across that. The milder or alë-coloured, white on the latter parts is of the same colour, and that makes very broad nets for flies on the walls. Pliny, and Hermolaus. But as *Aetius* faith, *Tetragnathia* is one kind of Phalangium, with a broad body, whittifh, with rough feet, it hath two little wings in the head, one uprightness, the other broad, that it seems to have two mouths, and four cheeks. *Aelian* faith there is a great number of them about the River Arbas in *Indias* sometimes deadly to the Inhabitants. In harvest time they are found amongst pulse, (when they are gathered with the hands) some small Phalangia are like to Beetles.
ties, of a flame-red colour; such are those the English call *Tarrantula*, by eating whereof cattle are oft-times killed: Phalangium breeds amongst reeds, and in the Peach-tree they call it *phalangiarius*, by *Niceander*; *Acicinum*, *kachykarios*, by Diophortes, because it boldly strikes the heads of those that pass by it, when it descends by a thread, or falls down without it. It is a little creature in the shape of a Butterfly Philaena; it goes hurriedly with the head always nodding, and a heavy belly; it is of a long body and a greenish colour; it hath its fting in the top of its necks if it light upon any man, it will especially wounds the parts about the head, as *Acicinos* witnesseth; it is nourished in the Peach-tree leaves, and hath wings like to some Butterflies: whence the Scholiast would intitulate that this kind of Phalangium is winged, which no man hath observed yet. *Penecetus* and *Aradogus*, deceived by Rabbi *Mofei* suppothe it to be *Crawuckles*, and the Tarrantula; *Gilbert* an English man followed this errou in the Chapter of the Tarrantula, Scleropeltus, or hard-head, little differs in fashion from the former; it hath a head as hard as a stone, and all the lineaments of its body like those little creatures that fly about candles, Scolion is a long Spider, and varied about the head especially with some spots. There is also a kind of Phalangium, Pliny calls it the Dover Spider, with a very great head; which being cut, they say that two worms are found, which bound to women before conception in a crow's skin, will keep them from conceiving: and this virtue of them will continue for a year, as Cezlius hath left it written in his Commentaries. We call the last *Appulurus*, and commonly Tarrantula, famous by that name, from the Country of Tarantum, where they are most frequent, it borrows its name, we give you here the picture of it, that was belowed upon *Pomnus* by an Italian Merchant of happy memory; where if you paint the white places with a light brown, and the black with a dark brown, you shall the true spotted Tarrantula; I know no man yet that describ'd it as it should be. *Nesebus* *Penecetus* doth sign it to be only with fixe, and *Aradogus* thinks the same, and faith more, that it hath a long tail. *Rhages* calls it Tarrantula, Sypsa, Albus, Aslari; Rabbi *Mofei*, *Aggymorga*, *Aiccinana*, *Scbinis*, Gilbert an English man, Tarrata; for he followed *Aradogus*, who made two kinds of Tarrantula's, one brownish as we have pictured, another Saffron coloured and clear, such as Egyp produceth.

Phalangium is not known in Italy, as we laid out of *Pliny*, but now they are all almost found in the South Country, with great inconvenience to mowers, and hunters, as is manifest by chily experience, *Penecetus* was wonderfully deceived, who in l, c, 15, of the Scorpion, calls Phalangium a venomous Fly. It is a cruel creature (fait Alexandre ab Alexandre) pestilent to touch. In summer when the sun is very hot, their stings are venomous, at other times not. In the coldest Countries there are many Spiders, but no Spiders called Phalangia, or if there be any, they are free from all venom and infection. Tarrantula lie hid in the clumps of furrowes that are cleat with heat, and they strike and wound with their teeth mowers or hunters that are not aware of them; wherefore the inhabitans defend their hands and feet, when they go to mow, or to hawk or hunt, she makes her web like a net very silently, and all the little creatures she can catch, she provides for her fpper. All the Phalangia bring forth in their nest, (that they make thick) and they do as it were sit upon eggs in a great number, and when the young grows up it embraceth the dam and kills her, and oft times calls out the fire, if it can lay hold of him, for he helps the dam to fit, and they bring forth 300. *Bellenius* *fig. 2.* e, 68. observed little Phalangia in sandy grounds creeping up the Hoftes legs, (may be that is it the Germans call *Scein spinos*) by whose contitus bitings they suddenly faint, and flagtering continualliy they confined. Baglini faith that there are ten kinds of Phalangia, but he describes them not. Adixima (I know not out of what Book of Galen) divides the Spiders Phalangia into the Egyptian, the black, the bright red, that men call *Raches* the white, Citron coloured, Grape coloured, Piume-like, like Camans, Wafpy, and mountaintions. But both he and all the Arabians describe them so foolishly (to lay no more) that there can be nothing more confused in so great a matter. Lastly, to add all the kinds of Phalangia which we have seen or read of. I shall annex the *Cretian Phalangians*, you have here the picture of it exactly painted. It is of colour brown and ash-coloured, a smooth body, and hairy legs: near the mouth it is fanged as it were with two hooked prickles, with which it bites and wounds. It lives as the Spiders do by Flies & Butterflies, & makes nets to catch them; the Isles eggs, and froths them under her breast, whence the young ones are thrust forth, which stick under the dam's belly, till growing older they kill her. They dig a hole fit for the bignefs of their body; for as they are not every where of one colour, so they are not of the fame magnitude. They dwell in a case two foot deep, and on the outside they cover it with straw that the drift get not in. All these venomous Spiders are naturally so, for they suck not their poiyon from herbs, (as some think from their
Of lesser living Creatures.

Grievous symptoms follow the bitings of Pitfire Phalangium, for there follows a mighty sign of the swelling on the part bitten, the knees grow weak, the heart trembles, the forces fail, and other symptoms of times death succeeds. Nicander faith that the sick sleep so deeply, that they are alwayes asleep Phalangium, at last, and are in the same condition as those are that are slung by the Viper: Histories relate that Cleopatra set one to her bed, that the might escape Angelus, without pain, nor is the wound deadly unless it be wholly neglected. Rhagias makes a very small wound, and that cannot be seen, after it hath bitten: the lower parts of the eyes, as also of the cheeks waxed, then horror and fainting seize on the loins, and weakness on the knees, the whole body is very cold & hath no heat, and the persons suffer commotion from the malady of the venom. The parts serving for generation is to debilitated, that they can hardly retain their seeds, they make water like to Spiders webs, and they feel pain as tho’ are dung with a spider. From the time of Phallagium, they seem wholly without strength, their knees fail them, quivering and flock invade the patient. The blew Spider is worth of all, causing darkness and vomitious like Spiders webs, then fainting, weakness of the knees Conus, and death. Dyslepis or Wasp-like Phalangium, causeth the same symptoms with the blew, but milder, and with a slow venom brings on purgation. Where the Tetragnathus bite, the place is whitish, and there is a vehement and continual pain in it, the part it self growes small as far as the joyntes, lastingly, the whole body sinketh no profit by its nourishment; and after health recovered, men are troubled with infinitesimal watchings. Austin. Nicander denies directly that the all-coloured Tetragnathus can payson one by biting him. The Cantharides like, or pulse Phalangium saith wheels, which the Greeks call ὓδαθων, the mine is troubled, the eyes are wept adie, the tongue hammer and falls, speaking things improperly, the heart is as it were moved with fiery, and flies up and down. The Vetch kind produces the same mischiefs, and cause Horaces that devoure them, and cast to be very thirsty, and to burst in the middle. Cramocalaptus faith Pliny: if it bite any one, death follows shortly after.

But Austin and Nicander affirm the contrary, and that the wound thereof is cured without any trouble almost at all. Head-sac, cold vertigo, reftlessness, tollings, and prickings pains of the belly follow, but they are all vagued (faith Nicander) by fit remedies. Nettlebeards is like to this in form, and forces and effects the same things, as also the Selicium. We said that the down Phalangium drives away barrenness, if it be carried about ones but whether it be violently venemous, I know no man that hath determined it. The spotted or Phalangium of Apulia, doth produce divers and contrary symptoms according to the complexion of him that is wounded, and his present disposition. For some laugh, some cry, some speak falltering, others are wholly silent, this man sleepes, the other runs up and down always waking; this man rejoicest, is merry and moves up and down, that is sad, loathful, dull; some think themselves to be Kings, and command all; some are mad, and think they are in captivity, and fettered; lastly, as men drunk are not of one quality: so are these that are mad, some are fearful, silent, trembling: some are bold, clamorous, comatant. This is common to them all, to delight in musical instruments, and to apply their minds and bodies to dancing and leaping at the instond of them. Lastly, when by continuance of the disease and the vehemency of it, they feem next unto death, yet when they hear musick they collect their spirits, and they dance with greater cheerfulnes every day. These dancings being continued night and day, at length the spirits being agitated, and the venom driven forth by incontinent transpiration they grow well. But if the Mucians upon any cause do but leave off playing, before the fuel of this mischief be spent, the sick fall into the same disease that they were first oppressed with. We must admire this mol; above other things that all those that are slung with the Tarantulas dance so well, as if they were taught to dance, and sing as well as if they were musically bred. (In Italy it was first invented, and some hath taken it up to call such as are bitten, Tarantuli, or Tarantulus.) Cardanes against faith and experience, denieth that musick can restore any that are bitten, yet we heard the same thing fell out at Bafel, from Felix, Plutus, Theodorus, Eugenius, our most famous, and dear Masters; and we read the same in Mathios, Bellus, pseud. and Paracelsus. And if the sweet musick of pipes could help mad horses, and pains of the hips (as Aesopliades writes) why may it not help those are slung with a Tarantula? Some there are that affign to this diseases, some I know not what small deity, as superintendent over it: they call him St. Vitus who had formerly great skill in singing, he being called upon and pacified with musick, as he is the patron of musick cures them, so that men superstitiously implore that to him, which they should do to musick and dancing. Bellus reports that the Cretian Phalangium induceth the like mischiefs, and the pain and wound oft is also cured by musick. It is no wonder the Ancients described not these two kinds of Phalangium; because they knew them not, nor did they know how to cure their flingings. Dioscorides writes thus of the common bitings of the Phalangia. The symptoms that follow their bitings are commonly these: The place flung looketh red, but neither swell, nor waxeth hot, but it is something royst; when it growes cold the whole body quakes, the hands and groins are stretched out, there is a colick in the loins, they are often urged to make water, and they sweat with very great pain, and labour to go to the floor, and cold sweats runs down every where, and tears trickle down from their
darkened eyes. *Anisum* adds further: They are kept waking, they have frequent emotion of the yard, their head pricks, sometimes their eyes and their leg-grow hollow. Their belly is unequally lachexed out with winds; and their whole body sweats, chiefly their face, their gums, their tongues, and onils: they bring forth their words foolishly and gaping, sometimes they are trou-
bled with difficulty to make water; they are pinned in their secret, they make urine like water and full of cobwebs. The part affected is prickled and sweats, (which *Disorides* denied before) and it is moderately red. So saith *Anisum* from whom *Paulus, Mithanvaris, Argoppos, differ but little. *Gal. 3, de loc. eff. c. 7.* hath it thus. The birings faith he of the Phalangia are scarce to be seen: it fitt affects only the skin, and from the superficialies of it, it is carried by the com-
munity of the fibers to the brain, and into the whole body: for the skin comes from the mem-
branes and they from the nerves and the brain; this is clear, because by presently binding it on the other parts, they are preferred from the venom that is near to them. In *Achatinu* they that are bit by the Phalangia are otherwise affected, and more grievously, in other parts: their body is astonifh'd, weakened, trembles, and is very cold: vomiting and convolvulion follows, and inflamation of the yard: their ears are afflicted with molt cruel pain, and the foles of their feet. They use bathing for a remedy; if the party recovered go willingly into bathes afterwards, or were by chance or by craft brought into them, by the hot water the contagion pafliter on the whole body, and he perceives the fame mitchief in the whole body. *Disorides* writes the fame things in the chapter concerning Trifoly that fends as Alphaltum. The decoction of the whole plant effeth all the pain byfomentation, where Serpents have flung men, what manfe-
ver that hath ulcers and walhet himself in the fame bath, is so affected, as he that was bit by a Serpent; *Galen* faith he thinks it is done by a miracle. *Lib. de Theria et Pifonem.* *Galen* did write that Book. But *Elias* speaks more miraculously, where he affirms that they may happen to those that are found, making no mention of ulcers. And thus much for symphomes. *Now for the cure.*

The cure is particular or general. Physicians speak of but a few particular cures, because the general is commonly effectual.

But *Plini* sets down a remedy against the biting of the Phalangium called *Formicarium;* that hath a red head: to flew another of the fame kind to him that is wounded, and they are kept dead for this purpose. Also a young Wealit is very good, whose belly is fluit with Conander, kept long and drank in Wine, A Wap, that is called *Ichenomen* bruited and applied drives back the venom of the *Phalangiumfoliariun* (faith *Bellona*) not otherwise than as one living kills another, that is alive. For *Ichenomen* (faith *Arifatex,* is a small creature that is an en-
emy to the Phalangia; it often goes into their holes, and goes forth again, lodging its labour. For it is a matter of great labour for so small a creature to draw forth its enemy greater than it self by force; but if he light upon his enemy preying abroad, he drags the Phalangium as easily with him as a Pumice doth a corn; and the more fully he draws himsclf back, the Wap draws him on the more fiercely, and sparing no pains, doth beat himself with all his might; sometimes when he is tired with too much labour, he flies away and breathes himself; and having recoved-
red breath, he goes to seek for the Phalangium again, and thinking him often with his wings, at last he kills him; when he hath killed him, he carries him into his own habitacion on high, and there it renewes its kind by fatting upon them. Those whom the Tarantula strikes, are helped by violent and constant motion, but *Celio* on the other side commands those that are bitting by the other kinds of Phalangia, to be quiet and to move but little. But mufic and finging are the tue Antidote of it. *Christophorus de beneuio* bids presently exhibit *Theria et Andromachi,* Also he gives Butter and Honey, and Saltiron root with Wine.* The Bezar of it are the green grains of the Maftere tree. *Pomatus lib. de venen.* periwades to give ten grains of Maftere with Milk, or juice of the leaves of Mulberries, j ounce and half. In the augmentation he cureth it with Agarick of white Brions, after sweating much they must be refreathed with cold and moist things, as with Poppy-water. *Merula* faith they are cured with finging, dancing, leaping, and colours; I will not contend for the first three; but I cannot see how they can be cured with co-
lores especially when as they that are flung are blinde, or see very little. He faith also that in-
habitants and citizens are hurt by them, but strangers are safe and out of danger, which no man of a small belief, or not very great faith can believe. *Disorides* appoints a general cure: Firth, fcarifying must be repeated, and cupping glaffes fet on with a great fire. *Afbrum* coun-
sels to fume the part flricken, with the thiels of Hens eggs flift steeped in Vinegars, and burned with Harts-horn, or Galbanum.

Then you must use fcarification, and draw forth the blood by finking or cupping glaffes, Or, which is safest:burn the place affected with an actual Cuautry, unless it were full of nerves; for then it is best to fet a Cauntry on the neighbouring parts. Then sweat must be provoked with clothes laid on or rather by gentle and long walking. Lastly, to perfect the cure, you must prove by external and internal Medicines, such as we here fet down, and the most commodious and most noted we mark with an Afterick. Internal remedies out of *Disorides*: Take seeds of Southerwood, Anniseed, Cummin feed, Dill, round Birthwos, wildle Cices, Cedar fruit, Plantain, Trifoly, seed of Minimiches, each alike, bruise them severally; the Dole of them severally is 1 drams in Wine, but if you joyn many of them together, drink ii drams or iv with Wine; also 1 dram of the fruit of Tamarisk is effectual, with Wine, Chamepifh, and the decoction.
decoction of green Cyprus nuts with Wine.* Some prove of the juice of River-crabs with Alse milk and Smallage-feed, and they promise it shall presently take away all pains. Also a Ly of the Fig-tree is drank against the bitings of the Phalangia; also it is good to drink the fruit of the Turpentine tree, Bay-berries, Balm-leaves, the seeds of all the wide Carrots, and of Coriander, the juice of Myrtle-berries, Ivy, Mulberry, Cabbage and Clover-leaves, with Wine or Vinegar, one dram of the leaves of Bean Trioly drank with Wine.

Decoction of Spinagrus root, juice of Houfeleek, juice of Clovers with Wine. He also commands a snail bruised raw, and drank with Alse milk. * Alse Balm-leaves with Nitre; and Mallowes boiled with the roots, drank often. The leaves, flowers, and seeds of the herb Phalangia, and the seed of Gith, the Decoction of Alsparagus, Mock Cervell, and the juice of Mullberries.

Out of Gaul.

Take Birthwort, Opium, of each four aures, roots of Pellitory of Spain three aures, make Trochis as big as a Bean; the Dole is two Trochis with three ounces of pure Wine. The ashes of a Rams hoof drank with Wine and Honey. The remedies of Diophanis, against the bitings of the Phalangia. Take Birthwort four drams, Pellitory as much, Pepper two drams, Opium one dram, make little Cakes as big as Beans, take two, with two Cycathi of the beet Wine.

Another that is better. Take seeds of wilde Rue, Rocker-feed, Pellitory, Storax, quick Brinton, each six drams, Calleyrum two drams, mingle them, make Trochis as before with Snails blood; the Dole is three oboli in Wine, Another. Take Myrrhe, Calforum, Storax, each one dram, Opium two drams, Galbanum three drams, Annifeed, and Smallage of each one aceta- blum. Pepper thirty grains, make it up with Wine. Another. Take Myrrhe five drams, Spike of Syria six drams, flowers of the round Cane two drams and half, Caffa four drams, Cinnamon three drams, while Pepper one dram and half, Frankincense one dram and one obulus, Collins one dram, make it up with Athenian Honey; the Dole is the quantity of a Hazel-nut with water, or with Honey and water. Apollocon* remedies. Take wilde Cumin one aceta-blum, blood of a Sea-cottace four drams, rumen of a Hinde or Hare three drams, Kids blood four drams, make them up with the beet Wine, and lay them up; the Dole is the quantity of an Olive, in half a Cyathus of Wine. Another. Take seed of bituminous Trifoly, round Birthwort, seeds of wilde Rue, Tare-feed dried in the Sun, each six drams, drink them in Wine, and make Cakes, four drams weight; the Dole is one Cake, Gal. 2. de Antid, where he hath collected many remedies from Authors.

Out of Aetius and Asinia.

Take quick Brinton, Galbanum, each four drams, bitter Almonds blanche, juice of Leaf- wort two drams, of Alla four drams, mingle them with Wine and Honey, and drink them, also lay them on thus. Another. Take Ameos two drams, Flower-de-luce one dram, or of St John's-wort, or bituminous Trifoly, drink them in Wine, or take Annifeed, wilde Carrot-feed, Cumin-feed, Gith, Pepper, Agarick, each one dram, drink it. Or take leaves of Cyprus-tree, or the Nuts bruited in Wine and Oyl one Hemina, and drink it.

For this he prescribes Bay-berries, the herb Scorpions gralle, Serpents, Liferwort, Calaminth, Camphrtha, by themselves, or with Rue and Pepper. Another. A bunch of Mints boiled in freth Poica, let the sick drink two Cycathi: Also Germundare, Camphrapyth, white Thorn, and Penotyall in decoction are good. Also a Ly and juice of Ivy with Vinagre. Alfe epliated ued thef. Take feed of Sphondylium dried, Calamine, each alike, bruise them, and drink often in a day two-Cycathi of Wine with them. Another. Take juice of Lifefont, Daur- cus-feed, dried Mints, Spikenard, each alike, make it up with Vinagre; the Dole is one dram: take it with Poica and Wine, four Cycathi, and presently go into a hot Bath; when Liferwort is wanting, take the double portion of pure Affa.

One that is better. Take of Cenchryis, seeds of wilde Rue, Pepper, Myrrhe, wilde Vine, of each one dram and half, Cyprus root one dram, make a Confection; the Dole is one dram, with four Cycathi of Wine, and one Cyathy of Honey. Also the eating of Garlick is good, as also a Bath and Wine, and such things as help against Wipers stings, Paulus repeats the same remedies, and Theben Cumin, or feed of Agnus Caflus or leaves of the white Poplar-tree drank in Beer are very effectual.

Out of Nicther. Root of the Turpentine tree, Pine or Pitch-tree, drank or swallowed, is exceeding good, which Gefam and Bellonius say they learned by experience, to be true.

Out of Avicina. The Myrtle-tree and the fruit of it, Doronicum, Matilic, Alfifatioid, Dodder and its root, the Indian Hazel-nut (which is Theriac for this disease) white Bedellium, all of these drank with Wine. Take roots of Birthwort, Flower-de-luce, Spike Celtis, Pellitory of Spain, Dacus, black Hellebore, Cumin, root of Daffodil, leaves of Winter Wheat, leaves of Dough-tooth, Pomegranate tops, Hares Renner, Cinamon, juice of River-cubs, Storax, Opium, Carbophil/amion, of each one ounce, beat all to powder, and make Trochis, the weight of ounce; all these are the Dose of them. Also give in Wine the decoction of the leaves of bitumen Trifoly, of the Cyprus Nut, Smallage-feed. Moreover give to drink, Pine kernels, Ethiopian Cumin, leaves and rinde of the Plane-tree, seeds of Siler Montannum, black wilde Chitches, seed of Nigelles, Southern-wood, Dillon, Birthwort, fruit of the Tamarisk, for all these are very good. Also the juice of wilde Lettice and Houteleek are commended.
The decotion of Cyprian Nuts, especially with Cinnamon and River-crabs, juice and juice of a Goose: Also the decotion of Spirengus with Wine and water.

Another. Take Birthwort, Cumin, each three drams with hot water: An approved Tonic.

Take Nigella, seed ten drams, Daucus, Cumin, each five drams, Cyprian roots and Nuts, each three drams, Spikenard, Bay-berreries, round Birthwort, Carphallamum, Cinnamon, Gentian, feeds of Siler Montanum, and of Smallage, each two drams, make a Confection with Honey; the Dose is the quantity of a Nut with old Wine. Confection of Afa. Take Afa fucidae Myrrhe, Rue-leaves, each slike, make it up with Honey; the Dose is one or two drams with Wine.

Out of Abysters, Lullus, Albucases, Rhafos, Pulzettaus. Take white Pepper thirty grains, with a draught of old Wine, take it often. Also Thyme is given in Wine. Abysters. Drink upon it one spoonful of Wine diluted with Balm. Lullus. Take dry Rue, Celius, wilde Mints, Petalloty of Spain, Cardaman, each slike, Afa fucida one fourth part, Honey what may suffice, mingle all, and make it up; the Dose is the weight of an Hazel-nut in drinke. Abucasia. A Hens brain drank with a little Pepper in sweet Wine or Pofta. The decotion of Cyprian-nuts with Wine. A Thrias against the bitings of Phallangia. Take Tatar six drams, yellow Bristomites eight drams, Rue-feed three drams, Calelaenum, Rocket-feed each two drams, with the blood of the Sea-tortoise, make an Opiate; the dose is one dram with Wine. Another. Take Petalloty of Spain, round Birthwort, each one part, white Pepper half a part, Hocehoud four parts, make it up with Honey; the Dose is one dram. Another. Roots of Cipers, long Birthwort, Bay-berreries, Gentian root, each slike, drink it with Wine, O: drink Distilla with strong Wine, and Cumin, and Agnus Catus feed. Another. Take Nigella feed ten drams, Daucus, Cumin, each five drams, wilde Rue-feed, Cyprian Nuts, each three drams, Indica Spike, Bay-berreries, round Birthwort, Carphallamum, Cinnamon, Gentian root, feed of bituminous Trifoly, Smallage-feed, each two drams, make a Confection with Honey; the Dose is the quantity of a Nut with old Wine. Rhafo.

Out of Pliny, Celius, Scaliger.

It is good for those that are bitten by the Phallangia to drink five Frinices, or one dram of the Roman Nigella feed, or black berries with hypocotylis and Honey. Alfo Marith Smallage and wilde Rue, are peculiar against the bitings of the Phallangia: Also the blood of the Land Tortoise is good, juice of Originum, the root of Polymonts, Vevain, Cinquefoil, the seed of Garden Onysons, all the kindes of Houtritic, roots of Cyprus, Turnille with three grains of juice of Ivy-roots in Wine or Pofta; alfo Calloreme two drams, in Maltum to caufe vomit, or in juice of Rue to make it dry. Alfo Agnus Catus feed two drams: Apoldonan that followed Democraat calls a kind of herb: Crocodie by the touch thereof Phallagia dies, and their force is abated; the Marc-ins leaves next the root, eaten do profit. Pliny. Take wilde Vine-berreries, Myrrhe, each slike, drink them out of one Hemina of hot Wine. Alfo the feed of Radish, or root of Damar must be drank with Wine, * Celius. But amongst many other remedies that are proved, one Antidote is due to Scaliger, who was the ornament of our world and age; the form of it is this. Take true round Birthwort, Mithridate, each two ounces, Terra Sigillata half an ounce. Fies living in the flowers of Nepelus, 22, Citron juice what may serve turn, mingle them, For faith he, against this venome or any other bitings of Serpentis, Art hath scarce yet found out so effectual a remedy. Scaliger. Juice of Apples drank, or of Endive, are the Bezar against the bitings of the Phallangia: Petrus de Albano. These are the most approved outward remedies. Five Spiders purefied in Oyl and laid on, Alles or Horfe dung anoynted on with Oyl or Pofta: Take Vinegar three sextars, Brimifone a fith part, mingle them, foment the place with a sponge or a bath, the pain being a little abated, wah the place with much sea-water: fome think that the flone Agates will cure all bitings of the Phallangia, and for that reason it is brought out of India and fold dear. Pliny. Fig-tree sifes with Salt and Wine, the root of the wilde Papame bruited, Birthwort and Barley-meal impalid with Vinegar, water and Honey and Salt for a fomentation. Deccion of Balm, or the leaves of it made into a Pultis and applied; we mutt constantly use hot Baths, Pliny. Open the veins of the tongue, and rub the places white with much Salt and Vinegar, then p.woke fievat diligentely and warmly. Figetius. The practical men mightly commend the root of Panax Chironia, Theophrastus. Anoynt the wound with Oyl, Garlick bruited, or Onyons, or Korn-graffe, or Barley-meal with Bay-leaves, and Wine, or Wine Lees, or wilde Rue,lay it on with Vinegar for a Cataplaume. Nonius. Take live Brimifone, Galbamus, each four Denarii, Lybian juice and Euphorbiam, each slike, Hazel-nuts plied, each two drams, dilolve them in Wine, and with wine make a Cataplaume, alfo inwardly it helps much. Flies bruied and laid on the part affected. Alfo a Barbel heals the bites of a venemous Spider, if it be cut raw and applied to it. Galen. Anoynt all the body with a moft liquld Oyntment with wax. Foment the part affected with Oyl, wherein bituminous Trifoly hath been foked, or with a Sponge and hot Vinegar, very often. Make alfo a Cataplaume of thefe that followeth, namely, with Onyons, Bloodwood, Solomons seal, Leeks, Brin boyled in Vinegar, Barley-meal, and Bay-leaves, boyled in Honey and Wine. Make them alfo with Rye, Goats dung with Wine, Cyprus, Maronam, and wilde Rue with Vinegar. Aftermin his Plaifer, Take feed of wilde Rue, Rocket-feeds Staves-are, of Cenchus, Agnus Catus, of Apples, Nuts, of Leves of Cyprus, each slike, brathe all with Vinegar, and with Honey make a Plaifer. Asin. Lay the decotion of Luiripes upon the place affected, the Echta being first taken away, then anoyn
Chap. 13.

Of lesser living Creatures.

Now let us see

That Spider with which our minde well agree,
Who sat within the midle of a net to watch
Where the East winds blow, it shakes, he doth catch
Flies that but touch his web, none can him match.

Chap. XIII.

Of the tame or boose Spider.

A mongst Insects, though many may be found (as Pliny, Calvis, Curio the second out of whom we have fetched many of these things, lay right) that may exercise great wits, yet the nature of Spiders is worthy to be admired in chief, and is apparent by their curious workings, as any reasonable man will judge. Aristotle the greatest diver into Nature, faith that this is the most magnificent, and wisest of all Insects. And Solomon himself at whose wit'sonne all the world admired, amongst those four Animals that exceed Philosophers for their knowledge, reckons up the Spider, dwelling as he faith in Kings Palaces, and weaving Webs that man cannot do the like. The Poets fay that the Spider was once a Lyathan Mayd, that Minerva had taught to work with the needle, and weaving all curious artificiall work: but she was grown so proud of this skill, that she denied that ever she learned this of Pallas, and the processe to fave in arrogancy, that she boldly challenged Minerva to work with her in all these Arts: Wherefore Pallas disdaining her pride, came, and sharply rebukiing the Mayd for her insolence, brake all her fine wrought works with a Wand: At this the Mayd was so abashed, and thought to have hanged her self, but the Goddesse pitying the poor Maid's condition, would not suffer her to do so, but as he hang by a very fine Cord, she changed her shape into a Spider.

Pallas was angry, and in wrath she said,
Yet live and hang thou, proud and haughty Mayd,
And that thou mayst still suffer 'tis my mind,
The same law lefts for thee, and for thy kind.

But they that interpreted this a Fable or a Hiftory, say that Arachne found out the art of spinning, towning, and weaving hemp, taking pattern by the Spiders. And this needs not seem strange to any man, since the Swallowes found out the art of plaiting, and for Oculifles, Eagles for building, Hippotamass for letting blood, Isis for giving Glyfters, Goats for Antidotes, so Tortoises, Weasels, Storks have infringed us.

To praise the Spider as I ought, I shall first fer before you the riches of its body, then of its fortune, lastly of its minde. If you consider the matter of its, it is light, containing much of Air and Fire (that are the most active and noblest Elements) but it hath little of earthy dregs and gravity. Consider the figure it is wholly round and orbicular, or at least Ovall, that is next unto it. The substance of it is thin, transparent, subtle, and though sometimes by the abundance of phlegm and phlegm, it becomes so fram'd, that it grows as great as a Walnut, and Cardes are not as great as a Sparrow sometimes, yet if you see it hanging in its Web, against the light, it shines all through like a Chryfoltite, and makes reflexion of beams most grateful to the eye. It hath the same colour that Ovid writes that Loves have, that is, pale; and when it flicks aloft with its feet, it calls every way, the exactly represents a painted Scare. As if Nature had appointed not only to make it round like the Heavens, but with rays like the Sun, as if they were alive. The skin of it is so soft, smooth, polished and near, that the preceeds the foffet skinned Mayd, and the daintièft and most beautifull Scurpm, and it to clear that you may almost fee your face in her as in a Glass; the thinf fingers, that the molt gallant...
The Theater of Insects: or, Book II.

Gallant Virgins desire to have theirs like to them, long slender, round, of exact feeling, that as the Scopendres, nor is she without feet, as some Insects are, nor hath only six feet, as those that want wings have, but eight feet, which number is next to the most perfect number, as all men know. These legs also are made in a sequestrial proportion, which is most admirable and venerable; so that though the latter feet be always shorter than the former, yet they hold still their proportion. Many Philosophers who hold that Spiders are blinde, are blinde themselves, for were they blinde, how should they make choice of those places that are most convenient for to pitch their nests, and who should lead them to slay one thred to another, and should know how to mend their Webs when they are broken by accident? When as also the tame and familiar Spiders will come from a distance to catch a Flie that toucheth but the sides of their threads, they are the more bold to pursue them, and will take them as it were from hand to hand, as we have often seen. Truly they are blinde at noon-day, and understand nothing, so say, that Spiders are blinde. In this Spider there is no poyson nor hurt, for if it bite it is with- out harm, and it is rather tickling then painful. Also their very Carcase, and their bodies, when their eyes, their excrements, are good and usefull for many diseases, as we shall make it plain enough when we speak of their use. I know not what it was that made Personio so frighted when he thought of eating them; for he knew a Noble English Lady, and Phærus a Philosopher, that did often eat them without any hurt at all. For the truth is, Spiders are free from poy- son, and are very good for ones health. But because it seems so horrid a Creature, some people, that the very fight of it makes them fly from it, I rather attribute that to their me- ncholoy apprehension, tenderness and diftemper, than to the ill form of the Spider. Nature hath used no little elegance and beauty in the Spider, then she hath done in the Butterfly, and Flies, and it is no light device of the mundane to daddin to beautiful a work, and to be afraid of a Creature that weaves so curiously. Lastly God hath given a wonderful disposition and nature of the skin to so wonderful a body; for it doeth not only once a year (as Vipes doe) but every Month it the be well fed she changeth her skin, and recovereth a new one that is more curious. Also it is of so excellent a temper, and so fragall in its diet; that in a wholesome place, where the canger any provision, she will live always, I think that to be the chiefest good amongst the goods of Fortune, or rather Fate, that they carry the matter of their Webs in their bell- ly, and they are so well forred with it, that a Spider can draw forth imnumerable threads and weave them, and catch if need be, a hundred Flies, and have Needs enow to wrap them in. And though they have not meat in a Granary as Pititines have, nor ready and growing up Beeshave, but they live only upon food they light upon by chance, yet by Gods providence the prey comes flying by that sustains them, and oft times they grow fat with plentifull dills that they take by holitly. Further, I should think it no small part of good Fortune given to the Spider, that when she is satisfied with the troublesome fare of the Court, yet the never hath the Gout. You have heard that Solomon of old assigned her a place in Kings Palaces, that she might be a pattern to his Courtoys, to labour, to be ingenuous, wise, fragall, and vertuous. There beginning her Webs the work with hands and feet, and never need to goe a hawking for Flies, she feared no affaults, no treachery: and briefly, this most wise creature did but rule in the great Palace of that great King. After him arose bad Princes, that were idle, fol- lowed ill counsellors, that came to name, it is hard to say, how hardly they used the poor Spider, and commanded her to swathe her self with beesome and poles, as if she had beene night-robbors, and to tread her under foote, and to kill her. Presently Furies ran and swept down and spoiled all those learned works that had been wroght, so that she could hardly escape the quick-sighted beelomes of those late devils. She was most miserable now, left al alone in so great abundance, and in so large houses, she could not finde one corner to be it. And by the Kings example, the Nobles and rich men drove out this Mystreffe of labour and verve, and they would not suffer one thred to remain, that was a Token and Engulf of her great widoome. She when once she went abroad to travel (as the Fabulit wittily saith) the Gown by chance came to keep her company, though she could hardly hold pace with her, but with great roil. When as now they had travelled one dayes journey, at night they took counsell to try their Hoft, but they were of different opinions. The Spider going into the City, got into the house of a rich Citizen, and so soon as she began to work and to spread her Tapethry and hangings, (by the example of the bad Kings) he forthwith hates her, and drives her out, and the same night he exposd her to the rain and open air. But the Gown being bane, when he could go no farther, got into the first house of the Town, and could force in- treat to be harboured in the poor-off Cottage there; and when she lay down, the found mercy enough; she had for supper brown bread that her stomach rote against, and a little herbs, scarce any salt upon them, and water was fethed from the next pond in an earthen Pitcher to quench her thirst; being thus entertained, she required a bed to ly on, she could get none but flay or the planks to ly upon, and to the lay down in pitiful misery, lamenting and sighing. But alas how watcht a thing it is for tender limbs, and that cannot endure to be touched (as faith Hippocrates) to ly upon such a hard bed and pillowes. The next morning the Spider and the Gown met again; the Spider complained terribly of the incivility and rudeffe of the rich Citizen, and the Gown on the other side complained of her Hofts poverty and poor fare, showing the
the black and blew marks the hard lodging had made in her skin; and when they had a while taken deliberation about it, they both agreed upon this, that the next night they would change their holts; that the Spider should go to the poor cottages, and the Gown to the Kings palaces and rich men's houses: the Gown not unmindful of this agreement, went to a very rich man's house, and lay down at the feet of a very well fed Master, that was very rich; and so soon as this kindo Holt perceived her, with what humanity, embracings, and cheerfulness did he entertain her! down pillows were laid under her, all the foots and chairs in the chambers are fitted with the best feather, and cushions laid upon them; the kitchen was very hot, and all officers at work for provision; the table is spread with all dainties, and the cups fill'd with Wine; fat and cramb'd Capons, Peacocks, Partridges, Peacocks, Quails, Turtles, that feed on figs and grapes, and those birds that have two hearts to set them forth come flying to the table: Turbors, Gift-heads, Sturgeon, are not worth speaking of. The stool-filh of Campania with purple juice, and Oysters from Abalans and whatsoever the whole ocean can afford, are ready. The Wines are white, black, red, purple, sweet, delicate, sharp, Cecebuns, Falerums, Chins, powered forth in full bowls. To fay nothing of the second table brought from Tatrum, and the dainty cares, with Rohe, Violer, and facinh coloured. Lastly, no delights, dainties, pleasures, or joys are wanting, that the rich Gowns (for she is daughter to Bacchus and Venus) with her fifters, the hand and knee-gowts, may be entertained delightfully. The Spider also is good hap was, light upon a poor Cottage instead of a rich pal, and there she teacheth man and wife what duties are useful for both, and fars her fift with care. But perhaps some man will object, that they can find no good fortune in this, but only the Spider may be commended for changing her habitation and her holt; but it is very fortunate for her: for the lives not only safer and more at rest, but the doth not from the roof as from a watch-tower, behold any more adulteries, glutony, riotous prodigality, Lifeciousness, plays, dancing, woods, fights, pick-thanks, and Lady-thole vanities, and bell lines, that never enter into poor men's cottages, whereof the she knew her fift to be guilty, while she lived in Courts and Palaces of great men, who so soon as they had driven forth the Spider, (the mistrels of labour and frugality,) were presently filled on by the Gown, and not only so, but all luxury, dillembling, lying, flattering, pride, entered into their palaces, or rather into their ears, eyes, and minds, and polluted them with all wickedness and companions of all mischiefs: were it not better for Kings to allow this good, frugal, wise, harmless little creature a room in their large chambers, than to hear it, and to reward it so much such pick-thanks, and Court-flatterers, and voluptuous persons, who by their wicked counsell and example will quickly corrupt the best men? I know not whether I were bient commend the Spider for the gifts of her minde, as wisdom, justice, valour, temperance, humanity, love of poverty, love of works, sufficiency, cunning, cleanliness, and her other vertues; or else her admirable art and skill in weaving her Webs. Her wisdom appears in that, that when the Rivers are like to rise higher, and drown her house, she removes to some safer place. In fair weather when the Flies fly about, they weave not, but wait on their prey: she runs away at the least touch of any thing that troubles her, and hides her head in her hole (as Vipers do) that she may feel the lefle pain, and that her body being hurt, (which is easily healed) yet she may preserve her head that governs the whole body. Who taught them to know this? Did any Chaldens teach them, by the situation and position of the Stars? No indeed, but the Spider hath a certain divine wisdom given her, as the Poet fang truly.

_Poefy of the_ Spider from the gifts of her minde,

_Her body moves by vertue of her minde_  

_Diffused in every part—_

Moreover, so soon as they see an enemy fall within their nets, they do not presently wound him, or bite him in a hostile manner, but they kiffe as it were and tickle him, until they have all smeared him over with a clammy web fetched out from the hinder parts with their hindermost feet, and have as it were bound him with bands, taking away from him all power of resistance, flying away or moving; then that thred being fastned to their web, they run to the centre to observe, if any prey may fall within their nets: and thus sometimes you shall see ten or twenty Flies hang upon a line on high, and the Spider will take them one after another, breaking their line they hang by, and fastned to one of the hinder legs, will carry them to the centre of her work, and there devour them: they feed on nothing but the juice of Flies, and when the car-kas is dry and void of all juice, they throws it down as an useless burden to her web. Moreover, because the female is something greater than the male, therefore she hangs under and observes, for fear the small creatures should percieve and take heed, but that they may fall unawares into her net, for by reason of her greater body she is not so fit to catch her prey. But the male is more active, and lies a top, as if he were otherwise employed, or else seeing all things from a very little hole in her net, she conceals herself that he cannot be seen. And when any by chance comes to his lot, how vigilant is he and intent after his game? for he will not let his prey escape, but he runs from the upward line to the lowest suddenly, and when he hath his belly full, he takes up the rest of his provants, and hangs them up by a thread to suck them another time. And when as by age the webs have lost their clammy quality to hold saft, the Spider either new weaves them, or else begleaves them anew and repairs them. Her work ended, she either contains her self in her hole; or watching above she holds the thread drawn from the centre, as it were with
with her hands, whereby she can go and come to her nets and retreat at pleasure, and also (if any prey be taken) she perceives it by the motion of her web. But to be more certain, before she comes down, she draws her thread back sometimes, that she may know how it is by motion and weight. Then first the hafteth to the centre; which the enframed little creatures either feeling or conjecturing, do lie still, left by motion they should discover themselves and be more entangled; yet they cannot deceive the Spiders who with feet and eyes perceive their prey, and run swiftly unto it suddenly. But good God! what and how great justice is seen amongst Spiders? None of them robs another of his wife, none of them enters upon another's house; each of them lives by his own labour and possessions, and they hold it unlawful to break the bands that belong their neighbours:

But men are not so just, oh pity 'tis to see
How covetous they are, lust reigns in each degree
Adding house to house, both seas and lands,
And more worlds they fain would have in their hands.

Farther, they do not pitch their nets for such creatures as are good, and useful, but to catch Hornets, One-flies, Hotie-flies, Wasps, Drones, Breezes, Gnats, common Flies, which are to us like bands, thieves, flatterers (as the Comedian speaks) that breed us many inconveniences, but are no way fit to do us any good. Moreover, the darts (as the is very valiant and magnanimous) hunt after the Lizards young ones, whom the presently involves in her nets, as they make resistance, then laying hold of both their lips with a deadly biting, she holds them so fast that she makes them dye under her. And lately like another Cactus she draws them backward dead into her lurking place. And if by chance in this great contest, she finds her nets broken or folded together, she presently repairs, unfolds, and spreads them anew with great dexterity. Farther yet, there is a fierce and everlastling feud between the Spider and the Serpent: for at any time the Serpent seeking shady places, falls upon some places under a tree where many Spiders, are, one or other of them will fall right upon the Serpents head with his net, and she will so beat upon his brain with her mouth, that he will make a noise and hiss, and be so vertiginous, that in this miserable condition, he can neither break her thread, nor escape from her. Nor is their end of this combat, till the Spider have destroyed him. Let the Romans be silent concerning their battaíls on the stage, and the cruel combats of Elephants, when a little Spider dares fight with a horrid and wan black Serpent; and not only to fight with him, but to triumph over him, and carry away the rich spoils of his victory. Who would not admire so great force, so great weight, so sharp and hard bitings, and almost incredible strength, in so small a body; and of no consideration, having neither bones, nerves, flesh, and hardly any skin? this cannot proceed from its body, but its spirit; or rather from God himself: In the same fashion they enter the holes with land and water Toads, and kill them in single fight. For not only Pliny and Albertini the Philosopher mention this, but also Erasmus in his Dialogue of friendship, relates how a certain Monk, who slept with open mouth, and had a Toad hanging at his lips, escaped by the assistance of the Spider. Oft-times also they enter the stage with the winged Hornets, that hath a strong sting, and fibres almost of horn, who straight by main force breaks through their webs, as great rich men do with the Laws; yet at last he is wrapp'd in a more tenacious glue, and pays for breaking open their houses, and conquer'd in single duel, he becomes subject to the Spider.

I must not pause by their temperance that was once proper to Man, but now the Spiders have almost won it from them. Who is there now (if age will let him) who will be content with the love of one? and doth not deliver up himself body and soul to wandering lust? But the Spider so soon as they grow up, chooseth their mates, and never part till death. Moreover as they are most impatient of curtsies, so they set upon any Adulterers that dare venune upon their Cottages, and bite them, and drive them away, and oft-times jetly destroy them. Nor doth any one of them attempt to offer violence to the female of another, or to assault her chastity. So great command have they of their affections, so faithful and entire are they in their conjugal love, like Turtles. If you respect their household government, what is there more frugal, more laborious, or more cleanly to be seen in the whole world? For they will not suffer the least thread to be lost, or placed in vain; and they ease themselves by interchangeal work; for when the female weaves, the male hunts; if either be sick the other supplies both offices; they may defend alike. So sometimes the female hunts, and the male weaves, and this at any time when the one wants the others assistance; for we cannot think them so void of mutual love, that living so faithful in Matrimony, the one should not lend a helping hand to the others necessities, and so by mutual concourse they continue their friendship amongst themselves. The female at home being now learned from her Parents to spin and weave (as she is wont to do with us) she begins her webs, and her belly contains all the matter of them, whether it be for that at a certain time her entrails are so corrupted (as Democritus said) or that there is a kind of woolly fruitfulness in her as there is in the Silk-worm. Yet Aristeue will have the matter to be without, like a thin shell which is drawn in length, by spinning and weaving; or after the manner of those that shoot out their brittle, as the Porcupine. However it be, they lose not the leaf
Of lesser living Creatures.

The variety of their Nets is so great, that it is not called amities, the Goddess of a thousand works; some of them are looser, some thicker, some triangular, others square, some Diamond figures, for the commodity of the swindling of hawking: But that which is round is commonly wrought between two trees, or Reeds, and oft times in divers windows, hanged with ropes, and fail-yards. Good God, what great reason, judgement, art, what admirable wildomne and beauty she shews! Truly we may not suppose amities, to say that Enicles learned to make his figures from hence, and Fishermen their Nets; for from whence else could they fetch such an example of so curious and laborious a Miftrefle? So finely is her work brazened, and made so round and exact, and so evenly balanced, and the work to the body in place of a weight and spindle, that she may well be compared with Minerva, but that the comparison makes me afraid. Alfo the work is fo firm, that though it appear fo weak, that it will hold Homers, endure force of winds, and being fallen into its, it rather yealds than breaks or is hurt. The manner of her Net-work is this: First she draws her semidiameters to the places circumjacent, most fit for her work; then, with no compayle, but by a natural skill of her feet, she makes 44 circles with her thread from the center: to the circumference, by equal parts more distant one from the other. Moreover that is worth our knowing, as also it seemd most admirable to our most learned Turnerus and Bruerus, namely, that those Spiders when they are purpose to fallen a thread from a high beam, in a right line to the earth, they hold a little stone with their feet, and then by degrees they let themselves down by a three doubled thread, that the angle at the earth may answer the angle above by the beam exactly, But that above all the rest is worthy of admiration, how they fall the first thread on the hither side of the River, and the second on the farther side, whereas Nature hath not taught them to fly, or to swim; I much doubt whether they leap over or not. The second payses in weaving they desyre, that be build on the rafts of houses, and other Field-ides, who upon the graffe weave a Net, that is broad, thick, and plain, and it is a Net indeed, set forth like a sail, or sheet. In the work of these Spiders, if you consider, the wind, the skins of yarn, the thread, the chaff, the comb, the wool, the ditaft, the web, either: you will see nothing, or you must see God incomparable, yet really performing all these things; and truly in spinning, they go far before the Egyptians Lydians, Phcenio, Tarsagis Athenians, Romans Claudians, Sabins, Frulas, and the Queens of Macedonians, that were wonderfully skilled in spinning, because (beyond all ordinary reason and art) no threads be drawn overwight, they make a solid and tenacious Web, of a strait continued long thread. Their work being ended, they snare it over with a biedilum glutinous snare, by the touch of which alone the prey is entangled, and pays for its bottom and waste of forright. The colour of her Web is aerell and transparent, or rather no colour, which is the thing deceives the Flies that are not aware of it, and they that see but hardly escape it. For had it but any perfect colour, they would think what need they to avoid it, and fly farther from it. The molt ignoble Spiders
Spiders, (namely, those that are sluggish, fat, and that ly in holes) make but a very courie Web, and groser thred by farre, which they hang only to holes in Walls. These have a more heavy body, shorter feet, and are more unite to spin, or card, they light upon their prey rather by chance than seek for it, because the hole is so great without; and seems a fit place for Flies to hide themselves in; but at the very entrance they are entir'd by the Spiders, and catcht, and are carried into the Shambles for Flies to be lamm. For they ly deep in Walls, that they may escape the Birds that ly in wait for them (as Sparrows, Red-breasts, Nightingales, Hedge-parrrows) and that they may the sooner entirre the Flies that suspet no harm. And for Spiders that are harmless, and for their webs, let this suffice: Now we shall add something concerning those kindes I have observed.

Chap. XIV.

Of certain kindes of Spiders observed by Authors.

You may remember that I did divide Spiders, that some were venemous, and called Phalangias, and others were harmless: Few of the Phalangia (and perhaps none) use to spin, but all the rest spend their time in making threds or Nets. Some of these Net-workers are House Spiders, others are field Spiders, and also are thoes that make threds distingified.

Amongst the Net-workers I saw one the greatest of all, I have set down the picture of it here. In Autumn amongst small Rose-boughs it extendeth an artificiall Net, and it catcheth either another Spider running over it or Gnats or Flies that come to it, when she pulls her cord with wonderfull dexterity, and when she hanged them thus up, she leaves them till the growes hungry again. She hath a frothy body, Ovali figured almost, it hath a little head with pinthers under the belly, and the back is adorned with white spots. This is one of the Annual Holes, and so a very short time it will grow from the bignesse of a Pea, to be as big as you see here described. Amongst the Web-makers, we have seen some spin a very fine Web, others spin one that was but moderately one, some spin base stuffe, groser, rude, and ill favoured: The most subtile work-masters are the Housebred-Spiders, whereof we have here set down one of a brown colour, of the bignesse of the figure, and being placed between you and the Sun, it is of some transparence. This is it whose commendation was written by Cælius Secundus Curious, and the nature of it by Pliny, which taught Hebra, Penelope, the Egyptians, Lydians, Macedonians and others that were given to spinning. This field Spider weaves a moderate and strong Web in hedges, stretching forth his sheet with a Coverlaid, and where he dwells he waits for his prey. His Web is thicker that it may not rain through, and better to endure the force of winde, the hath a brown body, but feet that are changeable colours, varied with black and white spots in order, the hath a forked mouth, fenced with claws, the two white spots that are seen above in the head I know not whether they serve for eyes, the whole body is gently hairy; the doth stretch out her Web wide and long, that she may catch much prey, to which she is very much addicted. This field Spider spins a base and unpoltithed thred, and gathers it as it were into a bundle. Pennius first observed this kind of Colchester fields between wilde Origamum watching for Flies, and he never saw it otherwise. It hath feet like to those described just before;
many young Spiders run forth, which go all with their Dam to feed, and at night they rest upon the Dam's back. Pennants supposed that this was rough with warts, until he touchd it with a straw, and saw the young Spiders to run down. Also in rotten hollow trees there are very black Spiders, with great bodies, very short feet, that dwell with Cheelsips, and Cater-pillars called Jull. Also GEFNER, we have seen them all white, with a com- pacted and broad little body, upon the flower of Mountain Parsley, Roes and grass, they have most long slender legs, he thought it was venomous.

round body like a Globe, the back is marked with white spots; also it hath a fundament four square, and black. Hitherto also we referre three kindes of the Spiders called Lups, who live in clinks of Walls; heaps of stones, and old rubbith: they weave a bafe and small Web in their holes, and in the dry time they wander farther abroad in hopes of prey, which they set upon with great forces, and draw into their dens. The greatest of them is of a brown colour, it hath a head almost of Globe figures, the body as a Globe, both sides are adorned with two small and short white lines about the middle of the back it is of more whitish colour, it hath feet comely with divers black and brown spots: The middlemost is the leaft, and grey-coloured; the ridge of the back is set forth by three Pearles as it were, whereas that which is next to the neck is greater and longer. The third seems to be blacker, wearing a Croffe overthrow the back very white, and with rightt angles, and therefore some call it the holy Spider. I conjecture that these are of the Wolf kind, because they run with a kind of leaping, and discover a great ravening appetite, for they lay up nought for the morrow, but consume all their provision in one day. GEFNER saw many young Spiders run forth, which go all with their Dam to feed, and at night they rest upon the Dam's back. Pennants supposed that this was rough with warts, until he touchd it with a straw, and saw the young Spiders to run down. Also in rotten hollow trees there are very black Spiders, with great bodies, very short feet, that dwell with Cheelsips, and Cater-pillars called Jull. Also GEFNER, we have seen them all white, with a compacted and broad little body, upon the flower of Mountain Parsley, Roes and grass, they have most long slender legs, he thought it was venomous.
Of the generation, copulation, and use of Spiders.

Generation.

It is manifest that Spiders are bred of some æereal feeds purified, from filth, and corruption, because that the newest hovels the first day they are whitened will have both Spiders and Cobwebs in them. But their propagation is frequently by copulation, the desire and act whereof lasts almost all the Spring. They do by a mutual and frequent attraction of their Nets, as it were kindle venery, and continually as they draw, they come nearer, then at last they copulate backwards, because that manner of copulation, by reason of their round body was most convenient: After the same manner do all the Phalangia that weave, copulate together, and they are generated from creatures of the same kinde as Arisitofes tells. But they copulate not in the Spring, but at beginning of the Winter; at which time they go fatfe, and hurt certainly, and seeme to be more venomous. Some after copulation lay one Egg alone, and carry it under their belly, and it is white as snow, and they sit on it by course, the male sometymes helping the female. Others lay many and very small Eggs, like Poppy-seeds, out of which sometimes thirty small Spiders are bred, after some wrilling sports in their Web, they go forth with their Dam, and in the evening they come in again, until such time as each of them hath learned to spin its own Web, to live more safely and pleasantly, they thrive forth their young by leaping, they sit on their Eggs three days, and in a lunar moneth, they bring their young to perfection. The House Spiders lay their Eggs in a thin Web, but the field Spiders in a thick, because they may resist the greater forces of winde and rain; the place helps much for Generation. For as in the Country of Arrhenia, and in the Island of Crete there are great store of Phalangia, so in Ireland there are none; they did not long indure in England, the Tower at Crtationali would sooner none, for though many of our Spiders swallowed down do hurt us, yet their bite is harmless, and no man is killed by it, but the bitings of all Phalangia are deadly. Where shall you not finde these Spiders that bite without doing hurt? They climb into Kings Courts to teach them vertue: they work in Noble mens Chambers to teach them their Duties; they dwell in poor mens hovels to teach them patience, to suffer, and to labour. Goet but into your Orchard, and each tree is inhabited by them, in your Gardens they hide in Roses, in the field they work in hedges, you shall finde them at home and abroad, that you may have no cause to complain that there are no examples for vertue and diligence every where. The Spiders, though Pallas called her impudent, Martial inconstant, Claudius bold, Politian pendulous, Iuvenal dry, Plutarch corrupt, Virgil light, Plutus unprofitable; yet is the good, and created for many uses, as shall appear clearly; wherefore adoring the Majesty of God who hath given so great vertues to so small a Creature, we shall proceed to speake of the profits we receive by them.

Copulation.

Thfe catching Spider wrap in a linen cloth, and hang'd on the left arm, is good to drive away a Quotidian, faith Trallianus. But better if many of them be boyed with Oyl of Bayes to the consistence of a Liniment; if you anoynt the arteries of the Whiffs, the arms and Temples before the fit, the Fever abites, and seldomes comes again, Kiramides. A Spider bruised with a plaiater, and spread on a cloath and applied to the Temples, cures a Tettn, Dsorides. The Spider called Lycos, put in a quill, and hang'd on the breast doth the same. Pliny. That House Spider that spins a thick and white Web, shunt in a piece of leather, or a Nut-shell, and hang'd to the arm or neck, is thought to drive away the fits of a Quarantine, Dsorides. Peninus faith he proved it to benefte, Three living Spiders put into Oyl, let them prefently boyl on the fire, drop some of that Oyl warm into the ear that is in pain, and it profits much. Or prell out the juice of Spiders with juice of Roses, and put it in with Wooll, Marcellus Empir. Pliny bids infue them in Vinegar, or Oyl of Roses, and ramp them, and then drop some into the ear with Saffron, and it will still the paine certeinly: Dsorides affirms as much, Sofratus med torque, faith, that Crescelaptes (a certain Spider) drowned in Oyl, is a present remedy against poisons, as the Schollett of Nicander profeelleth. Some catch a Spider with their left hand, and bruise her in Oyl of Roses, and drop some of it into the ear of the same fixe the tooth agin, and Pliny faith it is a cure. Laid upon their own bitez, and taken inwardly they help us. What should I speake of the Albugo of the eye, a molt hurtfull disease? Yet that is taken away very easelie by the help of one Spider, if you do but bruise the longest and slenderest feet (especially of that kinde of Spiders that are the whitest) with Oyl and anoynt the eyes affected with it. Pliny. Also the running of the eyes is stopped (which the Greeks call sponuba) with the dung and urine of a Houfe Spider droppt in with Oyl of Roses, or one dram of Saffron, or elle laid on alone with Wooll: whereby you may know that there is nothing so filthy in a Spider that is not good for something. Akim for supplication of the masters, applied a Cerate of Spiders to the Navells, and faith it did great good. Pliny faith, that Spiders help the swelling and pain of the gins, but he tells us not his reason. He faith moreover, that if any man take a Spider coming down with his threads, and bruised in the hollow of his hand, do lay it to the Navel it will cause a feafe, but if he takes him climbing up,
up, and applies him, it stops the belly. He writes also that a Spider applied to one that knows not of it, and taken off the third day, will cure a F felon. The head and feet being taken away, it helps swellings of the Fundament. The same Author. By the fume of Spiders all the Lice fall down and never breed again, Goose-grease and Oyl of Rofes with a Spider a noynted on the breaths, keeps the milk from curdine in them. Anonymous. Also that knotty Whip of Godman mock of all Physicians, the Gowr, which learned men say can be cured by no remedy, finds help and cure by a Spider layd on, if it be taken at that time when neither Sun nor Moon shine, and the hinder legs pulled off, and put into a Deers skin and bound to the paied foot, and be left on for some time. Also for the most part we finde those people to be free from the Gowr of hands or feet, (which few Medicaments can doe) in whose houses the Spiders breed much, and doth beautifie them with her Tapefry and hangings. Oh the rare miracle of Nature! O the wonderful vertue of a poor contemptible Creature! O most happy rich men, if they knew many of them how to make use of a thing ready to do them so much good! Antoninus Pius was wont to say, that the quirks of Sophiftry were like to Spiders Webs, that had a great deal of art and ingenuity in them, but very little profit. But how often hath the blood run forth of the body most miferably by a fresh wound, yet it had been eafe to have stopp’d it by laying on a Spiders Web, something thick, and binding it fast on, were we but more attentive to look to such remedies that God affords us in our houses. But we are greedy after foreign remedies, except from farre; as if they were better that we bring with great pains from the farthest Indies, or more healthfull because of their greater cost. But unlesse mad af fection did drive us, as if we were Gad-Hung, through all the places of Sea or Land, to finde remedies to stopp blood, cure Ulcers, hinder corruption, drive away inflammation, knit wounds, One Spiders Web would do more good than Serocollis Sandaracca, Bole brought from Armen ia Terra Sigilata, Argilla Sambia, Terra Lomia: For it bindeth, cools, dries, glutinates, and will let no putrefaction continue long there, wherefore it suddenly stops all bleeding at the nofe, (and the bleeding and they murr’d and blod’d in a Dyfe) by Menstrual blod and it over great evacuations of blod by the opening of the mouthes of the veins) whether you give it alone with wine inwardly, and lay it on outwardly, or else mingle it with Blood-tons, Curae Martinus and other things of that kinde. Also the Spiders web is put into the Unguent against Tetter, and applied to the swellings of the Fundament, it confumeth them without pain, Marcel. Emp. Also Pliny faith it cures runnings of the Eyes and layd on with Oyl it heals up wounds in the joyes. Some rather use the athes of the webs with Palenta and wine. Our Chirurgians cure warts thus: They wrap a Spiders ordinary web into the fashion of a Ball, and laying on it the warts, set it on fire, and to let it burn to ashes; by this means the wart is rooted out by the roots, and will never grow again. Marcellus Empiricus was wont to use the webs of Spiders found in the Cypreft tree, in a remedy for the Gowr, to cafe the pains, For the Tooth-ache, Galen 5. v. a. 1. out of Archigenes commends highly Spiders Eggges, mingled with Spike Oyl, and put into the tooth: Alfo Kiranides gives Spiders Eggges to drink against a Tertien; whence we conclude with Galen ad Pifon. From the Spiders we may understand enough, that Nature hath made nothing to vile, but that it serveth for its necessary use; if fo be Physicians would use more diligence, and would not disdain to enter into the wood of such things as are eafe to attain. Now I will proceed to other things, leaft if I stay too long in the History of the Spiders, I may indeed be faid to weave the Spiders web; yet I will add this that Munkeys,apes,Stellions, Lizards, Waips, Ichneumons,Swallows Sparrows, Muskins, Hedge-sparrows, feed on Spiders, And the Nightingale that is the chief of singing Birds is cured from some diseases by eating of Spiders. When Alexander reigned, it is reported that there was a very beautifull Strumpet in Alexandria, that fed alwayes from her childhood on Spiders, and for that reafon the King was admiffioned that he should be very careful not to embrace her, leaft he should be poifoned by venome that might evaporate from her by fweat. Aberta also makes mention of a certain Noble Mayd of Collem, that was fed with Spiders from her childhood. And we in England have a great Lady yet living who (as we faid before) will not leave off eating of them. I cannot butt into a history that I formerly heard from one dear friend worthy to be believed, Breraus. A luftfull Nephew of his, having spent his estate in rioting and Brothel-houses, being ready to undertake any thing for money, to the hazard of his life; when he heard of a rich Matron of London, that was troubled with a Timpany, and was fortaken of all Physicians as past cure, he counterfeited himself to be a Physician in practice, giving forth that he would cure her and all diseases. But as the cuftome is, he must have half in hand, and the other half under her hand, to be payed when she was cured. Then he gave her a Spider to drink, as supposing her past cure, promising to make her well in three dayes, and so in a Coach with four Horses he presently hails out of Town, left there being a rumor of the death of her (which he supposed to be very near) he should be apprehended for killing her. But the woman shortly after by the force of the venome was cured, and the ignorant Physician who was the Author of fo great a work, was not known. After some months this good man returns, not knowing what had happened, and secretly enquiring concerning the fcape of that woman; he heard she was recovered. Then he began to boast openly, and to ask her how she had obferved her diet, and he exculped his long abfence, by reason of the sickness of a principal friend, and that he was certain that no harm could pro-
ceed from so healthful a physic; also he asked confidently for the seat of his reward, and to be given him freely. Truly in this present corruption of manners and times, how highly is such a Mountebank esteemed, wherein chance is accounted for skill, and one accidental rash cure of a disease, with danger oft-times of the patients life, makes a Quack-surgeon a great Physician, and he is judged worthy of praise and honour? But a better revenging Judge will correct these things; we pass on to Pismires.

CHAP. XVI.

The commendation of Pismires; wherein we shall describe their Differences, Nature, Ingenuity and Use.

To begin with the commendations of the Pismires, I know not whether I shall first speak of their body or minds, since Ants for both are not only to be preferred before many Insects, but also before many Men; for they are not one eye'd, nor horrid skew-eye'd, nor do they walk with crammed guts, as Bulas cloth in Plantus, nor yet are they mithapen, crook-leg'd any ways, gout-bellied, over close knotted, bul-bulched, great mouthed, lean chaps, rude foreheads or barrets, as many great Ladies, and noble Women are, who have lost the faculty of generation; but the beauty of their body follows the goodness of their minds; and nature hath given them for their degree and order, a constant and absolute perfection. Cardan was the first said they were blinders, because their body is small; not remembering that there are many Flies and Gnats that are far less than Ants, yet they have eyes and can see well. If they were blind, I see not what the light could profit them, and they would work as well in the night as in the day; I confesse that their foreyards serve them for a staff to prove the way, not that they do not see what way they go, but because by those means they try the hardnes and softnes of things. They have a very little head, but round as the heavens are, wide brain'd, set with eyes, a mouth with teeth, and a throat not without a tongue and a palate; they have a square breath with ribs to defend it, with lungs, or bellows that supply their room, that are so firm, and yet loose, that they never grow out of windes by labouring, but always draw their breath moist freely. They have a stomach in their belly that is strong to digest venomous, (for they feed often on Serpents and Toads) and they are very hot in the matrix, and very fruitful, to their commendation. What should I here mention their swift walking, and their equal motion when they go? for they not only out-goe pack-horses for the proportion of their bodies, but run the swiftest Charriots. They vary in colour, according to the difference of their kinds and places. For there are red ones in Mauritania, and the inhabitants of Budemelium have white ones. In Europe they are most an end black ones, yellow, and somewhat red from tawny. Here they seem very short, smaller, fine necked, slender, and weak bodied; yet these will carry a weight thrice as great and heavy as themselves; and those in India of a great bignesse, will carry great pieces of fleith with them, and devour it.

Their praise is not only for their bodies, but for the excellence of their minds, which stand in proportion to their bodies, as wherever we meet with the visiblity of a great man, we see that he is set in a body that doth become him. Truly, as often as I remember the profudens of Caius Julius Cæsar, the luxury of Caligula, the prodigality of Nero, the excelsive glutony of Apicius, and the great wealth of Heliodorus; so often do I exceedingly commend the wit and ingenuity of the Pismire, and prefer her patience before that of Men. I know that they lived tightly and with far patrimonies from their fathers, they gained large inheritances; yet they found out new use of baths, dangerous kindes of meats, curiosity in banqueting, love of gold and pearl, flowers, in all who passed among them, and especially in the Pope, who made a new use of baths, and stood often in one and the same bath, as many as six times in the same bath, and was so particular about his apparel, that he would not go, but that they should be fit to be seen, and that no one should see him, but that he should be seen by all the world. In the same way, the Pismire, who is the most virtuous kind of Ant, and whose name signifies not great, but humble, is the most natural kind of Ant of all, as Cæsar is of the Romans. And (Oh God!) faith the Comedian, what a miserable thing it is for a man to have had a great estate formerly, and to have nothing now? how much better were it for us to imitate the Ant, who gathering corn in Autumn, doth not weigh it prodigiously in Winter rioting, but keeps it providently for future use, and daily store? Hence it is that she is never tortured with hard poverty, nor is she tossed on the billowes of croft's fortune, nor is she endebted or in danger by borrowing from others; nor doth she seek from other creatures either work, or sufficiency to maintain her, and keep her in health: and if frugality comes from fruits, as the Etymologist derives it, (for our Ancients, the Meters of old sobriety, scarce knew any other diet) it is very credible that that virtue is puffed from our first parents into the Pismires, who feed only on dry corn to maintain their lives, and avoid all superfluity of many dishes. Hence the Poet elegantly feigned that the Myrmidons, the most excellent people of the Greek Nation (if you consider their temper-
temperance, their labour and their diligence) were defended by the Pilgrims. For whence could they have gotten so great abundance of riches and goods, unless by an Emigrants prudence they had preferred what they had gotten and laid up to prevent poverty? And as aspiring in keeping so diligence in getting, and wisdom and industry is found to be admirable in them. They take a very commendable way first to preserve their life, then for their politty, and lastly to provide their victuals. First of all, they build themselves an house, as in the golden age, not covered with tiles for delights, but with green turf, and not made of bricks, but fenced with mud-walls. Histories do mightily magnifie the Pyramids, and breaches of Eggs, and the Labyrinth of Crete. But no man can sufficiently set forth the excellent work of breaches that the Ants make, the figures, the magnificence, the turnings, windings, and revolutions thereof: for these by an unpeasable prudence, beyond all mans art, make houses under ground with such strange turnings, that they open only the way that is inaccessible to others, and is not possible for any that would do them wrong to enter at. First they make the earth hollow with their tender nails in the place of spades: and to throw the earth forth they use their hinder feet for thowels: hereby they call up a mount, and fence it about as with walls or forts; then they cover their work with chaff, straw, leaves, bowes, bark and pieces of sticks, and laying on new matter, they raise a tower that may be seen afar off, (called an Ant-hill) which is far higher and more sloping than the foundation, partly that their houses may not fall by rain falling about them, and partly that they may live the more healthfully by reason of the air that penetrates and pulleth through. This divine little creature fetcheth the fashion of its building from heaven, either because their multitudes required room, or their excellence required the best. The entrance is not right forth but turning with many labyrinths and mazes; they distinguish their chambers in this tower of theirs in a threefold order, yet it is so hard to come into them, that Argus who was all eyes, may be often deceived in them. The first room is large enough, like the Presence-chamber, where they all meet, and converse, we call it the universal Congregation house of Ants: under this for the females, there is the feminine room arched by Daddlean Art, wherein the eggs are laid safe that they may produce their young ones, it is made left they should be thought careless of politty. The third chamber is most inward, and most safe from showers, and that is built for their store-house for their corn, that as it were in a granary they may lay up their belly-timbers, and may main it well from the winter cold that searcheth into all things; the adjacent parts and outward skirts of their castle they appoint for a place of burial, and there they bury their dead with honour and state. And this is the manner of their buildings, plain indeed, and within the ground, as are the houses of the wise men of elder times, before that pride, and the head-strong ambition of Ninas invented to build upowers to heaven. Since his death, shall I speak of Kings or Princes? Truly there are some Citizens of the lower bench, who with extraordinary charge do build up, not an Ant-hill, but Manseleam, or a prison for their bodys, and adorn it with all the cost and art they can; worthy they are indeed to be devoured by Pilgrims whilst they live; that dying by the force of a wise Creature, they may suffer for their folly. Nor do Ants build houses that are places for idle people, or such as are mischievous to harbour themselves in, but every one, yet without any Commander, followes some honest labors, and for the good of their democraticcall state each one mutually employs his pains by turn. For they all like thosse that labour in the Mines, do honorably exercise themselves in digging of trenches, stones here to repair their houses, to adorn them, and to keep them clean, others with great assemblies and tanctall solemnities bury their dead, in the place of burial adjacent, others again visit the sick, and out of their Granary they fetch some Physicall grans, (for they have Corn and grain almost of all plants) and prepare that and carry it to them. They have Officers of all sorts, as Purveyors for Corn, Gleaners, Stoners, Yeomen of the Larders, Householders, Carpenters, Masons, Arch-workers, Pioneers; for such is the verity and skill of every one, that each Ant knows what is needful to be done, and willingly doth his best to help the Common-wealth. But in their ordinary work what labour and diligence do they use? If they be minded to build an Ant-hill presently, or else are forced on a sudden to raise a new house, the old one being undermined and decayed by the Moles digging under them, they go forth all in troops, and from the rubbish of their houses thrown down they build new ones hard by. First they gather together their scattered Eggs, and Corn, and put each of them in their proper places, afterwards they repair their hill, and covering and thatching that well; they keep all safe and dry: when the Sun shines, when they go forth to fetch Corn, the greater and elder go before them as Captains, the rest follow after. They creeping up to the top of the wall, bite off the ears of Corn, and the young ones lay and gather them up, and the Chaffe being fallen off, they pull the Corn out of the husks, and then they carry it home; and the end of it being earen off, if there be necessity, they set it at their doors a sunning; and when it is ventilated they lay it up again. When gleaning is done, they frequent the thrashing floors, and there not by heath, but openly they take subsistence for their lives; and they enrich their treasury. Which labour of theirs Virgil wittily describes in these Verces.

As when the Ants plunder a heap of Wheat,

Minding cold Winter, stow it up for meat.

Their
Their black Regiments through narrow ways pass,
And carry their prey over fields of grapes.
Some bear the burden, some them forward drive,
Cheating delays, who shall work most they strive.

Wherefore not unfruitfully did the Prince of mortal wildness, send those flagitious and loothaft Monsters of Mankind (who like Mice live always on other men's labours, and goe from door to door like Vagabonds to beg a peny) to learn wildness of the Ant, that by the example of the Ant, they may use opportunity, and lay aside begging, esteeming labour much, which is the Merchant for all that is good. Hitherto belongs that of the French Poet.

Poor Sluggard who doft live in penury and want,
Behold the household prudence and wisdom oth' Ants,
Left she should stand in need, which she doth greatly fear.
She gathers in one month, to serve her a whole year.

This is their diligence in gathering, their care in preferring, their prudence in storing, their economical skill in distributing what they have laid up. I shall shew you also their modesty on the way, which me thinks should not be over-palled. For though they go in a narrow way, yet are there no brawlings, contentions or strivings for its, nor yet any murmuring, or fightings, or slaukiers amongst them for places (as it is usually amongst proud men,) But the younger gives place to the elder, and he that carries no burden, to him that is loaded, and each of them is ready modelly rather to palle by an injury, than Walshiply to offer one. If any man compare their burdens with their bodies, he will confede that no Creature hath more strength considering their proportion. They carry their burdens in their mouths; the greater burdens they attempt to take up backwards with their hinder feet, and lay their shoulders to them with all their might. They have all care and mindfulness and endeavours for the public good. They store up the feed they first bite, left they should grow again in the earth; when they are subject to grow mouldy, and are wet with rain, they bring them out and dry them in the Sun, wipe and torch them, and then they lay them up in their Granaries again. The greater seeds they divide at the entry. They work also at the full Moon in the night, (as good Mowers are wont to do) and when the Moon is in conjunction and hid, then they forbear Labouring. But what pains do they take in labouring? How diligent are they? And because they work in divers places, to come home with it, the one not knowing what the other doth. Certain days (faith Pliny) are appointed for a general survey, and meeting to enquire into the buisnisse, what running together of them is there then? how civil is their conversation? how complimentally do they salute one the other? how diligently do they seem as it were to talk together, and to make enquiry? You shall see fee Flints worn in the path they goe, and a path made in Marble stones, that no man may doubt but that diligence will doe something in any matter; for they all goe almost in the same path. For if one carry a burden too heavy for him, the rest in the way will come and help him, lending their legs and shoulders, if it be a light burden the fewer come to assist; if a weighty, more come, and either draw back, or thrust forward, or if the burden be too great, by biting it in sundry, and dividing it, they promote their buisnisse: And by this means they bring home a great heap of straw and sticks to their houses. Now if any will attempt to hinder the Ants in their labours, (as the Serpents and Toads often doe when they meet them,)  

They fight and will not flee,
And hold it noble in these wars to die.

For then (making as it were an agreement) they conspire together, and with horrid and cruel bitings, they destroy the enemy. He that hath not fastened upon the common enemy, thinks he hath deserved little of the Common-wealth, and upon that score they fight. In the time of harvest, when such an accident falls out, they do not meddle with a dead body, but presently as the enemy is vanquished, they fall to their labour again, and they gather again the Corn they laid aside before the battell, and lay them up; for they hold it no prudence to stay to plunder, when greater buisnisse doth require their industry, and they hold it ignoble to concile with those that are dead. They feed chiefly on grains of Wheat, Winter Corn, Barley, and hard meat which they delight in. They take great pleasure in Cyprus Nuts, and the tender flowers of herbs that are red. They eat Scorpions (called Geraret) faith Rhobes, and they feed on the Carcasses of Serpents and Frogs when they are hungry. Otherwise they abhor to eat corrupt and venomous things; nor will they touch fruit polluted with Menstrual blood, nor taint of them. Have not men by reason of hunger been compelled to feed on Horses, Wolves, Serpents, grasse, and dead bodies in time of narrow fiesges? That is sufficient to prove their cleanliness, that they carry out their dead in the husks or bladders of trees and Corn, as of old time the Romans buried their dead in pits, but they now carry them forth on Biers. They delight to live in clean houses, and for that purpose they do not lay their dung (that is
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like to Urine) within doors; and when they travel through dirts, and are bedawbed, at the entrance of their houses, they rub themselves clean against some rough bark. They love and take such care for their young ones, that they always carry their Eggs in their bosomes, so long as they are little, and not so overgrown that they hinder their Labour; but then they lay them up in their deep hollow Caves, that they frustrate the birds that prey upon them, as the Wood-pecker, the Nightingale, and also the Bear. But so soon as the young Pinfires come forth of the Eggs, they immediately shew them the way to Labour and take pains, and if they refuse to work, they will give them no meat. Hence you may observe that they let every one his task: The stronger with their mouths, feet, little noses, do call up the earth, and when they have it call forth, they make it up in heaps, when they heap it up, they mingle straw with it, that it may lie light, and lie hollow. The wiser sort of them do build, the lesfer of them remain in their trenches, and work, the more expert make windings like Mazards and Labyrinths, and frame vaulted Chambers. If they observe any to be idle, they not only drive them out, pinched with famine as a bale breed, but they bring him before the door, and calling a Council of them all, they put them to death, that their young ones may take example, that they may not heither addect their minds to sloth and idlenesse. The days appointed for labour and gathering Corn, they let venereous action side; and chiefly in Winter, (when there is neither fowing nor mowing) they couple together; yet for modesty they let use venereous actions within doors, as the Bees do, at this time they make much of their Females, and when they are great with Eggs they embrace and love them most. Above all they take care (O wonderfull love to their young ones) that nothing may be wanting to their off-spring for food or instruction. He only can doubt of the valor of Pinfires who never saw them fight, nor heard the report of their battells. For they are not only full of choles, (as the proverb is) but they have a purpose to fight, so that they either joyn battell with externall enemies, or else hold civil wars amongst themselves, when they want food. For though Pinfires never fight when their Granary is full, and their Democratical Government stands fast whilst they have plenty of food; yet (what we read to have hapned in the belt ordered Monarchies) in a dearth, or rather want of provision, they fight despairly for food, and for their lives, and the lefser of them will rebel against the greater, (as being the greater gulsps of the Common-wealth.) If it be the nature of necessity to give and not to take Lawes, and then chiefly when the belly a troublesome Client, doth feed on it self, and the guts croke and are empy. There are few juiter Kings then 

Lyceolcoun was said to be, nor were there better Subjects then the Athenians, yet both of them did many things disorderly in famin, and he gained thereby to be branded with the name of a pullulent dishonourable Prince, and they of rebellious Subjects. Therefore this warre of the Pinfires is to be commended, that is not undertaken for a Crown of Ivy, Bayes, or of Gold, or of Grafe, (which was accounted the moit ancient) but from intestine necessity, and nature leads them to it: for neither could Solon himself endure thirst, nor Solomon conquer hunger. For these will dig under all walls, will be held by no bands, and they only know neither Lawes nor bounds. 

Anna Silvius relates a strange history of this fight, lib. de Europa. c. 50. His words are these, In the Country of Bononia, many little Pinfires that were hungry, clambered up a dry Pear tree to seek for food; the greater Pinfires came upon them in no small number, and these took out their mouths, and killed some of them, others they threw down, those that were cast down returned to their Ant hill, or fort, in the way they met with others, and seemed to talk with them, and rip up the injury they had received, and they bring forth all the forces they had, and their companions out of their tents. About two hours almost afterwards, so many bands of the leffer Pinfires, and such a mighty Army drew forth, that the whole field appeared black by these black fouldiers; they came all well guarded, and compassing the stock of the tree round, they began to climb up. The greater Pinfires when they saw their enemies at hand, drew close into a body to receive the encounter aloft; so soon as the Armies met and fought, the great ones killed abundance of the leffer ones with fierce biting them, and they destroyd all those in a terrible skirmish that first ventured up, that at the root of the Pear-tree there lay a great heap of them flyen. The rest of the little Pinfires and the middle Army would not be daunned by this, or run away, but they recollected their forces, and attempt to revenge, and folloging more swiftly, and piercing one Army after another, they mouned up the tree in greater numbers than before, and they bite their enemies on the back, on the sides and in the face, and they forced them to yeeld, and leave the tree. The greater Pinfires were much too strong for them, but the numerous multitudes of the little ones prevailed against them, and threw them at least fet upon one. This happened when 

Engein the fourth was Pope, Nicolaus Pifforinens a most learned Lawyer standing to behold it, and he related the manner of the fight sincerely and truly. Olaus Magnus reports the like accident to have hapned at Upsal and Holme, before that barbarous and cruel Tyrant Christopher the second was driven forth by the Inhabitants of Sweden from ruling over the Gnaus and Swedes. In which battle that must nor be forgotten, the leffer Pinfires after they had won the field inforced the bodies of their fellows, leaving their enemies exposd to the Crowes and Muffins; also they made choice of a high Tower for the place of combat, as if they would with a clear voice call and draw into them the prodigy of Tyrants and his followers, to see their deftiny
deflthy revealed, and the punishment that hang over their heads. Also they hurt Elephants and Bears, but not unlesse they be first hurt by them. They affliet Serpents and Dragons and make them mad, but it is either because they hinder them in their labour and stop the way, or because they breath their venomous breath into their caves and turrets. Grasshoppers and Dormice they hate exceedingly, those because they spend the Summer time in singing, these because they lose the Winter in sleeping, for a Common wealth well regulated doth punish idle persons as well as those that are wicked, and the Spartans were wont to call forth those that would not labour. They live very long, and would hardly ever die, unlefs the Birds did catch them before their time, or the floods and waters drowned them. They are for the most part very healthful, because they observe those three rules of Plato very exactly, mirth in labour, temperance in diet, and sparing in venemous actions. For what creature labours more cheerfully, diets more moderately, or did nature ever produce that is more temperate in venery? Also there is in them many seeds of demeitick discipline, justice, friendship and other virtues; and had we the like, either by nature or by art in us, we would fcor to live betely on the labours of others, and we would refuse to be slaves to our helies. Moreover they have some sense of future things; for before a famine they labour exceedingly, continuing their work night and day, and every where laying up a great store, as Juvenal hath it Suet. 6.

---Hunger and cold away drive, And from the Art learn to an art to thrive.

Since therefore (to wind up all in a few words) they are so exemplary for their great piety, prudence, justice, valour, temperance, modesty, charity, friendship, frugality, perseverance, indolency, and art; it is no wonder that Plato in Phaedo hath determined, that they who without the help of Philosophy have lead a civil life by custom or from their own diligence, they had their souls from Ants, and when they die they are turned to Ants again. To this may be added, as I related before, the fable of the Myrmidons, who being a people of Eging, applied themselves to diligent labour in tilling the ground, continual digging, hard toiling, and constant sparing joyned with virtue, and they grew thereby so rich, that they passed the common condition and ingenuity of men, and Theogonius knew not how to compare them better then to Pifmires, that they were originally descended from them, or were transformed into them, and as Strabo reports they were therefore called Myrmidons. The Greeks relate the history otherwife then other men do; namely, that Jupiter was changed into a Pifmire, and so defowered Eurymedusa the mother of the Graces; as if he could no otherwise deceive the bell woman, then in the shape of the bell creature. Hence ever after he was called Pifmire Jupiter; or, Jupiter King of Pisniures. For the generation of Pisniures are endowed with fo much virtue and justice, that they need no King to govern them, for each of them can regulate his own passions; or if they have any King, it is the Supreme Jupiter, that governs all, who is deerevedly thought to be the Fountain and Author of all virtue both in Men and Pisniures, and all other creatures. For there is none among men that doth govern better then the Pifmire; and we that shoul teach them (as faith St. Hieronymus) may learn of them divers things that are necessery for our souls and bodies. For when contrary to their nature and industry they hide themselves, we are certain that rain is not far off; and when we see them running here and there, and carrying their eggs before them, we are warned thereby of great winds and tempests. Also those that are well acquainted with Country learning, when they see the Pifmires run here and there, extreme faint, twice as much almost as at other times, and take such huge pains in gathering and boring up Corn, they are warned of a famine at hand, and so buy up all the Corn they are able. For they more rightly and certainly by their naturall magicke forethrew Tempests, then our Soothfaying Almanack-makers, that are derided and exploded for vain fellows by all godly and truly learned men. For let Emium be heard;

They that are our shee other men the way, And promise riches who have none to pay, To whom they promised to them they pray.

Nor doth Accius effe elegantly describe them, who was the chief in writing of Tragedies, in his Atticis we read thus;

I trust no Witches, who have learn'd the skill, With gold their bowers, others ears to fill.

They do better in my opinion who observe the Pifmires, and grow rich by following his manners in labor, industriy, rett and study. We read of Midas that he was the richest King of all the Welt, and when he was a boy, the Pifmires carried grains of Wheat into his mouth whilst he slept, and so forethrew without doubt that he should be endowed with the Pismires prudence, and should by his labour and frugalitie gain fo much riches, that he should be called the Golden boy of fortune, and the darling of prosperity. Achias. And when the Ants did devour and eat up the live Serpent of Tiberius Caesar, which he so dearly loved, did they not thereby give him sufficient warning that he
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he should take heed to himself for fear of the multitude, by whom he was afterwards cruelly murthered? Suetonius. They do teach us by their example of labour and virtue, both because they do inculcate unto us parsimony and perseverance, and also because when they are grown rich they maintain perpetual and inviolable friendship. For though at such a time one man is a wolf to another, and the desire of having more increaseth with gain, (which the Greeks call *mnestia*, Covetounes) yet as the Comedian speaks;

In good or bad what ert it be,
The Ant with Ant doth full agree.

And they never fight and jar but upon occasion of extreme famine. Horace chargeth them with Covetounes, because they always heape up more; but since they do that for the common welfare, that reproach of his is not their fault. But they eat Serpents, and live sometimes on venomous things: I grant that, and may be they use it for their Theriac, and are not therefore Pismires to be commended? Yes as well as the Storks, they ought to be fed from the common Treasure, and I might say to be adored as well as the Indian Rat Johnsonum. In Thibon the Priests sacrified Pismires to the Sun, either because they thought the Sun the most beautiful, and therefore they would offer unto him the most beautiful creature, or the most wife, as seeing all things, and therefore they offered unto him the wilde creature. But you will say, they are most hurtful creatures to Vines, to Dittany, to young shoots, and to many tender plants, and Pliny calls them the plague of trees. But Gellius calls them properly the revengers and judges of idle people; for by their labour call us out of our lurking holes, and drinking houes, to till our grounds, and take care of our Orchards more diligently, and to exercice our wits, and to be more industrious in our busines, and to do what is just and equall. Go forth then idle companions, and powre on a little hot water wherein lime hath been infused, and believe me not, but you shall drive all Pismires away, and shall infuse more life and spirit into all thy plants. Origium, brim-ffone, Afa, Nitre, Smalls-sheils, Lupines, Lacerwort, wide Cucumbers, Bals-gall, boyl, and caft on, or but in fume or sprinkled: also many things there are ready to be had for one that is diligent and laborious, whereby you may quickly drive out this plague from your grounds, and you may expect a great retribution for your pains, abundance of fruit. Moreover all those things that drive away Walfps and Hornets, that we spake of before, will afford you a sufficient remedy, and will also kill all the Pismires. Yet in truth, thou sluggard, thou hast more need to nourish this creature and fet up for it a statute of gold. For so of old time they are said to have done, when they worshipped the Ant, in an hieroglyphick, holding three ears of corn in the mouth of it, as being an emblem of divine providence, and labour, and of household care. For they are, to use Aristotle's words, without any King, and under a popular government; yet every one of them is for himself a father of his Country, and they do to their power increase the common good as if it were for themselves in particular. But if you object, that the Pismires by biting caufe redness, tumour, tickling, and then a grievous pain where they bite; I do not wonder at that; I rather wonder at this, how thou canst look upon them, and not blush extremely, for thou canst not chuse but bluse to see such great industrious in so small a creature, and to behold the watchfulness, labours, journeys, sweat, and toil that he is buffetted in. Yet they do not wound idle people so much (whom alone they are said to flinge) but it will be cured with an Emplater of *Varignanus*, made of Flies and Pismires mingled together; for as Scorpions, so are they the remedy for the wounds they make; and they bring their cure along with them when they bite. Pliny, Columella, Arvalus, Elianus, Albertus, and Vitalis, will direct you in other helps, but you must not draw them out and apply them, without using the prudence of the Pismire. Will you give me leave to reckon up the infinite benefits you may receive from them, for this small detriment you accuse them for? Now let what the Ancients write concerning the virtues of them, and judge uprightly concerning it. For they are not only meat for Serpents, Dragons, Bears, Locusts, Rats, Dormice, Chameleons, Lapwings, Woodpeckers, Larks, Nightingales, Pheasants, Wagtails, Hens, sometimes to satisfy their hunger, sometimes as remedies to cure them of surffets, as Pliny, Solinus, Plutarch, Palladius, Euthimius, Bellinian, Albertus, and experience do witness: But also the inhabitants of the Country of Mani, do feed on red Pismires seafoned with Pepper, and they are their greatest dainties as Nicolas Venetus doth tell us. Also they are good to catch Locusts, and to bait for many fishes, chiefly the Roch. As concerning Phythick, there are but a few diseases that these creatures, as the hand of God, do not yield some help unto. Doth a Beaver burn and scorch thee alive as it were in the Engine of Perilla? hearken and I shall tell thee of an admissible water to quench that fire, and most effectual against it, as Glycer received it from a friend: Take fountain water one pound, honey three spoonfuls, flask them in a can, and set them in an Emmets hill, so that Pismires may easilie fall into it when you find that so many are fallen in as will thicken the water, shake the Can, and as you use to do in making Rose-water, fo distill them. The dos is half a spoonfull, or more as the Patient can endure it by reason of his force more or lesse, it will wonderfully provoke vomiting, and will also evacuate the matter of the diseas by Urine. Pliny is the Author from the old fayers, that a Quotidian, Tertian, Quartan, and all intermitting Fevers will be cured, if the fiek caufe the parings of his nails to be cut before the entrance of the Ant hill, and if he catch the first of them that layes hold of them, and bind him up and tie him about his neck. Art thou troubled with pains in thy ears? go to, fill a glasse with Emmets and Emmets eggs, and (lop it well, and bake it in an Oven wch
with the bread, till it be as hot as the bread that begins to heat; then shall you find a water that is very usefull to cure the pains in the ears if it be dayly dropped in. Is there a cloud before the fight, preface the juice of the red Emmer, and drop it in, it doth corrode with some pain, and wholly extirpate it. *Erosia, Trudula, Theophrastus.* Emmer's eggs beaten and put into the ears, remove all deafnesses quickly. *Marcellus.* Some bruife them and prese out the watry substance, and drop it in. Some infuse them in a glaffe vesell in Oyl, and boil that on the fire, and powre that into the ears.

If Urine be retained and caufe the *Dropsie,* drink twenty Pifmires, and so many egges with them in white wine, and they shall help you. Alfo their egges diluted do much when Urine is stopped. *Leo, Pervontius.* A Maid that cares for her beauty, and would make the circles of her eye-lids black, Emmer's eggs bruised with Flies will perform that, and give them their desire. Some again either through age or disease (to ufe the Poets phrase) are beaten in their property, and have loft their generative power, that they cannot do the office of a husband if they would. Some Authours commend to these oil of Sefium with Emmer's eggs bruised and fet in the fun, if the yard and telhicles were anointed with it. To this oil some add Euphorbium one scruple, Pepper, Rew feed, of each one dram, Multifpiced half a dram; and again they let it in the fun. *Rafis.* *Arnoldus* in this cafe commends black Ants macerated with oil of Elder. *Nicollum* minglith it with roots of Saturny; and others do give the diluted water thereof to thoſe that are futting. *Geffier in Eumyrum* describes a water conducing thereunto: *Take faith he,* a pot bemerred within fide with honey, and half full of Ants, then add long Pepper, Nurmegas, Cardamon, Pellytor of Spain, one egglug, Butter what may fuffice, and digeft them fourteen daies in horfe dung, then dilifil them in a Bath, and give a little duly to be drank futting. Others, faith *Merula,* add Comfery to oil of Pifmires; others *Baras,* or root of Mafterwort with Wine when the impotent man goes to bed, and thus they affirm that men may be cured of feeble- nefs; and women of barrenness. But I wonder at the force of Pifmires in this cafe, for *Brunsfisulfis* writes that but four Ants taken in drink will make a man unfit for venery, and abate all his courage thereunto: yet he will maintain that Emmer with common falt and egges, and old hogs greale, wrapt in a cloth and laid on, will cure the pain of the Hip-gowt. *Marcellus* faith, that if they be applied with a little falt, they are a prefent remedy for a Tetters: Alfo as *Serenus* relates, they are good againft scabs and itch from an inflammation of blood.

The dust in Emmer's hit doth deep by,
Being mingled with oil, will help it by and by.

Alfo *Arnoldus* reckons Emmer's egges amongst fuch things as take off hair; and commends water distilled from them againft *Noni me tangere,* and all corroding Ulcers. *Albertus* thinks that drank with Wine, they do powerfully diffipate winde. Reckon how many Wars you have, and take fo many Ants, and bind them up in a thin cloth with a Snail, and bring all to ashes and mingle it with Vinegar. Take off the head of a small Ant, and bruife the body between your fingers, and anoint with it any impollumated tumour, and it will prettily fhink down. *Aronius.* Alfo God, that I may omit nothing, by the biting of Ants called *Solipagae* (it is a kind of venemous Ant) drove the Cyna-
molgi (a flourful and idle people of *Ethiopia*) from their habitations, and destroying them quite. *Flinys.* Some think they fhould be called *Solipagae,* but *Cicero* calls them *Solipagae.* I have a few things to speake from Authors, as from *Athenobius, Albinus,* *Natalia Comas, Diogenes Laertius,* and *Micheas a witty Book of the fame argument.* And *Aratus, Herodius, Strabo, Aristophanes,* *Rafis,* *Ag-
gregator, Broduz, Bifius, Zetius,* *Arnoldus,* have by the by run over the natures of them, and their polite life. But because they add but little to what hath been faid, I would no longer play the Pifmire, lefl seeming to be eloquent I might grow impertinent, and searching every creek too nar-
rowly, I fhould make more gaps. God grant that we whom God hath commanded to learn of Ants, when we are idle and mind nothing but our belles, may by his good guiding learn of them, and he instructing us, we may perform our duty. It is a small creature, and contemptible for its magnitude, yet we must know that goodnes is not in greatnes, but what is good is to be accounted great. I have faid.

**CHAP. XVII.**

*Of the Gloworm,* and the female *Melo,* and of *Antbremus* and the field *Chiflep.*

Oftimes those that are of a great faction, and of noble decent, will scorn to marry with one of a common family. Yet the Poets write that *Jupiter* did not disdain to imbrace ordinary women; and the Cicindela or Gloworm, and the *ol Betele or Melos,* (though they are of the winged order) are not ashamed to couple with others that want wings. And for as much as these females are endowed with the same force and dignity by nature, which is seen in males, *I know not why they should refuse or be weary of their chance, and of their females, when as (if their wings be taken off) they agree in the fame endowments of their minds and bodies.* We speak abundantly in the first Book, concerning their form, figure, manners, virtues,
Of lesser living Creatures.

Chapter XVIII.

Of Mineral Worms with six feet.

In Pennius his papers concerning the nature of Wormes, I did for a time wonder at his opinion, when he spake of Wormes in Stones, and he averred that he saw little ones with six feet in old rotten Stones. For he had received from all Philosophers, that all things that are very bitter, salt, sour, sharp, dry, hot, cold, hard, though they may corrupt in time, yet they will breed no worms, and therefore Theophrastus calls them Leues, not that they want life, but because they breed no living creatures. I began to weigh the matter narrowly, and to put into an equal balance, without fraud, all their opinions; at last I found that our Anceliers were here, and there most foully deceived, and I subcribe more to mine and Pennius his eyes, then to all their words. Tell me in good earnest, is there any thing more bitter then Gall or Agarick, saltier then the Sea, more tart then Leaven, more sourer then Vinegar, more hot then fire, or more pure and cold then Snow congealed? yet certain it is, that Wormes breed out of all these: and it shall appear sufficiently by the fequest of the flory, that Wormes are bred out of Stones, neither drinck, nor solidity, nor coldness, nor want of heat or moisture can hinder it: Nor will I allow of that, That Nature produces living creatures by a mixture of Heat and moisture, and moisture is a wayer as the matter for heat to make a concosition of. For not only where moisture affords matter, and heat both manifestly concot, are living creatures bred; but there also, (that we may not seem to fet bounds to the power of God) where we fee with our eyes that there is neither of these, nay where we may conceive that they are both absent. The generation of the creature called Pygogia in the flames, of Orites in the most frozen snow, shall evidently prove this, and that was the caufe that I sooner subcribed to the generation of Worms in stones. Moreover, they that with their graving tools, do make rough their Millstones that are grown over smooth by using, find Worms of six-times bred in them, as the Brother of Pennius certified. Felix Platonius, the worthy President of the Physitians at Bafil reported to me, that he found a great live Toad in the middle of a hard stone that was cold in funder, that was bred there. And that excellent man Zuingerus relates the same thing of a Scorpion. And indeed these things had seemd to me incredible and monitory, had I not known the same thing to have happened in a Quarry of William Cave a Noble man of Leister. And neither Philosophy nor reason is contrary to this opinion, since in the earth, the mother of all things, there is all kind of heat and moisture, and all kind of spirits; and (to use the words of a principal Physitian) all things seem almost to be

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Of Worms in Vegetables, that have six feet, and first of Worms in trees.

Worms in Vegetables are either Worms in trees, or in thorns or Pulses, or Corn or Herbs. The Tree-worms some of them feed on the wood, some on the bark, some on the leaves, some on the fruit, and of all these we shall speak in order. Those that corrupt the wood are of divers sorts, for those that breed in green and growing wood are called Salmone, those that breed in dry wood without sap, are called Sugana, those that are bred in solid and dry wood are called Thripes, those that breed in harder kinde of wood are called Termites, those that breed in saw-dust are called Coff, those that breed in planks of Ships are properly called Teredines. Salmone may it be took their name from Salmo, for they do bite and eat living trees, so that oft times about their roots a great deal of powder and dust may be seen, as it came by saving. This Worm hath an ill-favoured head, of divers colours, covered with a covering, and he can put it forth and drive it in the pleasure. His feet are on the hinder part toward his tail, as the Coff have theirs on their breasts, the rest of the body is covered with a sappy Coat, as it were their shell, and when they put that off they die, as Snails out of their shells.

In that time which Nature hath appointed they grow into a fishlike like to an Aurilia, but what winged Creature corneth from that afterwards I could never yet observe. This is far greater than Coffus, by reason of its unfairest eating, and is not so highly. The Wood-peekers and other Birds that spoyle the trees do make holes in the green trees, and by the sound finding out the hollow places, they dig and pierce in there, till they come to those devouring Worms, and they devour them. For they exceedingly delight in this kinde of meat, and for love of it they will sometimes spend whole days in diggings of a tree. Edaphus is found in rotten and hollow wood, which will make no noise though you strike it with a stiffe, it is very like to the Ceratgus in Theobryias, and the Pistocampa of the Physiologists, but that it hath only three feet on both sides. Geiger attributes it to a venomous and confolate evil smell, and a very corroding faculty. Thripes are thought to be named from terrando wearing, they are little Worms very frequent and common, their bodies are white, their heads black, or brown from red, with fix very slender feet near their necks and blackish with a little red like to the Worm in a Hazel-nut for the fashion of their bodies, but they are shorter and smaller in the middle; they love no black wood, but are bred only in wood that is whitish (as is the white sap of timber, Hazel-nut trees, Birch, Cinamon, the Plain-tree) and they penetrate into these when they are partly dry and solid, and drinking up the moisture they have, they make them rotten. I pass over the contests between Pliny, Hufchius, Theobryas Plineus, concerning the signification of Thripes, whereof some are so negligent, some so curious in observing the propernes of words, that in describing them they are very oblique, and as good as nothing. The Ancients used for Sealts, the wood the Thripes had eaten, and chiefly the Lacinianus as Hufchius testifieth. Whence Lucian in Lexiph. I keep them under sealts eaten by Thripes. For these Worms as they eat forward, do engrave divers characters of herbes, and forms of living Creatures, and so exceed the Divine sculpture of Phidian, Praxiteles, Myrmecides, Euroclus, Sephyrills, Antherurus. Galen speaks of a man that made Rings, p. 17. de usu part, who
who on the broad part of a Ring engraved exactly, to a wonderfull demonstration of his are, Physics with his Chariot and Horses, cast down headlong. But the Worm Teredo hath neither graving tool nor iron instrument, but with his solid teeth engraves most foul signetts, and frames wonderfull pictures of all things sometymes only by the conduct of Nature. When woods are dryed by overmuch heat of the Sun they produce and feed a Worm called Teremes, which as Servius saith, being bred out of the very wood, as left comems its mother, and will nee touch the hard barky substance. A very ungratefull little Creature, and so much worse then other Worms, the more it is hartfull to the heart and vital fountain of trees: For they live sometymes when their bark and hard wood is devoured, but when the pith is wasted they die presently, and Nature can never cure this wound. They are like the Cofis in shape of body, but they are farre late, and much fatter. The name perchance comes from Kis a Greek word, as if you should call it a Wood-weevle. For the Philosopher saith that Kis is a little Creature bred in wood, like Worms bred in Corn; the English call them Timber worms because they are seldome in any wood but that which is cut, and prepared for building. Their bodies are full of wrinkles, and hence some Roman Contuls are called Cofis. The greater Cofis are almost as thick as the little finger, and as long as three fingers broad, of a whitish colour, almoast like to the greater kind of Caterpillers; wherefore the great ones are called by Pliny Cofis. They have three feet on each side that are prouenous, not farre from their heads, short, flesser, and black. The body of them hath twelve rings, thoise toward their tails are always smaller and shining; their heads are somewhat thick, of a dark colour, and the nose is small, forked, sharp as a Spear, black, with two plates in the forehead, near the mouth there are small hairs that are pointed, all the rings in the sides are severall marked with red points, a little hollow. It is a Creature that crees very lowly, and the motion can hardly be perceived, wherefore Felis calls them Cofis, great belliess, and sluggish Creatures. He hath very little eyes, a round back, a belly something hollow, of a wathish whitish colour; they seem to be fat, and very soft; they breed in wood newly cut, but before it ought to be. But if they have been long cut, and have lost much of their moisture, the small Cofis only breed in them, that differ from the great ones only in bignesse. The Ancients in Pontus and Phrygia (as Pliny and Hieronymus note) fed on these as the most dainty meat, and for that use they fattet them with meal, that they might be fed Worms. Pliny faith they serve alio in phisick; for they heal Ulcers, increase milk, and in Ointments they cure creeping sores, which Albertus also confirmes. The Teredines have a very great head, considering their bodies, they gnaw with their teeth, and pierce into Okes, as you may know by the noyse: But Theophrastus thinks that there are only found in the sea, and men think there is no other Worm can properly be called Teredo. We remember, that in the Ships of the Venetians, that had long flound in the Havens of Alexandrius, those little ones were found, that were a cubic foot long, and as thick as a mans thumb, such as that famous Sir Francis Drakey another Sea Neptune brought home with him in the Ship that had gone over the world, and was grown rotten and popyony. We saw other Teredines in inch long like to Worms bred in flower; they have a red body, a yellow shining head, a little red, a forked mouth, from the lips whereof little thorny hairs come forth, they have three feet on each side, the incisions of their backs are eleven, something red: The rest of the body is of a watry yellow, and thines the greater they are the more darkly they thine, of a Crimson colour, and the smaller they are, the whiter they are. The Italians call them Elysam, the Spaniards Broman, from the eating of them, for they eat Ships, and penetrate them; whence Aristoephanes in Equisibus, brings in a rotten Galley, speaking thus, I being eaten by the Teredines am accusing for it. And Ovid faith thus, 1. de Ponto. It's eaten as a rotten Ship with Worms. By Peninn his leave, the Teredines eat not only Ships, but beans of houles, so the Scholiast upon Homer faith, (Odd. 70.) The words are thefe. Melampus whose ears Dracu had picked, that he might understand the voices of wild beasts, was cast into prison for the Oxen of Iphicetus he had driven away; where when he understood by the speech of the Teredines that there was but little of a main beam left, he caused himself fell to be brought forth, lest it should fall and kill him; and whilst he was lifted up by a man and a woman, and got forth, the houfe fell, and both of them were flyny. That is also apparent out of the chief of the late Comedians, when he brings in Philolachus a young man, speaking to them thefe words;

If tempest come, Teredo enters, And the rain at all adventures, Gets in, and ratt the walls and wood, Makes work for Carpenters, that's good, &c.

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These
The theater of Insects: or, Book II.

Their hurt especially great trees, as the Oak, the Pear-tree, the Apple-tree, the Chestnut, the Larch, Walnut, Beech, the Medlar, the Elm and broad leaved Willows; in which cut intentionally, or planned, a soft and ill-fatty humour breeds (which Wood-men call, the sap, and the white) which is the matter and nourishment of all the Teredines. Trees that are then, more bitter, more oily and hard, are thought to be so much the freer from these Worms: yet sometimes they will offer violence to the Cypres-tree, the Walnut, the Quercus, the Tiele-tree, and to Ebony it will. The manner of their breeding in wood is thus: Many are bred within, and do not come from without, and they eat up their originals, that of what they were bred they may live by the same. The material and conjunct caule is the sweet moisture of wood that is fit for their nourishment, being corrupted even as of sweet flagm, Worms are bred in the belly, Now that sweet humour purgets from a twofold caule, either by diateme, or solution of continuity. By diateme the quality is corrupted, and by cutting not only the inbed humour runs forth, but some strange humour enters by rain and mists, and corrupts the wood. In old sponges, and dry trees, by reason of ages, are the greater Worms, both because the radical moisture is more diminished, and because the diateme, heat and moisture that are strangere, are more augmented: as oft-times old men are troubled with cruel Scabs, and eating fences, and Worms. Wood lying open to the Moon in the night, sooner breeds Worms, because of the over much moisture of the air, and in the hotter Sun, from too much heat. Those that breed within, breed at all times, but for those that come from without, and are bred of the seed of Gnats and Flies; the Spring and Summer are the chief times for them for they, since and age. Also the climate and the crookedness of great trees, for the third wood seldom corrupts, and they do such venture in the ground and in Arabia, in the climate. Now we shall describe the particulars.

Of those Worms, that are in Fig-trees, some are bred of the trees themselves, and another is bred withall, that is called Cerastes. For since the greatest part of Worms do differ in shape and form one from another, yet the principal difference amongst them is this; that those which are bred in one kind of tree or fruit, if they be transferrd to another kind, they will not live yet men affirm that Cerastes is bred in the Olive-tree, and will breed in the Fig-tree; wherefore the Fig-tree hath its Worms, and feeds forth those also that it receives from other trees: yet they are all like to Cerastes, and they make a small thrall ground. Symposiai faith he hath two horns on his head: when he hath ere the place so hollow that he can well turn himself; he begets another little creature, and changeth one kind into another as Catterpillers do.
call it 'pipewr Butler; it may be because it will eat with its nib into the thickest Wine-cask.

And certainly if there were not something of God in it, and of divine virtue, how could we find to great force in so little and almost no body? Also in the leaves of the Beech, little knots are found wherein the c are small Worms. The fruits of trees (as Theophrastus faith) are sometimes worm-eaten, when they are yet green, as we see in Services, Medlars, Pears and Apples. The Olive both in the skin and kernel hath Worms called eupus, and it is a mischief not to be neglected (faith Theophrastus) for it will not only wheal all the oil and the juice, but will eat up the bones that are so hard wherein the kernel is. Also little Worms are found in Gall that are eaten through, and they are bred in the very inmost pith, out of which afterwards ariseth a kind of Fries and Gnats, as Valerandus Duver in Apotheosis of Lions teUeth. Moreover, in Oak Acorns, and spongy Apples, sometimes Worms breed, and Astrologers preface that year to be likely to produce a great famine and death. I need not contend that there are Worms in small Nuts for all men know it: especially when the Summer is moist, and the wind blows from the South. It is strange that Ringleberghus writes, libe experiment, that these Worms may be fed to be as big as a Serpent, with sheep's milk, yet Cardanus confirms the same, and shewes the way to feed them, Lib. deer, varietas. There are little Worms bred in dry Figs like those in Hazel-nuts, with a black head, and the rest of the body is a whitish yellow, but they are smaller, Belonius faith he found that Cedar as well as Pine Apples were subject to Worms. They are for thickne's like to the female Glow-worm, a fingers breadth long, with a head like an Emmet, but more compact, with twelve incizens; on each side it hath three feet near to the head, and two circular forccvs, ds, with a thick belly, and a sharp tail. Also in the hard and woody hulls of the Witch-tree, there is a broad seed, and oft-times eaten with Worms: and you shall finde there oft-times their very Aureli's. Lathly no fruit can be named, but some Moth or Worm will infect it; even Manna it self sometimes (which the Poets feign to be the meat of the gods, the Scriptures maintain to be the meat of the sons of God) commite and bred Worms, when contrary to God's Word it was laid up till morning.

CHAP. XX.

Of Worms of Fruits, Pule, Corn, Vines, Herbs.

Upon the lower Willow (especially when dwelling galls break forth) sometimes there are found like to rotes, that are full of Worms, as it also happens in the leaves of the Mistick-tree. Zinnzaranis faith there are two kinds of scarlet Oak, one like a great tree; the other a small shrub, about a foot and half high; it spreads very broad, and the leaves are smooth and shining, with a numerous thorny beard in the circumference rising up with many scipes like to the Rose-bush. Our Countrymen call it a Beech-tree, though it be nothing like to a Beech-tree. It grows on plain ground, but that stands high, with little dry hillocks, and unfruitful: when the flubs are bedewed with showes in the midst of the Spring, the Cochineal begins thus: When the lower stalk divides into two branches, and in the middle of these there comes forth a thing that is round, and of the colour and bigness of a Pea; they call this the Mother, because from this the other grains proceed. Besides every one of these flubs hath commonly five Mothers, which at the beginning of Summer and in hot weather put forth a great company of little Worms; and they cleave in the top. A new offspring shoots grows up severally on high of a white colour, that produce living creatures. But wheresoever they meet with the hollow places of the twig budding where the Worms are, they fall down, and become as great as Mister-feed. Then growing up more freely, the white colour changeh into all-colour, and then they appear no more living creatures, but again like unto Pease. Then those grains being ripe gathered, now great with colour'd Worms, which are carried to the Merchants, the thin skin that goes among them breaks. The price of a pound of these Worms that are come forth of the skin is a gold noble; but that part which is yet in the skin, is sold for a fourth part of it; the mean while the little Worms are as if they were dead, and move not. But when the season of the year comes, they are stylized by putting them in linen cloths, and exposing them to the Sun. Then but feeling the heat, they presently creep forth, and strive to fly away; but by the keeper of them, who watcheth them continually, they are hatch'd back into the middle of the linen cloth till they die; while this is doing, and for three days after, there is so sweet a smell and delicious, that no Civet, Musk, or Ambre-greece, nor yet Lemon flowers can surpass it. But if any grains escape from him that gathers them, they pretend forth a numerous army of winged creatures into the air. It was observed one year, that in a thorny field in the Country by Ales the profit of this increase was reckoned at 1000 crowns. So writes Zinnzaranus. And Cardus Clifumi l sthathat in his time, the same fashion of gathering Cochineal was observ'd about Navarre in France, and also in Spain. For they have plots of ground in the open air provided for the purpose, with the fides something high, and they lay a linen cloth upon them and pour forth the Cochineal upon that; the keepers stand ready about it with little wands continually when the Sun shines very hot, and they strike
strike the outsides of the linen cloth, that they may drive back into the middle of the cloth these little Worms that happen to come forth. But *Perum Bellowius* *l. i. observ. c. 17* tells us of another manner of preparing Cochinale.

There is (faith he) in Crete a great increas of Cochinale: shepherds and boys do gather it. They finde it in *fmut* upon a small shrub, of a kinde of holm that bears Acorns flicking to the stock of that shrub, without any stalks and the colour is ash-colour with white; but because the leaves of that shrub are without prickles like to Holly, the Shepherds have a flatte in their left hand to press down the boughs, and holde them so; and in their right hand they haue a pruning knife, wherewit the cut off the small boughs, from which they pull off little round bladders as great as small peas, on that fide they grew to the wood they are chapt and open full of little red creatures smaller than nits, that fly forth at that cleft, and leave the bladder empty. The boys when they have gathered their Cochinale, bring it to the Treater; and he gives them victuals for it. He parts these little creatures from the bladders with a sieue, and then he takes them gently with the tops of his fingers, and makes bals of them as great as Hens eggs: for should he press them too hard, they would run to juice, and the colour be lost; wherefore there are two kinde of dying fluyce, one of the pulpe, another of the bladders; and because the pulpe is more usefull for dying, the price of that is four times beyond the price of the bladders. *Gfuer* also saw small Worms of a yellow and red, upon the uppermost boughs of the Juniper-tree; in the spounge of the Eglantine or wild Rose, white worms breed, from which *Artifex* faith that Cantharies do come. *Gfuer* faith, that after two moneths the spounge being kept in a flove will send forth a great number of little live Worms. Also the Thorn and the Bramble, the Rose, Heath, Broom, tree Trifol, RAFpisa, the Myrtle-tree, Capers, Bulls, the Goosberry-bush, the Palm-tree, the white Thorn, the Privet, Park-leaves, Litoric, and indeed every shrub, and under-shrub is eaten by Worms: nor could *Palma Chrfthi* (which afforded shadow to *Johannis* divine Prophet, when he was very hot) escape this plague, as we finde it written. Also Pulie, the gults of Ceres are (to use the Philosophers word) most Worm-eaten, but how that comes to pass is most uncertain: whether it is as *Theophras tus* seems to say, when the juice cannot be diffused, by reason of the great heat, and the foulness of them? or should we rather say, that at the dry part denies the humour, but the humour flies from it as its contrary? So we see drops hanging on a dry wall: or whether the over great heat corrupts both the natural heat and moisture contained within? That corruption comes this way, most likely *Ethiopia* can refilte. A little worm eats Beams, *Theophrastus* calls it *Mico*, *Hypochsi*, *Aegopis*, it is found breathing in Pulles, but chiefly in Peafe, and hath its name from eating: and such a breed of which *Pelos* after that the falsnes of it is washed away with swows, as besides the Scholast upon *Hepha. Pheartum*, and *Theophrastus* determine. They often breed in the sweeter Pulie, both by reason of the fitness of the nourishment, and the nature of the air fit to breed worms, and when they are bred they nourish them, and raise them forth. Worms bred in corn are generally called *Lanaurois*, which feed on the roots, stalks, reeds, and prickles of winter Wheat, Panick, Oats, Rice, Miller, Rie; others there are that feed upon Wheat-flour, as those that are called *Farinaris*; others of that which is whole Wheat, not yet ground in a mill, as Weevils. The English call the *Farinaris* *Meal-worms*: they are like to ships worms, they have six feet, with a little shining red head, a roundbody, and divers coloured as the meal is: so the belt and white meal breed them white, the elder meal breeds them yellow, the lean meal full of bran hath dark colour'd. Cardan calls them *Meal-moths*, (but as it falls out frequently) not well considering of it. Those that are fed with bran, it is wonderful how great they will grow, and from ten in a fliote time you shall finde three hundred. They are found amongst woollen weavers at all times alomost; for they make a mixture of Bran, Vinegar, and Hogs greese, from whence they breed abundance ly. The Weevil is the bane of wholeWheat, be it raw or torched (as in *fign* of *Actus*, which the English call *Mauls*, the mother of Ale.) For to my Comedian hath its, though *Virgil* and *Varro* call it *Gargulus* or *Gargula*. The English call the Wheat-worm *Kis*, *Pce*, *Bone*, *Weevil*, and *Whirl*, as if you should say double Bull; yet it is indeed a living creature with three backs. It destroyes wheat chiefly, yet it will destroy any other grain, leaving nothing but the hull, and the thin skin. For as *Virgil* hath it in his *Georgicks*:

*The Weevil spoils amisyng heap of corn.*

It is formed like a small Beetle, it hath a beck proper to it self, and with three forks: Some of them are with black bodies, others with brown, but others that are the greater are greenly, and the midle of their body very small. This creature is so dry, that with the leath touch it will turn to dust. It is bred chiefly in the Spring, some few dutes before that Bees swarm, *Theophras tus* faith they breed of one part of the grain, and the other part they feed on. Our Countrymen finde by experience that this wheat-worm will lay eggs in chinks of wals, and under the tyles, and from thence by procession comes a new off-spring. They speak of three wonders concerning these little creatures. First, that though they be but few at first, yet in a short time they will increase infinitely. Secondly, that they will lie between the tyles and in chinks of wals without any meat at least three years. Thirdly, that if they be put into water three dutes with
with Wheat or Barly, when they are taken forth they will live again. Our Countryman Sichardus (a diligent observer of Nature) describes the propagation of Weevilis thus: when Ants have eaten off the top of the ear of wheat, the Weevil goes up, and in that little hole he lyes one or two eggs (but seldom three) so great as a grain of Millet, long and yellow, full of liquid yellow matter; from this afterwards proceeded another Weevil. This little Insect hath both sexes, for they copulate before they do this milchiet. Petrus Comfor affirms that they proceed from Beans corrupted, to whom no man but Guillermins de Conchis attests, lest they should falsely confound a Weevil with Midas, or Bean-worm. Beside this Weevil commonly known, Jacob Camerarius found two others to Pinnus out of the barns of Germany, with a far greater belly; one of them was a kind of afe-colour, and the other green. Alfo Scaliger thout there is in whea worm without a beck, which perhaps Pliny meant by his com-beetle. To this I will refer a certain little creature that is frequent in barns, that creeps with fix feet; and with two short fail-yards it moves its way, it is spotted on the middle of its back and fides, and the rest of the body is black, which I therefore call the spotted Weevil. This creature doth no great harm to corn, because it is still alone: and seldom two of them are found in one barn. About Lanteburg, a Town of Germany, a certain insect is found in the fields, which some call Ulpus, some Korn-worm, others Kornetle. It is said to be very venomous and hurtful, the Husbandman will leave their plow when they meet it, and run after it to kill it. It is black from a little red, dwelling amongst wheat and eating up the corn; worms bred in Vines, the skarlet Oak worms are like them, such as Brefuaculos doth strongly maintain and think that they are bred on the roots of Pimpenel. Amongst herbs, both for phynick, and for meat, the Violer, Radifh, Rue, Bafil, and many more are molested with worms. The worms in Violets are very small and black, and run very fast, as Jacob Gareus a moft diligent Apothecary, and very famous in the knowledge of simples as there are not many, affirms out of the root of the Haffichoak a worm comes, that hath fix feet, like to a Caper-pilles, and whitish, with a reddish black head; where it bites the roots of Haffichoaks it makes them black, and at last kills them. The Radifh produceth the like. Cardan (as I remember) report that there is a worm found in the leaves of Rue and it will grow wonde-ful great, as the Hazel-worm will do if it be fed with heeps milk. A little worm that is the child of the dew, and a greeft in bail with a body almost upright, he sticks fast by his hinder feet, while he takes hold with his forefeet. Sugar is made of the Sugar cane, the sweeteft of all Sults and the commonest of Physicians supposeth, it is altogether free from corruption. Yet under the authority of Scaliger, I affert that a little worm is bred in Sugar, long, black as a fleth, and (if you take away his Beck) like to a Weevil; and therefore we may truly call it a Sugar-worm. Belusius also makes mention of this. But that Insect which the Germans call Mayen wormen, Seems to breed very seldom, faith Camerarius. For in the moneth of May dewes often fall that are very unhealthful and if they fall upon the leaves of Hops, they turn to little living creatures called Hopen. Amongst thousands of these you shall sometimes see one far greater than the rest (though it is scarce greater than a fat bowling) it hath yellow circles about the belly, the back is chaffer'd, the tail is somewhat long, the colour of the body for the greatest part is blackefh. This when it wants aliment from dew, devours one by one all of his own kind, even beginning with that is next to him: he changeth his skin like to Silk-wormes; lastly, when he is almost transparent, he putting off his left skin, he hangs by his head and feet by a kinde of thin thread, like to leaves, and so he dies; may we not call this worm the Hop-worm? In the talk of the Aliphodil, a worm is bred of a clear colour when the herb begins to flower, out of his shoulders wings grow by degrees, and when he can fly, he forsoth his habitation. In the twain joynes of the codd Arfimans and the wilde Thifhte, little white worms breed, as yellow ones do in the purple flowers of the bathard wilde Chervil, and red ones in the root of Pimpenel. I often have seen in the female Smillage downie worms; in Mullrums and Colewors, small black worms; in the root of Acorus, white ones: in the root of Elecampane whileft it is green and growing, white worms breed in ten or eleven joynes that are visible, that are as thick as a Gooquil, with a lit-black head, and six floft feet, and the body all black. The Kings of the Indians, as Cefarens tellfeath, use to eat for their second course, a worm found in a certain plant, when it is rolled at the fire, and they commend it for the daintife and sweetefl meet. In the head or talk of the Fullers Teafil, we have seen a worm very small, with a little head, and fix black feet, with ten or eleven incisions. First it eats up the fpongie fath of the talk, and when that fails it dies for want of food. It is easily found at the beginning of October, though Marcellus upon Diocondres doth most shamefully deny it. If I am not deceived, this is that worm the Ancients call Tavism. Xerocrates calls a plant like a double Camomele Calechedon, (faith Pliny) it hath a falk like Fennel Gigne, with a tall and prickly head, and like to an egg in form: in this with age they lay little worms breed, that are good against the tooth-ach. In the roots of white Thistle (which plant is luxuriant in the high mountains of Savoy) there is a little worm found, breeding in some, in others it grows great, and in most of them it grows to have wings and ready to fly; it is white, and hath some joynes that it is divided by, and very black shining eyes. It may be there is great use in physick of a little worm bred in wilde Tanfye; but I leave the enquirie of that to those that are curious in the secrets of Nature.
Concerning the use of Worms that breed in Minerals and Vegetables, and the way to destroy them.

Some think that worms that are bred in stones, (whereof we speak) tho' I mean that are as great as Hand-worms, beaten into powder with the stones, are good to cure Ulcers. Also Marcelius winnelith that these bruitled and given with three Cyathii of water, will break and drive forth the Stone by urine. The Ancients used the more solid wood that the Thripus had carved with their teeth for Seals, and Antiquity ascertained the invention of that to Hercules. In old trees red worms breed, whereof Serina writes thus.

From an old tree doth red worms procure, 
Brute them with Oyl, and drop in worms, be sure, 
For pains of 'th' ears this is the safest cure.

Galen out of Apollinia subscribes this remedy. Worms that breed in hollow and rotten trees heal secret Ulcers and all symptoms of Ulcers, and diseases of the head; also being burnt and powdered with their weight of dry Dill, they cure Cankers. Marcelius. But Aurelius adds three Worms bed of wood to an Ointment against the Elephantiasis, which he learned of a certain Phisitian that took his oath of secrecy. The rootenmeat that is made by their biting dries without pain, and is profitable for many things. Galen Expr. 3 c. 7. commends this kind of powder, against knobs, clits, and sores of the Fundament. Take Orpiment in pieces three ounces, rotten wood of an Oak four ounces, make a fine powder, then foment the place affected first with the warm urine of a young boy and afterwards fire on this powder. But the Coffe are not only food for the Inhabitants of Pontus and Phrygia, and they delight much in them (as Worms in Cheele are to the Germans) but they also cure Ulcers, increase milk, and as Pliny saith, when they are burnt to ashes they cure creeping sores. The Worm in Fullers Teazil put into a hollow tooth, will give wonderfull ease, Pliny. And if it be hanged in a bladder about the neck and arms, it will cure Quartane Agues, Discoevides. One Samuel Quickebergins a learned young man, in an Epistle he writ to D. Gifuer, hath these words; Sith he, as I was gathering of Simples, a certain old man came unto me whilst I sought for a little Worm in the head of the Fulles Teazil, and he said unto me, O thou happy young man, if thou didst but certainly know the secret virtues of that little Worm, which are many and great, And when I intreated him, that he would acquaint me with them, he held his peace, and by no intreaty could I obtain it of him. Pliny afferts that the Colewort Categorillas being but touched with it will fall and die. The Worms of Caledracon (which plant some men confound with Fullers Teazil) being put into a box, and bound with bread to the arm that fide the tooth akes, will wonderfully remove the pain, faith Xenocrates. The Worms of the Eglantine will cause sleep, and therefore some Germans call them Schlafers: They are applied alive to a Pilon (but always their number must be odd) and they do certainly cure it fide quickelbergins. A little Worm found in the heb Cardiacis, bound up in a piece of Skirtlet and hang'd about the neck, will cure the tooth-ache. Marcelius. The Worms that are found in the root of Pimprenel, make a most incomparable purple colour, (Gifuer) that I wonder the Ancients said nothing of them. All little Worms found in prickly herbs, if any meat stick in the narrow passagial of the throat of children, will presently help them. Pliny. Rub a faulty tooth with the Worms in Coleworts, and it will in a few days fall forth itself. Meal-worms are good and seem to be bred to catch black-heads, and Nightingales, and to feed them; but it is there in winter wholefome; meat for them; for they purge, heat, and nourish also, those Birds that have but a thin nutriment to preserve them. I spake before of the profitableneffe of the Cock-whel Worms. Brassavola affirms the fame of Vine-wormes, but how rightly let others judge; but they are not only good for dyes but necessary in Phylick, for they both binde and dry, and scour without biting, and incarnate also, they cure rheumatick eyes, mingled with Pigeons blood, they help suffusions of the eyes, they cure Dystremes, they help hard labour in Childbirth, and debility, they cure Melancholy, fea Epilepsies, they provoke urine and the terms, they heal the Mixis, they dissolve water and cholers, they abate the putting of the heart, and upon that cause they are put into Confection of Alkermes, and are the Bafis thereof. Diffor. Avicen, Kirander. I say nothing, how greedily Sparrows,Wood-peckers,Hens, Wood-cocks, Snipes, the Parrot, a Black-bird, Larks, Caracippers, Reed-parrows, and many other birds, that are good phylick, or else meat for us, do feed on the Worms of trees and hebs. Now since God hath mingled conveniences and inconveniences together, both to come up our providential puissance, and to punish us with punishments due to our sins, howboth of these may be prevented I shall shew briefly, phoenix being charfified under the shadow of the Gourd, he thought it safe and happy to be so, when the heat was so vehement, But God sent
a worm and took that from him, both to try his patience, and demonstrate his frailty. There was an Arch-bishop of York, whose surname was Grey, as our Histories relate, when he had abundance of all Corn in the time of great scarcity, yet he refused to let the poor have victuals either for money or instesty. A little after this his barns that were full of Corn, were to exhaust with Weevils, that they left not one whole grain of Wheat or Barley: even as St. Jerome said, Heto that boards up his Corn the people shall curse him, but blessing shall be on the head of him that felleth it. So God, that he may call forth a sluggiard father of a family, sends the Moths and Worms into his Orchards and fields, both to make him laborious by this means, and also to teach him to make use of such helps and means that God offers to him. Our Antecedors have delivered by tradition many of these: But because Cato, Vitruvius, Pliny, Palladius, Theophrastus, Columella, Varro, Virgil, and many of those that were Princes in husbandry, have abundantly set down these things, we shall only give you a smack of them here, because others have given a full draught. That trees may not be eaten with worms, plant them in the new of the Moon, and cut them down between the new and old Moon in the conjunction. Also anoint them with Tar, and often wet them with the lees of Oyl. Also keep them under Covers, every where, that they may not stand exposed either to great heat of the sun or tempests of weather. Also that trees may not grow worm-eaten, anoint their roots before the first planting of them, and then afterwards moisten their roots with mans urine and a third part of the strongest vinegar. Some sleep a long while Squills with Lupins, and they sprinkle the places that are worm-eaten or pefle out their liquor with a Sponge, or they flme the flock of the tree till it be very warm, and they pour into the holes Bitumen mingled with Oyl. Others sprinkle on quick-lique, others Oyl-lees and old piffe, others Hogs or Dogs dog-feet in Afles pits, the roots being first uncovered. Democritus taught men to buile Terra Lomnna with waters, (it may be he meant Carpenter's red) and to flame them with that. Some pick out the Worm with a brasse pin and put Cow-dung over the hole. Red hairy Worms search to the inward paths, if you can draw these forth and not break them, and burn them hard by, it is reported that all the rest will dye with it. It is good also to pour often upon the roots, Buliffs gall, and lees of Oyl: To plant Squills, rue, Worm-wood hard by, to make a meniothious woman pafle over the place often, to flame the pruning knives with Oyl of Cantharides, and to avoid lean and dry ground. By these remedies Oranges, Peaches, Pomegranates, Queens, Pears, Apples, Olives, and Olxes, and other trees are kept found a long time, and almost free from Worms. Affes laid to fight-tees, drive away Worms, for it hath the force of falt, though not to strong. The seeds of Flag-tees or kernels will not be eaten by Worms, if a slip of the Maffick tree or Turpentine tree be sitt by them. As for Vines, Aristides tells us to sprinkle Sea-cole with waters, and cast upon the place in the Spring-time, and then to flame the roots of the Vines that begin to bud. For if you flame the pruning knife with Goats blood or Frogs blood, or do but anoint the W heter-pee with its worms will not breed there. Africans faith that the tears of the Vine mingled with the ashes of the Vine-flaks, and put on the root of Wine, it will do as much. Lastly they are killed with a fume of Ox-e-dung, Harts-horn, Goats-clawes, Lilly-roes, blutions of Ivory, women hair. The herb Pionie or Thorow-wax, planted where Vines grow, drive away worms. Some there are that Boyl Affa fatus and Laserwort in Oyl, and anoint the focks of Vines with it (beginning at the root) and with Garlic bruiled. The seeds that must be fowed, should be kept in a Toottofe-thells or Mints to be fowed amongst Pot-herbs, but chiefly Tares. The bruiled leaves of the Cypress-tree mingled with them, will avail much. Aggregation. And Palladius faith that all feds will be free from Worms, if a little before you fow them you foke them in the juice of wilde Cucumbers. Pliny bids to prepare feds of Lupins before you fow them, in the smoke or some hot place, because in a moyyit place the worms will eat up the middle of it, and make it barren. Varro faith that worms will never touch Onions that are set with salt and Vinegar. Moreover, the feds of all pot-herbs wet with the juice of Houleek, will admit of no worms. Against Weevils, that are a certain plague to Corn, it is good to dawb the walls with lime and hair both within and without. Others do for two days steep the fruit and leaves of wilde Cucumbers in lime water, and with fand they mould it up like failer, and with that they failer the inides of their Granaries; though Pliny writes that Quick-lique is a very great enemy to Corn. Some put bealls pife to the fume, some worm-wood, juice of great Houleek, and hogs, others pour on the ground Oyl-lees, Herring pickle, and the decoction of Flea-bane. Strabo mingles Marle. Others report that often fanning of wheen keeps it safe from weevils; but Columella denies this to be true. Caio Lib. de Re Rustica commends Clay mingled with Oyl-lees, and he would have the Granary to be fanned with that; Varro with it almost the very fame wyes, but he commends Clay with Oyl-lees, Maple tree and Corn mingled together. Our English men do deceive and destroy them divers wyes. Some in the middle of the heap of Corn do place brasse Veiftis half full of hot water, that the Corn may lie almost up to the mouth bims of the Veiftis; for thus they think the weevils are taken or destroyed. Some shut up an Ant-hill and Ants together in a bag and after that they pour it forth in a corner of the granary: thus in ten dayes will the Ants destroy all the Weevils, and when they are killed, they take them and carry them forth, that are going back to their former house. Also they use to put into that place young Chickens that will soonest

The Theatekr of Insefts: or,  Book I1.

1090

Of the six footed Worms of living Creatures, and first of Lice in men.

Since God hath given the principality to man amongst living Creatures, we will begin with him. In the first beginning while he was in his innocency, and free from wickedness, he was subject to no corruption and filth, but when he was seduced by the wickedness of that great and cunning deceiver, and proudly affected to know as much as God knew, God humbled him with divers diseases, and divers sorts of Worms, with Lice, Hand-worms, Belly-worms, others call Termites, small Nits, and Acaries: *Acatus Alemans, Phthirickers, Pharaoh King of Egypt, Caffander son of Antipater, Democrates, Calathenes, Olymphis, Scylla the Dictator, and that river of Eloquence Herod, knew it to be true that I write, who perishing with a Lowry disease, used Physicks and Baths in vain, for they died miserably of them. Some also write that Plato (being elevated perhaps more then he ought, and so wise that he disdained others) died of this disease; whence grew the Proverbs, *Plato Lice. I shall say nothing of Henry the second a most cruel Tyrant, and Theodorus that propagated *Arianjus, two Kings of the Vandals: I let pale *Arnolphus an Emperor, and an emmanciate *Sudomites, and Cesar Maximus a filthy Pander, all confounded with Lice, who found that when God commands, the leaf and most contemptible Creature hath force enough to destroy furners, and with Pharaoh they were compelled to acknowledge this to be the finger of God.

The Hebrews call a Lowie *Kifim, and Chinamn, the Greeks *φίλος, *βιοσολα, *βιον, *βιονια, *βιονιας, *βιονιας, the Italians *Piscadiee the Spaniards Pies, the French Pies, the Germans *Lafe, the English Lows. The Latins call it *Pet, as we read in *Plantas in *Carum, wherefore you are a kind of Liois, and *Flies, *Grats, Lice and Flies you trouble all men, and are carried by all, but none do any good. And Livy to *Gladiatus, *Are they Flies, Wood-lives, or Lice? *Answer me. And Lucilius when he sees me, he scratches his head, and picks Lice, *Fusius. Where still a Lowie is called *Pet. It is a beaftly Creature, and known better in *Iimes and *Armies then it is wellcome. The profit it bringeth, *Achilles *Sheweth, *Iliad 1. in these words: *I make no more of him then I doe of a *Lowke; as we have an English Proverb of a poor man, *He is not worth a *Lowke. The Lice that trouble men are either tame or wilde ones, those the English call *Lice, and their *Crab-lies; the North English call them *Perit-lies, that is a petulant Lowie, comprehending both kinds, it is a certain sign of misery, and is sometime the inevitable scourge of God. The same ones that breed of corrupt blood, are lefe, and reddish, from *Fleames white, from melancholy and adulter humour, black, and from mix humours they are of divers colours, as *Petrus Gregorius noted l. 33. If you rub them gently between your fingers you shall see them four-square, and something harder than Fleas, whence in the dark when you take them you may easily finde the difference. They that breed in the head are bigger, longer, blacker and fiviter, those that breed in the body are fatter, bigger bellies, flower, darkish white, and marked with blackish streaks. Some confantly afferm, that in May they have een Lice with wings, and that the Locut-eaters, of *Lybia, when they have fed too plentifully of them, after they come to be forty years old, will die with these Lice, as Diodorus *Siculus faith confidently, 4. *Antiquitiae. *Agatharides speaks of these Lice, but he faith they are like to Ticks. They chiefly fatten on the chin, eye-browes, and the privities full of hair, the groin, and the arm-pits, their body is more compact, their nib is sharper, they bite more, and tickle leffe. For Tykes will sometime enter deep into the skin with their nofe, that you can hardly pull them out but with the loffe of their heads, and they fellomede aches but they bite cruelly, and make themselves a hollow place, and there they stand fast. Some call these Lice in *Latines, *Cicci, some mens Tykes, others Vultures lice: *Ariflate calls them wilde Lice, *Pisf. *Animal l. 5. c. 31. it is harder then a tame Lowie, and is more hardly removed from the place it bites. Our French men, faith *Joubertis, call them *Mopbones, and *Fattes the Germans call them *Fente. *lenjs, *Gordiones *Pessolates: They tick very fast to the skin, or bite through the * CONTENTs; they are of a dryer matter, and that which is halfrotted, 

Chap. XXII.
to they are not to grow, but they are more compact. The Arabian call them Alcarad, Guardarn, Faith, and with an Article, Algardarn, and Alford as Ingraffias observed. Also in the Synonymes contr. Rhoff, they are called Metes and Immores. The Italians call these Plantas and Chacilla, and Alhoniac Plantas. All Lice breed from humours, flesh, fat, sweat or corrupt, and differ exceedingly in respect of the place and humour. For those that breed of mans blood will die if you smear them with the blood of other Creatures. Also they that breed in a mans head will hardly live, or not long in his body. So the white Lice bred in the privies will die in the head. Those that breed of flesh putrefied, such as oven will abound in Ulcers ill cured, will not be fed with the excrements of the skin. (faith Hieron. Mercurialis. l. c. 7. de morb. c.) The opinions of Authors are divers concerning the generation of this disease: Aristotele 5. hist. anim. c. 31. thinks that Lice breed of flesh corrupted, in place he affirms those three things. First, that they that breed Lice have some pulses arising before in their skin, which if a man prick, the Lice will appear. Then that this disease come not, but by mort humour, or to such that have been troubled with a long and morty disease. Lastly, that all Birds, Fish, Four-footed beasts, are molleted with this disease, except an Alle. The first opinion pleasteth me not: First because in the skin of the head Lice breed most commonly, where there is the least portion of flesh. And again, if they should breed only of corrupt flesh, the heads of young children that are almost alwayes full of them would be to wanting of flesh, that it would almost wait all away. Further, in Consumptions, where the body nourisheth not, and is wholly consumed almost, they abound most commonly, where all the flesh is so dry, that there is no mortyler almost to breed Lice. Theophrastus is of another minde from Aristotele, affirming that Lice breed of corrupt putrefied blood; which Hieron. Mercurialis in the quoted place labours to infringe by these reasons. First because in Feavers that grow from putrefaction of blood, there is seen no such increase of Lice. Secondly, if they should be made from blood, some of them at least would be of a red sanguine colour, and reticfe from whence they were bred, as other things doe, but we see no such therefore, &c. In which place this otherwise very learned man, seem to beg his principle. For in the heads of our children we oft times finde very red Lice, and in those that are upon recovery of a putrid Synochus, we finde that oft times many red and mingled coloured Lice breed. Galen. 1. de comp. med. sec. loc. c. 7. and Avicenna, l. 4. fen. 7. trad. 5. c. 26. atribute them to some other caufe, and as Mercurialis thinks, that their opinion is the truth of all, namely, that they breed from the hot excrements of the second and third concoction putrefied, nor sharp nor bad. To understand rightly their opinion, we must know, that when blood is changed into the substance of the Limbs, many kinds of excrements are produced, whereof some are dissolved by infensible transpiration, others by sweat, others turn to filth, others stay in the skin; Those that are retained in the upper skin, make dandruf, if they stay in the depth of the skin, or are bad and sharp, they can be no heads. But since I have observed that in some that were in a Consumption incurable, where the humps of the humour eat up the very roots of the hairs, Lice come forth abundantly, why may I not think by their example that they may breed at first from sharp humours? Sediger would prove that Lice breed not from putrid humours, because hæms grow from the seed without putrefaction: for he thinks the principle is altered, but he believes not it can be corrupted. But by his leave I must say that Sediger or the Apostle must be mistaken: For in St. Pauls 1 Cor. 15. That which now is not quickened shall not be live. But if death be a corruption, as the Philosophers say, then Sediger was deceived, and (yet keeping the Laws of friendship) we may defervedly reject his opinion. And Epithymum breeds from Thyme, and Miseltooar thorn from some trees, that are found, and not yet corrupted. But I answer, that a Lowe differs more from the principle it proceeds from, than Epithymum doth from Thyme, trees from Miseltoo. For these are of the same kinds, and as it were thrue forth from the abundance of fruitfull matters, and Miseltoo is nourished from the pit of the tree. But it is apparent, that Lice seldome breed in found bodies, or not at all, but those that are cachetical, in Consumptions; and full of putrefaction, and watry blood, and whose flesh and skin are corrupt as well as their blood, and are troubled with them. Oft times found men sweats, and yet breed no Lice, for they will not breed of all sweat, but from corrupt sweat, and that which is not bitter. But when it grows bitter, (as we finde it in those that are dying, or troubled with the Jaundies) they forake their stations and creep from the body into the pillows that are under them; yet they do not always go to other places when men are dead, for as those that take care of the dead Corpse affirms, they will still stick about the mouth of the houcm, and under the chin by the sharp artery; which places which are most full of native heat, when they once creep into; it is no small sign of death approaching. Also the complexion serves much to breed Lice, the Countrey, and the dwellers. For some have more, some fewer, and some in any Climate will be free from them. Opuestos Navig. c. 82. writes, that Christians in the West-Indies have not so much as a Lowe in their heads, and yet the Inhabitants (to the Plantas his pirate) are very Lowly, people. Also our Country-men have ob- served, that have pullen upon the Indians teas, when they have left the Isle of Azores b. hinder them, all the Lice presently die, and when they fee those Islands again, they will revive abundantly. I think the reason is, (that I may herehelp Pemius in) the extreme heat between the Tropicks, that not only killed alienem from them, but the Element also. Vespucius reflieth of the Ile of
of St. Thomas, that the Blackmoors there are full of Lice, but the white men are free of that evil. As for drenching the body: all Ireland is noted for this, that it swarms almost with Lice. But that this proceeds from the badliness of the people, and want of cleanly women to wash them is manly, because the English that are more careful to dress themselves, changing & washing their shirts often, having inhabited so long in Ireland, have escaped that plague. Hence it is that Armés and Prions are so full of Lice, the sweat being corrupted by wearing always the same clothes, and from thence a festeth matter for their original by the mediation of heat. So that these keep no dews, but delight in eating, and filthiness, and feed on Vipers, Radiastes, Bats, Figis, Lignum Albus, Garden Smallagis, and Dates too much, their bodies will with putrefaction of humours breed Lice between their skin, as Dioscorus in Empirics, Simon Sethos, Aetius, and Pliny affirm. But Dioscorides faith it is exceeding false, that Lice will grow from eating Vipers. Sheeps-wool that a Wolfhach killed will breed Lice, if a garment made thereof be wet with sweat, which grant that it be an invention of Arifate & Pliny, yet experience teacheth us, that clothes smeared with Horse's grease, will breed Lice presently. Alcan faith that he will be full of Lice, who is anointed with oil wherein a Stellio is drowned.

Against this terrible disease, which the Greeks call θυάπερα, many have invented divers remedies. The Irish and Ieland people (who are frequently troubled with Lice, and such as will fly, as they say, in Summer) anoint their shirts with Saffron, and to very good purpose, to drive away the Lice, but after six months they wash their shirts again putting fresh Saffron into the Lye, but Αντιγονας in Συγν. Ηφθ. Paradox, so soon as little pushes or wheels appear upon the body, bids us pick them, and take forth the Lice: but if they be left unprick, that general lowtie difcase will come, whereby they say that Αλκανοος Φυσικος, and Περιπετεία Συρμες were destroyed.

The general Cure of the lowtie Diseafe.

Amatus Linfivrides cured that good Venetian at Acania (of whom I spake before) who was sick of a general lowtie disease. Fifth, by opening a vein, and then purging him; for so he drove forth the corrupt humours that foumented the disease, not at ones, but twice or thrice. Afterwards by applying Topical remedies, in a short time he grew free of this plague. Topical Medicaments were made thus: Take bitter Lupins ii. pugs, seeds of Staves-acre ii, pugs, in the sharpest Vinegar what is sufficient, boil them, and with that Vinegar wash the body from head to foot, then wipe and dry it, and anoint it with this ointment following: Take Staves-acre two parts, Sundaracha of the Greeks one part, the feet Nitre half a part, mingle them all with the sharpest Vinegar and oyl of Radishes, and pour them together very exactly, and with these make an oyment: with which Amatus soon attained his purpose, that the feck fell no more into the same foul diseafe. Amatus Lyfivrides, cent. 3, curat. 58. Hecur. (as ιοσθοφος and Αγιοθοφος teteiture) when he had got this disease by his great pride, and he was somitter from God, he went to the Baths beyond Jordan, and the Bituminous Lake, that were very good to cure this diseafe, but at that time they were of no force, when God was pleased to punish a proud Prince with a contemptible creature. If the body be lowtie all over, it swes a general Cacochymia, wherefore it is best in my opinion, first to open a vein, and then to give a Purge, as the humour requires, and so to proceed to specificalls, and such as agree with the place affected. Dioscorides prescribes such kinds of internal remedies: Take Garlick with the decoction of Origanum, drank this three dyes. Another, Let the sick drink Coriander bruited with Origanum, and anoint himself outwardly with Honey. He commends also Alum-water, and the Decoction of Bites, juice of Ivy and the gum of it with Honey, liquid Pitch, Alum, Synophex smeared on with Vinegar, Nitre with Samian Earth and Oyl.

Other outward Remedies that kill Lice out of Pliny: Seeds of Staves-acre beaten, without the hulls, will free the body from Lice, but better if you mingle them with the Sundaracha of the Greeks Multiard-feeds, Garlick, with Vinegar and Nitre are good for the same. Oyl of Radifh dode cure the lowtie diseafe contracted for a long time. Siler, Mountain-feed beaten with Oyl: Hylip, mingled with Oyl, Tar, Sweet Gums, the juice of the wilde Vine, and Staves-acre boil'd in Vinegar, will free garments from them. So black Hellebore with Oyl or Milk anointed on is very good. Internal Remedies out of Pliny. A Snakes caft skin powdered and drank for three dyes, will keep the body free from Lice. Multiard-feeds, or seed of Tamarisks, drank are good; so is water of Radifh-leaves, and the juice of Privet-berries, Plantain, Garlick, the juice of wilde Cucumber, and Tar. Novus commends the root of the Sharp Dock, bruited with Oyl and anointed, first wathing the body with the decoction of Lupins, and he prescribes a remedy of Sundaracha of the Greeks, Nitre, and Staves-acre. Orbyphus approves the juice of Pellitory long rubbed on, or Nitre with the wilde Vine in a Bath. Rhaphis prefers the leaves of Bauberies, gym of Iris, great Knot-grafs, and Sea-water, Avicenna commends Quickifler with oyl of Rothes, and wilde Staves-acre with Arlenick. Holy Abba bids us purge the body, and then to eat meet of good joyce, to wash the fifth, and to change our clothes often; then he prescribes Quickifler bruited with Staves-acre-feeds, and oyl of wilde Saffron, and with that to anoint the body morning and evening, after bating. He farther commends to use these Remedies: Take long Birtwhort, built it with Pine-leaves and Quickifler, and with oyl of Lupins what may serve turn, make an Unguent. Anoint the body with that at night, and in the morning wash it with
with hot water, after that, with a decoction of Alum, Wormwood, Summonicum, or Mygwt, rub it away. Another: Take round and long Birthwort, red Artemisia that is the Greeks Sundracha; and with oyl of Ban, make an unguent, with this anoint the body in the evening, and in the morning rub the body with Bran and Barley-meal. Another: Take brier Coltsfoot, Cashtaunam, Bulls gall, bray them with the Oyl of Pitches, anoint the body with it, and in the morning wash it with the water of a decoction of clear Bran, or of Barley. Constatius used Quick-filver with ashes, Litharge, Vinegar and Oyl mingled together for hot complexion; but for cold he used Pine-tree juices, Sea-water, Staves-ace, Nitre, Arsenick, and oyl of Wilde Saffron. Jeannes de Repeiffins mungled Quick-filber with Aqua-vite, and the powder of Wilde Staves-ace, with that there is a ginzile, which worn about the bare loyins will kill the Lice. Serenus, Abinesar, Amates Lusitanus, Matthiolus, Hildegardus, Johan. Vigo, and others, prescribe other remedies, but most of them of these materials. He that defies more remedies against the lowly disease, let him read Pantus Aeginae 1. 2. 3. Galen l. 1. de comp. med. sec. loc. and Galen. de Salubris l. 1. c. 48. I know one (faith Pennins) who when he was Governor of an Hospital, he cured the lowly disease thus: He whipt the fick till the skin came off with Birchin rods, and where the rains were, the Lice would never breed again: A new kind of cure, and most fit for idle Sea-nice and loulfoul companions. Amates Lusitanus (if I do not mistake) tells of a poor man that had a hole in his back by reason of an Ulcer, out of which daily abundance of Lice crept; questionless they were bred between the skin and the flesh, and after wards by an ignif of Wilde Staves-ace; Quick-filber, Pepper, and Lard, he was cured. Ruland prefers the Bal- 

fum of Sulphur to all remedies, and not without cause. Auctius writes, that Wilde Lice must first be picked out with great diligence, then the place must be sooment with warm Sea-water; yet very warily if they flick in the eye-brows, that you hurt not your eyes: then apply this remedy: Take Alum, Sifilij, j. dram. Staves-ace, j. obolus, Pepper j. obolus, hurt Bras j. dram, Myrrhe j. obol. Scifil-stone j. obol. and Nifl. Mift torrefied, j. dram; bruize it and dry it, and to use it: Then let them bathe and heat their head with diffiluents and strengthenes, with the whole body, and rub it again. Our Countrymen pick them out, and then anoint the places well with black Sop, and if the body were too hot, anoint the body with the pap of a sweeter apple mingled with Quick-filber, and it is a certain remedy. Celsus faith they offend the eye-brows so much sometimes, that the eyes being ulcerated they dim the sight, then incorporate purified Quick-filber with tops of Wormwood, and old Hogs grease, for nothing does more certainly cure one, if it be done with caution. Also take Aloe 2. ounces, Centa, Frankincence, each v. ounces, Lard what may suffice, make an ignif; some mingle with this Quick-filber and Brimstone. But here observe, if Crab-lice do breed thick on the beard, eye-brows, the share, and peritonum; first all the hair must be shaven off, so from as a general purgation hath been taken, and then the forementioned: Topicks must be applied, and all galls, especially Bulls-gall, Calis gall, Capons and Partridge, with Juyce of Centabia, and Quick-filber are very good. A lye of the ashes of Tamark destroys the Lice. Rhazes and Albertus command the marrow of a live Vulture taken forth. Varignana with the milk of the greater Bindweed, wide Mints, and Sow-bread, with a lotion of Honey. But chiefly he extols this Medicament: Take Staves-ace 2. ounces, Wine iv. glases, Hogs brills 2. ounces, purged Quick-filber 2. ounce, let them boil, and formen the body with the decoction, Marigold and many others make great reknowning of Wine-lees, Juyce of Stoons, a Lici- 

sium of Soera, Acrons, Calis, Pellitey of Spain. But Gilber the Englishman burns Leeches and Spirax Calamata together; and with these and Hogs blood, he prepar the excellent Un-

guent. 

Thse filthy creatures, and that are hated more than Dogs or Vipers, by our dainty dames. Ufe of Lice, are a joy to those that are fick, and sometimes a cure. For they that have lain long fick of a putrid disease, when Lice breed in their heads, they foresaw the recovery of the fick. For it is a sign of the exhaling of it, and flying forth from the centre to the circumference. Also experience proves that the Jaundies are cured with twelve bruited Lice drank with Wine. Pennins gave Lice and Butter to beggars and such live on alms, very often, and so he recovered some that we almost deprate; some for the Dysurie are wont to put into the yard living Lice the greatest they can, to draw forth the wine by their tickling: which Alexander Benedilus relates of Wig-fice, when clammy humors havinhurt the eyes, some cleanse them with Lice put in them, which creeping here and there like Oculis Chisifis, collect the matter; and wrap it up in that they will fall out. Alfo what shall I say? ApeS, Bbamosons, will feed on them, And Herodias and Strabo in Pontus speaks of men that feed on Lice, (to whom Ariannes in Periplo confers) and the Spaniards speake the fame of the Inhabitants of theProvince of Cuenena in the Indi- 

es. And they hunt after them to greedily and defire them, that the Spaniards can hardly keep their flaves from feeding on them. And it is no wonder that they can feed on Lice, that devour Horses, Aflses, Cats, Worms (and more than that) men that are raw. But because it is an idle work, the workmen have that task upon them to catch Lice, and they do that work almost, and therefore Strabo calls them Pedilegar. Serenus makes another ufe of them, and writes thus:
**The Theater of Insects: or, Book II.**

Some hurtful things our bodies do produce
By nature, which do stand us in great afe,
To keep us waking, and so stop th' abuse
Of sleeping ever much ——

See the Chapter of Nits among the insects without feet: Chap. 35.

**Chap. XXIII.**

Of the Lice of brute Beasts and Plants.

This plague fell not only on Man for his first transgression, but upon beasts also: yet amongst mankind children are more filled of them than young people, men than women; sick people than sound; nay people than such as are cleanly; and so it is with other creatures: only the Ape is said to be free from this disease, nor because Christ rid upon him, (as some fool dream) but because he goes so softly that he seldom sweats, or else God hath bestowed upon him some peculiar antipathy. The Lion is a contagious creature and king of beasts, yet is he so tormented with Lice feeding on his eye-brows, that when he cannot help himself with scratching with his claws, he will sometimes grow furious, as Pliny reports. Who hath not seen the Lice of a Horse, that most generous four-footed creature, and Nits with red heads that are apparent, and the rest of their body is of a dark white? The Lice of Oxen and Calves are black, and those that are lean have very many, like to Hog-lice almost; but fhorter and somewhat thicker. Hog-lice have the same form, but they are so great and hard that you can hardly kill them with your fingers, these are called  gif h from burning, as Albenus testifieth I. 4. c. 205. Dogs though more seldom, yet are sometimes Lowie; but their Lice are small ones, speckled, and with a whitish head, the rest of their body is of a blackish or win colour from blowes, as I first observed by the Dogs at Malta. Sheepes Lice are very small, their heads are red, their bodies white, Goats Lice differ but little from these: when the flag hath throve to cast his horns, he is troubled with an exceeding itching of his eye-lids, from Lice that breed of the same colour with their head that thuffs forth; who doth not know by Géner History of Birds, or by his own experience, that Swans, Hens, Geese, Pigeons, Quails, Pheasants, Partridges, Hawks, and other fowl have Lice? Also Palladins, Columellas Pavana, Varro and other principal Leeches for cattle, have fliowed us remedies sufficient for to kill Lice in brute beasts, that it will be no glory for me to inftirt upon them, nor fruitful to the Reader: what Avicenna L. 4. fem. 6. trad. 5. meant by Vultures Lice, I cannot conjecture, and I much desire the help of some Oedipus to untie this riddle for me; we mentioned before in our first Book, that your dung-Beetles are killed by their own Lice. Also Salmon-filies, especially the leaner fort, were seen by Pliny to have many Lice under their gills oft-times. Also they are found in Plants, as Southernwood, Wormwood, flowers of Water-lilies, and chiefly in Columbine leaves, in June by reason of its exceeding sweetnefs, (faith Géner). Also some plants are called lowie plants, either because they are good against them, as Staves-axe, or because they breed Lice, as Dedanum his Fiftularia, or because they abound with Lice, as Columbines, or from the great delipicableness of them, as the fruit of the great plum-tree, which are therefore called lowie plums.

**Chap. XXIV.**

Of little Lice called Syrones, Acari, and Tineæ, or Hand-worms, or Mites in living Creatures.

The Vitæ finally reports that the Ancients knew not what Syrones were, for Aristotle calls it Aegleum, 5. Hist. Animal. c. 2. Also they seem to be called Syrones, and viíó in vitra, because they creep under the skin continually. It is the smallest living creature that is, which useth to breed in old cheese and wax, and also in men's skin. Pliny and Snider say that æges is such a small thing as is too small to be divided. In Larine they are called Pedicelli; in French Cirons; in Piemont Sciri; in Gallaio, Brigantes; in English Mites, in cheesse, leavesc, dry wood, and wax: but in men they are called wheel-worms: the Germans call them Svezen. Abensuar faith that Syrones are called Assealæs and Assæbæ: they are little Lice creeping between the skin of the hands, thighs, and feet, and raising watery blisters there, they are of small creatures, that a good eye can hardly discern them. Gabrianus faith: Unro our times a kind of filthy torture that is not to be endured, is continued, a very small Lowie, not so great as a Nit, creeps under the skin. And John Phil. Ingraffias out of Abensuar, describes them very hand-somely
fleely thus: when the skin is excoriated when that small pimple and puth appears like to a red angry wheel, little living creatures creep thither to mall a man can hardly see them. And *fowerlin* writes that Syriones are those that are the smallest of all, always lying under the outward skin, and creep under it as Moles do, biting it, and causing a fierce itching. They consist of a dryer matter than *Mopionis*, which for want of glutinous matter, is almost divided into Atoms. They breed often in the head and eat the roots of the hair. The Greeks call them *mupe*; the Romans *Staues*; some call them *Staues* by a peculiar name. *Syriones* have not a certain form as *Scaliger* well observed, only they are round; our eye can scarcely discern them, they are so small, that *Epicerus* said it was not made of Atoms, but was an Atom it self. It dwells under the skin, that when it makes its mines it will cause a great itching, especially in the hands and other parts affected with them, and held to the face. If you pull it out with a needle and lay it on your nail, you shall see it move in the Sun that helps its motion, crack it with the other nails, and it will crack with a noise, and a watry venom comes forth; it is of a white colour, except the head; if you look nearer it is blackish, or from black it is somwhat reddish. It is wonder how so small a creature, that creeps with no feet as it were, can make such long furrows under the skin. This must obverse by the way, that these Syriones do not dwell in the pimples themselves, but hard by. For it is their property not to remove far from the watry humour, collected in the little bladder or pimple; and when that is wafted or dryed up, they all die shortly after: whence we collect that as they breed from putrefied whey, so again they are sustained by it. None of the Ancients, except *Abinsur* writes of these, who saw this disease, and rightly set down the remedy. Nor are those Syriones of the kinde of Lice, as *John Langius* seems to assert out of *Aristote*; for they live without the skin, but these not, nor do I know that *Aristote* in any of his writings, placed *Acros* among Lice.

How cruel a disease this is, and to be compared with the lowie disease, an honourable English Lady of forty years knowes, she was the most vertuous Lady of *Penrudeck* a Knight, that by drinking too much Goats-milk (for she feared a consumption) was for ten years troubled with these wheal-worms, with which night and day she was inutilely tortured in her eyes, lips, gums, toles of her feet, head, nose, and all her parts, that the lived a very grievous life, alwayes without rest, and at last in despite of all remedies, the disease increas'd, whereby her flesh was consumed, and she died thereof. I must not overpass this, that the more the women that fat by her, picked them out with their needles, the more their young ones breed, and when they had gnawed the flesh aloof, they grew to be bigger. Hence let proud defpicable mankinde learn, that they are not only worms but worms-mean; and let us feare the power of that great God who can with his content with an army confound; all pride, haughtines, daintines, and beauty, and conquer the greatest enemy. It may be some will think it impossible for these Wheal-worms to breed between the eyes; but we see it is so, and we finde it was done so formerly, by an Epistle of *D. Le leuns*, a Chirurgeon to *Jaco Griffins*, his words are these: Know, faith he, that in the conjunctive membrane, or white of the eye as they commonly call it, some great Wheal-lice by creeping up and down here and there, biting will make the place itch so much, that a man cannot hold from rubbing. In this case what remedies the Ancients used against the Lowie disease, but to no purpose. Then my friends fear me to a sick woman, who with a fluer needle pick off these worms to cunningly and without any pain, that I wondred at. And indeed had not I seen these little creatures to creep, with my owne eyes, I could never have believed that Wheal-worms could breed there. They dye for want of myodure that is salt, and are killed with contrary remedies. The common people ordinarily picks them out with a small needle, (the Germans call them *Seusen-Graben*) but since this takes not away the cause of them, which fosters them, the disea flitt abides; wherefore it is best to kill them with an ungent or fomentation, which may at once take off that troublesome itching. That which penetrates most and kills these Syriones is salt and vinegar. *Laur. Fouert. J oh. Arden, formerly the most learned Chirurgeon of England*, faith that a Lotion with Sublimate kills them quite. And it seemes not to be against reason: for it dries, penetrates, refists putrefaction, and by its heating acrimony kills them all. *Abinsur 12. c. 19. toll. 7.* prescribes these following remedies. First purge the body with an infusion of wistle Saff.on-feed, and Nettle-feed, after that anoint it outwardly with the oyl of bitter Almonds, or de *Cherus*, and with the juice of the leaves of Peach-tree: give boiled Partridge for meat, and leavened bread. Let the patient abtain from all kinde of fruit (except almonds) especially from Figs, Grapes, Jujubes, and Apples; rub the body often with the substance or pulp of Melons; or with the Musclasse of the feed. But the body be leathery, rub it with the juice of the leaves of the Peach-tree. *Fings* where there is this disease, fo.bids Oxe-fleth, Hogs, Geese, and all kinds of Fulle.

*Erinis I. de paf. mut*, writes thus: Wheat tempered with Wine, adding thereto powder of Frankincence, putte to the parts afflicted for a plaudiis will kill thee Wheal-worms every where, chiefly upon the cheeks andtoe-heads. *Another* : Take common Salt, black Sosp live Brimstone, eath alike, incorporate them with vinegar of Squils, and anoint the place with them. Another for Syriones on the face, which the Author of the English Role calls *Barrones* : Take shrop Dock, Frankincence, Dragons cutte-bone; eath alike, make a powdere, and thrice in a week rub the places where the Worms breed; but first with you face with a decocation of Brim; and on Sunday wash your face with the white of an egg and white Starch, and then waft it often

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with river-water, or with white tarch. *Alexander Petramus Triumus* commends this remedy most: namely a fine linen cloth made into lint, that it may be the softer, and stick the softer: bind this to the part affected, then lay on the white of an egg that is hoited hard, whilest it is hot, and cut into large pieces, and then bind upon it some thicker clothes and sof let it remain some hours. Then taking all away, you shall finde the inward lint full of these small Lice, which is thus proved: make this over the fire, and you shall easily heare thee young Syrones crack. Against hair-eating Worms and Mites in the heads of children, that are usual, and that will make little holes in them, *Alexius* makes great account of this remedy. Take Frankincense, Boles-grease so much as you please, let them boyt in an earthen vessel that is glaided, and make an unguent. *Another*: Sprinkle on the powder of burnt Allum, and lay on on lint. *Another not uneffectual*: Powder quick Bristmone, with Rose Vinegar of Squills, or else incorporate it with Rose-water, and bind it on with a cloth for 24 hours. *Another that is most certain*: Take juice of Lemmons and Aqua vitae, each alike, burne Salt what may suffices, mingle them, and anoint with them often. *Another of Hildegard*: Apply that skimming of the air, ifs, those cobwebs that are scattered in Autumn, and it will certainly destroy all those Syrones, and little worms. Also flew on the powder of Bees that are dead in their hives, on the places affected, and they will all dye, chiefly if it were mixt with Aqua vitae, or Vinegar of Squills. *Again*: bind on the crums of white bread whilest they are hot, do it often, the heat will kill them. Fir-tree seed burnt to ashes, which grows on the top of the trees, if it be strewed on, will help much. Also to the kernels of Barbereyes, powdered and laid to the places, will kill Syrones. *Johns Figo* prefcribes these remedies against Syrones wherefoever they breed. All bitter things, faith he, are good against them, have the part affected, that they may penetrate the better. Oyl of Var- triol warmly and lightly powred on will kill them mightily. Quicksilver with French Soap and a little Orpiment, and some Vinegar of Squills and some Aloeis, doth much good. *For Syrorns in the Teeth*: Some call the Worms that breed in mens teeth Syrones, which they affirn have fallen forth like havings of Lure-frings by the smoke of Henbane-feed, received at the mouth. Though I should truly deny these havings are Worms, yet that Worms breed in rotten teeth Barbers and every man knowes. *Against venemous Syrones*: Abinsuaris cals it the diseafe of Oxen, between the flesh and skin there breeds a kinde of venemous Worms; which raiseth no small tumour, as great as a walnut, wherein the Worm Syro lies hid, (he is venemous indeed, though he be but little). This diseafe neglected will kill. He appoints the Remedy thus: The place must be prestly burnt with an actual cautery, then apply lint with Barly-meal and sweet water: when the pain of the burning is over, the humour will fall being anointed with Unguent of Agrippa and oil of Rose, then wash the place with water of Honey and fire on powder of Rose; and then using incarnatives, lose up the wound. But if the part cannot be cauterized or cut, take Lupuncture-meal, Soot, Pepper, root of Endive, each alike, and bruizing them all, and wetting them with Alchitra, fill half a Nuf-fhel with them, and keep them on fo long, till the force of the medicament may penetrare to the Worm: but great care must be had that no part be left bare without the shell. A little creature called Nugas, as Thevet imagineth, doth much vex the Well-Indian people. It is faith he an Insect most offensive to mens hands, far less than a Flea, but breeds in the dut as a Flea doth. *De Lory* was taken with the same oversight, and was not affhamed to be mad with Thevet for company. But Ovidius affirns that they breed between the skin and the flesh: but especialy they breed under the nails of the fingers, into which places, when once they are rooted, the caufe a dwelling as great as a peale, with a mighty itching, and they multiply like to Nits. Now if this worm be not timely pick forth with its brood, in a few dites this itching becomes a wonderful pain, and the tick dye with the violence of the diseafe. There is a Worm that breeds on the bodies of Hawks and Faucons under the roots of their wings, it is called Troliae: we have left off to doubt any longer whether it be a Syran, Aearus, or Tinesor not, by reading Albertus his Book, wherein you may read a remedy for that diseafe at large. Also, as *Bonacivus* reports, in the urine of some womens with child, little red Worms called Syrones will be seen, which are a certain argument of conception. *Demneus* is an Insect that will consume skins, and from skins hath its name, and as the skins vary, so that changeth its colour. For oftentimes it follows the colour the skin is of: it is as big as a Flea, with fix feet and a forked nib. Also a Moth consumes clothes, especially woollen clothes: for it is a very devouring creature, and breeds from Butterflies as I said.

**CHAP. XXV.**

**Of Wall-lice.**

The Greeks call it *Xileos*, the Latins, *Cimex*; the Hebrews, *Nechphekes*, from seeking; for it seeks after living creatures that are asleep, to suck their blood. *Ephes* will have it *xileos* and *Cimex*, from the herb *xileos*, which they call *Cimicaria*: I confess ingeniously I know not what heb it is, unless it be that low and flinking kind of wide Orach, which growing near to walls and heaps of dirt, is called by a bowdy name, *Vulcavda*. *For Coris of Mathius Linn*
well, and therefore agrees not with Cimicaria. The Arabians and Barbarians call it Alcarado, Debllion, Pejasfe, Correa, and Corah; the Germans Wantimz, the English Wall-louse; the Swons Wantian, that is Wall-lone; the Brabant people call it not amifs Wregleys or Lowic of bed-teds; the Spaniards call them Chimefas; the Italians Cimici; the French Panifes. Now Wall-Lice are either home-bred and without wings, or winged and wilde Lice. We spake of them in the first Book, now we shall speak of those that breed in houses.

This home-bred Lovie is a creature natually distained, to use the words of Pliny, it is almost like to a Tike, for the body of it is of the figure called Rhomboida, black of colour with a little red; it hath short feet near the neck, on each side three, and the belly and back marked with incisions; the skin is very thin that it will break in pieces with the least touch, and send forth a molt abominable eink. In the night by bigning thatply, it lackes blood out of mens bodies to sustaine it self. For like Moths it cannot endure the light, and when the day breaks it will go into chinks of beds and walls. After it hath bit it leaves behinde purple spots swoln with an itching pain. They are bred, after Aritfeters opinion, from moisture that sweats forth on the surface of the bodies of living creatures, la 5, c. 31. biffer, but without doubt they arise from other humour corrupting about beds, and that sweat out of wood by degrees. Also they propagate by copulation, as Pennius oberved about Orinda; for whilest he kept company with a Spaniard bornat Capera, he trie to draw his sword to cut off a bough: but when he could hardly do it for the rail, he was forced to cut his scabbard, where he found abundance of great Wall-lice, with a great company of young ones, and a multitude of whitish eggs of a variy complication. Scaliger faith they will breed in Horns, and also in a score time they will infinitely increase in the Qutsiells. They are frequent in Fir-tree beddies, and chiefly when the strawgrows old. Also they will breed in paper-books. Lucius Vives in his Dialoges, thinkst that walts overcall with Albather are the most ready to breed Worms. It is commonly laide (faith Ippolito Scaliger) that Wall-lies will breed from Wall-lice bruized, which is hardly credible. Cardan that was a fancier of subtiltis, writes that the Cartburnians are never vexed with Wall-lice, and he gives the cause, because they eat no flesh. The beds at Telnus (I use Scaligers words) eat no flesh, yet they are noted for breeding Wall-lice. He should rather have allledged their cleanliness, and the frequent washing of their beds and blankets to be the cause of it, which when the French, the Dutch, and Italians do likewise, they more breed this plague. But the English that take great care to be cleanly and decent are seldom troubled with them. In the year 1503, when Pennius writ this, he was called in great halfe to a little village called Morlock near the Thames, to visit two Noblemen, who were much frighted by perceiving the prints of Wall-lice, and were in doubt of I know not what contagion. But when the matter was known, and the Wall-lice were caught, he taught them out of all fear. Against those enemies of our rest in the night, our merciful God hath furnished us with remedies, that we may fetch out of old and new writers, which being used will either drive them away or kill them. For they are killed with the smoke of Ox:e-duc, Horfe-hair, Swallowes, Scoiopendra, B:imifone, Vitriol, Arfenick, Verdigeantes, Lignum Stoeyes, Bideolum, Fern, Spurata Parida, Birthworh, Clematris, Myrtis, Cummin, Lupins, Knogeants, Gith, Cypresses, as we read in Actius Rhogis Flereantum Didyman, and Cardan. But the best way is with curtains drawn about the bed, to shut in the smoke, that it can have no vent. And so this end ungentis, omentae, Embrocations are provided of all of an Oxe, he Goat, Hedge-hog, Calf, the Goat, Afe, with the leaves of Cucumber and Ivy, Citrons, fuc-glaes, Oyl lees, Oxe dungs, and the harpelt Vineagar, quick Birmifone, Squis, Capers, wille Sceastes-aere, Woundwood, sweet Wine, Lime, Quickeilver, Bayes, black Soop, winter Cherrys, Joyce of Oranges, Lemos, &c. whereof conuitl Varro, Palladins, Armadins, Didyman and others: what concerns Petersention means, Hemp-feed, or winter Cherrys laid near the bed, or hanged up drive away Wall-lice. De morbus faith, that Harts-horn or Hares feet hanging about the bed-pollis, will do as much: which another author ascribes to a Foxe ear. The dress of boyed better call well: when there are Wall-lise, will wonderfully kill them, for they will feed on that till they be dead. May be that this is that fat whereof Cardan speakes in these wordes; I know nyce, faith he, but I have forgot, if a matter being imered on a wooden round circle, would so allure all the Wall-lise unto it, like a charm, that one could scarce see the wood for them. Some say that a half-penny laid under the bed will drive away Wig-lice. Some hang by a fleer wet incold water, and by actual cold they drive them away. Oyl of it self or with Viniol, or Buls gall, or the decoction of black Chanteloons will drive away Wall-lice. Moreover all things that are exceeding bitter, and have a stronger smell, are doubtles good against Wall-Lice. And that strong smelles will drive them away. Olum Magnus thesues by many raw hides heat up together. Alexander Benediks faith that when these multiply much, they forebode the plague. For it signifies a corruption of the air, or humours, or both. Bacchus decending to hell, as the Greek Comedian wittily sets it down, defied Jupiter to affhirm him such Innes in his journey, where there were but few Wall-lise: yet faith Pliny, that concord and dicoz, which fills all Phyicks, by the conduct of nature hath produced nothing that in some part is not good for man, and therefore that which Co
median God thought hurtfull, mans potterity kath found beneficiall. Indeed wall-worms are of a corrodng quality, yet have they place in Phlyck ; for taken with the blood of a Tortoise they cure the bites of Serpents. By their smell the Epileptie that ariseth from the stran@gling of the Mother, is disussed. Inclined in an Egge or Wax, or a Bean, and swallowed, are good for an Impoilume, and a Quarta. And, will help them (faith Pliny, Difforetis, Galen, Mecelius, Aetius, Altairius.) Drink with Vinegar or but must to, they will remove Horfeleeches that lick too fatt. Also the Verfes of Quintus Serenus fhew that they are good for Tertian Agues.

Shame not to drink three Wall-lice mixt with wine,
And Garlick bruised together at noon-day.
Moreover a bruell’d Wall-lice with an Egg, repine
Not for to take, ’tis loathsome, yet full good I say.

Geuen in his writings confirms this experiment, having made trial of it amongst the common and meaner fort of people in the Country. The Ancients gave seven to those that were taken with a Lethargy, in a cup of water, and four to children. Pliny and Serenus confents to it in thefe Verfes.

Some men prescribe seven Wall-lice for to drink,
Mingled with water, and one cup they think
It better then with drowsy death to sink.

And he of old fang, that bleeding at the nose would be stayed with the only smell of Wig-lice. Some there are, that cure dark fights by rea<son of a Cataract, bruizing thefe with Sale and Afles milk. Many annoyant painful ears with honey mingled with Wall-lice, to good purpofe. Alfo Marcellus faith they stay vomiting, and he faith it is a certain remedy, if a bruifed Wall-loufe be swallowing in a rear-egge, by one that is fawning, and knowes nothing of it. Pliny feems to prove from thence, that they are good againft the fits of all Vipers, Adders, and all kinde of Serpents, becaufe that Hens that feed on thefe, are free from the fhing of thefe Creatures. Aetius commend Wall-loufe againft the Strangury, and to drive forth the Stone. Vegetius in this cafe puts one Wall-loufe into the ear, another into the paffage of the Yard, and with a gentle ftrick of the parts, he affirms that they will presently make water, which remedy he faies to have borrowed out of Hesiod in his Hippatrickes. Galen Exp. 5. reports, that Wall-loue will not only provoke urine, but alfo drank for nine daies fpase, will flop children water that goes from them againft their wills. Valerandus Domines an Illander, a moft learned Apothecary of Lyons, often faid, that thefe drank with water hot, or wine, or broth, would wonderfully help thofe that were troubled with the Stone. Moreover, the latere writers wonderfull commend the ashes of them with a fift decoction cauf’d in a Clyfter, to bring forth the Stone. If they be bruifed and annoyant on the paffage of the yard, it will presently provoke urine. Marcellus. There are faith Geuen, that for the Colick prescribe four live Wall-lice to drink in wine, in the morning, and then they command to fift two hours after, and they give as many to drink two hours before fupper, and fo again the next day until they have drank up twelve Lice : truly it is a remedy to be depifed, but it is no new remedy in that desperate difaffe, and it is a prefent cure. It helped Funditus the Governor of Zurick at the fsecond taking, and fo it did fome of his Kindred also, and he was like to have written a commendation in praife of Wall-loue. What concerns outward difafe. If you pull up the hair by the roots, and annoy the part affected with the blood of Wall-loue, and let it dry, it is the opinion of Galen, Aetius, and Nonius, that they will never grow again. Pliny faith that if you annoy the breaths with Goofe-greafe and Wall-loue, the pains will abate, the Moles of the matrix will break forth, and fcabs of the privities will be cured. Cornelius Germa in his Appendix of his Cosmocritica, speaks of a woman in whose Skull opened, were found abundance of Wall-loue.

Chap. XXVI.

Of Tikes, and Sheeps Lice.

The Tike in Latine Richins, in Greek Ρηχιον, Hebrichim calls it ע"בבבם, Suidam אבבבב, and others call it סינימ, Siphonimus calls סינימ, but that is not right, for it wants wings. The Arabians call it Albauar, Alphiates, Albeimus, as Bedamus reports. The Perfini, faith Heimo-

laus Barbarus, to this very day call Tikes γεγόνει, as we read in Dianius Zelometes. It is called Richins in Latine, becaufe it is like the feed of the Plant Pulma Chrifti. Geza calls it Redwiam, and Alberti sometimes calls it Taca. Alfo Albertius Vincentinus, Guillerimus de Coma, call it Eugenem. I think that at firft it was called Cier, faith Staligers, because Cie is the fame with Cretan. The Italians call it Zvea, the Germans Heliebehck, the French Plata, from its compact body, the English Wood-teeck. Some diaminifh between Richins and Redwiam, thus very exadtly.

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Of lesser living creatures.

Rhus is a small insect, that when Summer comes on breeds in pastures among grass, and in woods amongst the leaves, of some putrid humour: with a very compact body and that feels plain, with a skin very tough, of a Diamond figured body, of a black shining colour, or a dark brown; but so soon as it fasteneth to any living creature, and thrusting its head within the skin, it draws the blood, in a short time it grows great and swells, and at length becomes almost round. It hath six feet fastened to its neck, with a sharp nose, but short, it produceth no young ones, nor is it produced by other living creatures, and in this it differs from all other insects, that it is filled with food abundantly, and yet there is no passage for any excrement, and therefore it may be the Hieremian call it Case. Let therefore the material philosophers that with Aphrodite draw all things from the manifest qualities of the Elements, consider diligently, to what defect of matter or confusion they will be here forced to fly. If they imagine, that Nature wanted a skin to pierce a hole in the tail, they deferve to be hissed at. But rather let them here fee and acknowledge that of Persulphur: That bodies may be made from Sprits, and Spirits from bodies. They calls a Tike a filthy creature, the end of whose glutony is, as to gluttones amongt men, death it self. For in a few days it will break with over-fullness; yet it will falt lustily for seven days. I scarce consent to Scaliger, who supposeth Tikes will breed in a mace beard and groins, for being there fasteneth it will lick close to feed itself: yet Isaphatius and Hrisbiae are of his side in these words. It is called a Tike, because it thicks fast to what it is bred in. But the truth is, a Tike is not bred in living creatures, but from the corrupt matter of leaves and grass as I said before, and as Ariftotele affirms, Hist. 5. c. 19. Tikes breed of Plants. May be Scaliger meant by a Tike some Lowe like a Crab, or some Crab-lowe in man; for they both breed in the beard and privities, and can very hardly be pulled off. It cruelly plagues men and Oxen, but especially barking Dogs. Cato also testifieth that Sheep and Goats are troubled with Tikes, but he was deceived by the likenesse of their bodies, for that Lowe of Sheep should be called Brussius, our Country-men say (a Sheeps Lowe) between which and a Tike there are many and different marks: For a Sheeps Lowe hath a long little beck, and its body when it is fullfed is never so distended but being pressed, it will never seem round. Also the feet of this are of a dark red, the back Ash-coloured, marked with three black spots, and it is framed after the fashion of a heart. The head is not always but feldom full in the skin, and it draws blood forthly but by turns, and it voids the excrements that breed of it by the tail, and it will dy Wool of so deep a green, that this cold tincture shall scarce be bettered in a hot dying Fat. Sheeps Lice will live a whole year in thorn Wool; but Tikes live only upon the hot blood of the creature. Let therefore Cato maintain them both to be of one kind, yet truth will maintain a vast difference between them. Saxo is a little creature, like to the swellings of leprous people, faith Alberius. Gisner doubts whether he understand by that a Tike or a Breetz; I rather think he meant a Tike, both from the round form of the swellings, and from their wan colour. Cato frees thorn Sheep from Lice with Oyl less well putrefied, and the beet lees of strong wine, and a decoction of Lupins added to them, and anointing them with it, then let them dry two or three days, and after that wash them with Sea-water. The English Shepheardz therethem, and then anoint them with Tarre and Sheeps feet, or else they bruise the root of Acorns, and boyl it in water, and they foment their bodies with the warm decoction. Some use nothing but Tarre, others use the root of Mandragora; but care must be had that the Sheep take it not, for fear of the great danger of stupefaction that it will cause. Others boyl the root of Cyril, and with that boyled they wash their Sheep. Diochares in Geopeon. Against Dogs Lice the Ancients bid us to anoint their ears with Oyl of bitter Almonds and of Walnuts; experience confirms that remedy. Also Nemoferius testifieth as much.

'Tis good to rowt their ears, and set them in the Sun, Or use red hot knifes when Lice are first begun.

Rhufis commends against Aescharid of Dogs or Dog-lieve, to wash them with Wine, and Vinegar, Cummin-feed and Salt-water. Themasithius and Cato prepare Oyl of bitter nuts, and with that they anoint their claws and ears, and sects also. Tarre of Cedar kills them. Diocharid. But Columella forbids to pull off Tikes from Oxen and Dogs, left the places should exculerate, and he highly commends Tarre and Hogs greafe. Pliny faith the juice of both Chamois will destroy them. Alberius reports that Tikes bloud will cleanse Ulcers, and if they be infused in wine they will presently make one drunk. Seventh farther commends them for to cure Fifula in Ano.

If that new ulcers in the secret chance to breed, cherry'd Bramble-leaves apply, you quickly shall be freed. Oyl from an old face a Fifula do growe, AWithis after burnt will help', and furtherknown, The blood of an Ox Tike to no means else below. Also
Alfo the bloud of a Tike will cure the Shingles. Alfo men say, that a Tike pulled out of the left ear of a Dog, if it be tied on, it will cure all pains. **Piny** write this out of **Niguid**. Alfo he afferts that if a womens loyns be anoynted with the bloud of it, the will abborre venery. Moreover nine or ten **Goats** Tikes taken in wine, will stop the terms. **DiSforier**, Anoynt your eye-lids with the bloud of a Tike taken from a Bitch, the hairs being firft pluckt off, faith **Galen**, **Simpl. 10. c. 5.** and they will never grow again: So alfo **Piny** and **A visitena** write, but it is from other mens opinions. **Dionysius Melellan** prescribes such a Deplatory againft pricking thorny hairs: 
Burn a Sea-hare in a new earthen pot, and keep the ashes with Tikes bloud in a horn box, use this, firft pulling out the hairs. Many **English** men have learned by experience, that one dram and a half of Sheeps Lice given in drink will loon and certainly cure the Jaundies.

**CHAP. XXVII.**

**Of the Garment-eating Moth.**

**Ennius** beginning to write the history of this Insect, faith that **Tinea** is a word that signifies many things; as Lice of Hawk-weed according to **Albertus**, Wood-lice in **Plantins**, the plague of Bee-lives in **Virgil**, and it signifies the creeping ulcers of the head, that are eaten like garments, whence it may be **Claudian** writes;

*The filthy Moths have gnawed the loathsome head.***

**Gaza** translates *Terna*; **Tinea**, but very ignorantly, as we observed in the history of Catterpillar. Alfo **Piny** faith that **Tinea** do destroy the seeds of Figs, he means the Worms that breed in Figs, from whence grow **Jara**. **Nipbus** calls that little Scorpion which eats books **Tinea**, whereas I spake in the history of Scorpions. But *su* and *Nipbus*; if a man will speak properly, is a Worm that eats garments. It is called in *Lateine Tinea*, a term from holding, for it ficks fast in garments, and will not easily change its station. The French call it **Trigue**, the Spaniards **Tindas**, the Italians **Tignola**, the Muçovites **Mel**, the Polonians **Mai**, the English **Moth**, the Hebrews **Hovshach**, and **Sas**, as you shall finde it **Job** chap. 13, and **Isai. 51.** It is a little Worm of a wan white colour, of which ariseth that small kind of Flie that will fly at night about the Candle-light. There are some of them that are silver-coloured, the English call them silver-moths, the Dutch **Sibwet**, from their swift motion. **Nipbus** greatly erred, making this the Scorpion amongst books. There is also a certain Worm that is thick, or with a coat. faith **Piny**, called **Tiera**, that draws its coat along with it, as a Snail doth its shell, and when the is deprived of this featherly diete. But if this coat grow too great, it changeth to a **Chrysalis**, out of which a fet time a little Glow-worm comes. This kind hanging by a thred, hangs a long time in houfes before it changeth to an Auralia. It hath a little black head, the rest of the body is a whitish brown colour, the Cafe of it is something long, made almost of a Cobweb, not round at all, but lightely compacted, and at each end something hairy. The Phaene that come from thence flick by the feet to the roots of houfes, un- till their bodies being corrupted and putrefied they are bred again: when their bodies corrupt, and their wings and feet fall off of themselves, they hang with a thred by the tails. At length they get a Cafe and are turned into this kind of Moth. In **Germany** and **Helvetia** there is a Moth of a faid red colour, with a little thick head, the body grows by degrees smaller even to the tail. The colour of its belly is lighter, something yellow, and like a soft downy filk. It is very tender Creature, especially that which is fiver'd over, and it is bruied to pieces if you do but touch it. Whence that Kingly Plaimiff, **Pfal. 32. when thou with chaffements flaitt corret man, thou makest him to confume away at a Moth.** And **Job**, **Chap. 40.** he amplifying the certain deftroction of the wicked: **They fhall be bruied (faith he) before the Moth.** All Moths are reckoned amongst the number of fix-footed Creatures, and they breed in Garments as well of Wooll, as skins that are not cleansed from dust and fift: and fo much the sooner if a Spider be flut in, as **Ariftotle** writes. For the Spider drinks up all their inbred moity, and dries them; wherefore care muft be had that garments be not laied up full of dust, and when the Air is thick and moity. Some to avoid Moths, ventilate their garments in the hot Sun-thine: which our women severely for bid, and lay them up in the shade, and when the winde is high and very cold. For they hold that the Sun-beams are kindly for Moths, but windes and tempefts and the shade are enemies to them. These Worms when they have by degrees inefibly eat off the outmost superficies of the cloth, then they eat up the inward part, and fo infimulate themselves into the middle substance of it, that those that search never fo well for them can hardly finde them. The Ancients were moft expert to kill Moths. For the garments of **Servius Tullius** failed to the deftroction of **Sejanus**, for they were kept with fo great diligence by the keepers of the Wardrobe, that they neither confined by age, nor were Moth-eaten. They that fell woollen Clothes,ufe to wrap up the skin of a Bird called the **King's-Fisher** amongt them, or else hang one in the hop, as a thing by a secrect Antipathy that Moths cannot endure. They are handomely destroyed by the fent and smoke of Savin, Hops, Finger-wood, Wormwood, Rosemary, Poley, Panax, Anifeed, Golden-flower, Pomegranates, Citro-
Of lesser living Creatures.

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pills, (for this was the chiefest use of Citrons in old time) the out-landish Myrtle, Cedar, Cypress, Calamint, Brimstone, Downy feathers. The Books that were found in Numa his Tomb, were said to be anointed with the juice of Cedar, wherefore as Pliny writes, they were supposed to be free from Moths above 350 years. The bones of Bergers (I know not what beast it is) being brought to powder, and these amongst garments, will drive away Moths, if we will credit Hygeian. Nemesius reports that Cantharides hung up in the middle of the house will do as much: Who fears moreover that garments wraped up in a Lions skin, will never have any Moths. Some wet a linen cloth in a strong lie, and dry it in the Sun without pressing it, and they affirm, that clothes wrapet in that will not be Moth-eaten. Cato bids sprinkle your Wardrobe with Oyl-lees. That which Pliny reports is a wonder, that a Cloth laid under the Bieten of a dead body, will never have Moths to hurt it. The richer people, who (as Horace writes)

Whose hangings rot in Chefs, rich for the Worms and Moths,
take diligent care in Summer to look up their garments, and taking them out of their Coffers, they air them in open place for the winde, and then they beat off the dust with the leaves of Indian Miller, or Hogs bristles, or Broom Moffs, or with Worm-wood branches. Of old they were wont to do it with an Oxtail; for so Martial writes;

If that with yellow dust thy costly clothes adorn,
Then most with an Oxtail bruft off upon the ground.

There are also rich Merchants, that have Cedar and Cypress Chefs, and they put up powder of Origamum, Worm-wood, Orris, Citron-pills, Myrtle-berries with their clothes, and by such remedies they drive far from them this Wooll-devouring Creature.

We write before amongst the six-footed Worms, of Worms in books, wood, the skin, the fruit devourers. I have nothing more to add to this Chapter, but only to exhort rich men to lay up their treasure there, where neither Moths shall eat their garments, nor rust confume their Silver; and let them in the mean time leave off that infinite expense in clothes, of which can they look for any better end, to use the words of the Lyric Poet,

Than to feed black Bugs, and the Lazy Moths?

If a man, faith Calvin, born of a woman, having but a short time to live, and always waxes old, and corrupting, would think himselfe to be like a garment that Moths eat, certainly he would lay aside all pride, and blith, and fall lowly upon his knees unto Almighty God.

CHAP. XXVIII.

Of the Flea.

The Latin word Pulex, in Greek Πυλος or Πυλη, comes faith Iphigene, from Pulvis, dust, or the ion of dust; in Spanish Pulga, Italian Pulzes, French Puce, English Flea, the Germans from its nimbleness in flight call it Fliech. Fleas are not the least plague, especially when in greater numbers they molest men that are sleeping, and they trouble wearied and sick persons; they escape by skipping from us, and so soon as day breaks they forsake the bed. They are a vexation to all men, but especially, as the wanton Poet hath it, to young maids, whole nimble fingers, and that are as it were clammy with myrture, they can scarce avoid. These Fleas are either common or extraordinary. The common ones are small Creatures about the bignesse of Life, but their bodies are softer, and they are bunch-backt, almoft like a Hog, they are black and thinning, their breast and belly is yellow from black, in white Dogs they are more clear, in red more yellow, in black Dogs blacker than in others. Here I desire you to observe the wonder of Nature, that their hinder little legs are bent backwards toward their bellies, and their forelegs toward their breasts, as four-footed beafts are, as it is usual almost in all Insects to whom Nature hath given but four feet. It may be for that end the joynts of Fleas are so dispofed, that they may with the more ease hide themselves in the long foldings and plughts of the blanket from those that hunt after them. The ends of their feet are divided into two parts, and are hooked and sharp, and seem as it were to be bony, not only that they may more fully creep up upon high places, but also that they may fix and stick faster to the smooth skin: They have a little head, and a mouth not forked but strong and brawny, with a very short neck, to which one Mark an Englishman (most skilfull in all curious work) fastened a Chain of Gold as long as a mans finger, with a lock and key so rare and cunningly, that the Flea could easly go and draw them, yet the Flea, the Chain, lock and key were not above a grain weight: I have also heard from men of credit, that this Flea so tied with a Chain, did draw a Coach of Gold that was every way perfect, and that very lightely; which much sets forth the Artills skill, and the Fleas strength. The point of his nibe is something hard,
hard, that he may make it enter the better. It must necessarily be hollow, that he may suck out the blood, and carry it in. They seek for the most tender places, and will not attempt the harder places with their nible; with two very small forayords that spring out of their foreheads, they both prove their way, and judge of the nature of the object, and whether it be hard or soft: where they bite they leave a red spot as a Testimony of the force with which they fast. In rainy weather they bite freely, and are bold to run over ever part of man body. They have but one small intellect, with folds inward, which is either relaxed or contracted as they eat more or less.

The lesser, the leaner, and the younger they are, the sharper they bite, the fat ones play and tickle men more willingly. It is very probable that they have eyes, both because they cleanse their places of retreat, and because they withdraw themselves when the day breaks. They will not stick upon corrupt or dead flesh. Those that have the Kings evil, because they are of bitter juice, and such as will die, because of the corruption and stink of the same, they will not meddle with. At all times they trouble men and Dogs, but chiefly in the night. Though they trouble us much, yet they neither sink as Wall-lice doe, nor is it any disgrace to a man to be troubled with them, as it is to be lowly. They only punish sluggish people, for they will remove farre from cleanly houses: when they finde they are arraigned to die, and they feel the finger coming, on a sudden they are gone, and leap here and there, and fo escape the danger: whilst those that hunt them endeavour to measure their jumps, as Aristophanes faith, they but play the fools. In the morning, after they have fed, they creep into the rough blankets, and flick to the walls, or else they hide themselves in the ruffles or duft; and so they lurk in ambush for Pigeons, Hens, and other Birds, also for men and Dogs, Moles, Mice, and vex such as passe by. Our hunters report, that Foxes are full of them, and they tell a pretty flory how they quit themselves of the same. The Fox gathers some handfuls of wool from thorns and briers, and wrapping it up, he holds it fast in his mouth, then he goes by degrees into a cold River, and dipping himself in by little and little, when he finds that all the fleas are crept to high as his head for fear of drowning, and so for shelter crept into the wool, he barks and spits out the wool full of fleas, and so very frolickly being delivered from their molestations, he swims to land.

Their first Original is from duft, chiefly that which is muffled with masts or Goats urine. Also they breed amongst Dogs hair, from a fat humour purrified, as Scaliger affirms. A little corruption will breed them, and the place of their original is dry filth. Martyr the Author of the Decade of Navigation, writes, that in Peruena a Countrey of the Indies, the drops of sweat that fall from their live bodies will presently turn to fleas. Some Countreys are such enemies to Fleas, that if they be brought in thither they cannot live, nor will they breed there; as in the Territory of Seflor of Sigismund. Contrarily the City Hea by the sea-fide, (Unleffe John Leo deceives us) is most fruitfull for Fleas, by reason of the abundance of Goats, as also Dede. In Hispaniola Fleas are found, but neither many, nor great ones, but they bite more fiercely by farre than ours doe; they love hot places, where the Sun shines. In the Spring they multiply, and at the beginning of Winter they die, for they cannot endure the cold. They copulate, the male ascending upon the female as Fleas doe, and they both goe, leap, and rest together. They flick long together, and are hardly pulled asunder. After copulation presently aimoile, the female full of Eggs seems fatter; which though in her belly they feem long, very small, very many, and white, yet when they are laid, they turn presently black, and turn into little Fleas, if we may grant what Pennius faith, that bite most cruelly. Philemon in lib. iie generat. maintains that Fleas breed not Eggs but Nits, and Nipsis faith the same: But they endeavouring to prove this because they crack when they are cruyf, doth not confirm their opinion, for Fleas will not break under the nail without cracking. Aristote thinks, that from them, be they Eggs, Nits, or little Worms, no other Creature breeds, and I should willingly subscribe to him, but that I think Nature made nothing in vain. Those Fleas seem to be more rare that India produceth near the River Nigua, as we learn from Trewet. They chiefly seize upon the softest parts of the feet under the nails, and bite venomously. After four days they raise a swelling as great as a peafe, or a Chich peafe, and young ones like to white Nits; and if these be not forthwith picked out, and the place affected burned with hot ashes, the part will be loeft, as it falls out often with the Slaves in Numidia. He also in the Province of Peru was subject to this mischief, and could not recover but by washing himself in the River very often.

Cardan writes of a little Flea. The West Indies, faith he, brings forth a kinde of Flea called Nyge, a very threfold plague. This creature is far leffe then a Flea, that tickling to a man will fo torture him, that some lofe their hands, others their feet. There medy is, to anoynt the part with Oyl, and shave it with a Rasor: To whom Scaliger answers thus. Thy story of Nigua is lame, yet not unprofitable if you consider Philologie: I shall adde what you have omitted.

This little Flea hath a most sharp nimb, and invades chiefly the feet, (seldome other parts) not only when men goe, but lye down also. Therefore the Indians lie high. Most frequently they bite that part which is under the nails. The fourth day the swelling begins to increase, and grows to the bigness of a great pea. This swelling is full of young Nits; they pick them out, and lay on hot ashes. Birdes are said to eat the same. The Indians write, that with venomous Insects. Amongst the rest the Nigua about the bigness of a Flea, insensibly creep in between the flesh and the nails especially, and they are bred in the duft. It falls out oft times that no pain is felt by them, till they grow as great as Chich peafeen or Lentes; and then with a wonderful plenty
plenty of Nits bred, they are hardly pick out with a needle or thorn; and this mischief is cured with hot athes. Moreover, the slaves of Africa that the Spaniards have in their families, because they go barefoot, are thereby troubled with this plague, and they breed in such numbers in their feet, that there is no remedy for them, but the iron instrument of the slave, whence many of them want their toes or their feet. Fleas will dye from extreme cold, and therefore in the colder winter they are not to be seen; or else we kill them when we can catch them. And one dog will as willingly bite out the Fleas of another dog, as they will scratch one the other. Also a most bountiful Nature hath furnished us with a large field of remedies, that the Fleas that hide themselves, and leap away from us, may be destroyed by us, and we prevent their spreading. For we have herbs, Dwarf Elder-leaves, Fennel-foot, or Anthos, flowers of Penniroyal, Rue, Colo- quintida, Brambles, Oleander, Mints, Hodmints, Hops, Rape-seed, Camom, Staves-acre, Fleabane, Cony, Saffron, Coriander, Gentian, Sweet Cods, wilde Cicers, Arfemart, Mustards, Lupins, roots of Chamaele, Hellebores, leaves of black Poplar-tree, Bayes, Walnut-tree, with the oyl of these, or the boyl’d decoctions, if the pavement be sprinkled, or the house be perfumed, the Fleas will be gone, and most of them are killed. Above all, the dregs of Mares-pote, or seawater are commended, if they be sprinkled up and down; also Harts-horn burnt is very good. Goats blood set in a basin or a pit draws all the Fleas to it, as also a flaffe anointed with the fat of a Hedgehog or Cony; Axe, Bear, Bull, or Fox, will do the like. The water of the decoction of Arsenic or Sublimate sprinkled, is a certain experiment to destroy them. Quicklime mingled with the juice of white Hellebore, doth the same. A Gloeworm set in the middle of the house, drives away Fleas. Fleas-wort in the City of Chaire is powdered, and the powder is strewn ab the beds, which, by its smell doth astonish the Fleas that they will not bite. If a Flea get into one of Peter’s oyl, will live; if it be sprinkled up and down, it will die. The remedies which I have here mentioned, are taken from Appyrians, Taros, Columella, Gales, Actius, Palladins, Aquicorns, Raphis, Kiramides, Guillifuns, Placentiums, Vfracinus, Belliniaeus, Hermodus, Barbanus, and Pliny. The Barbarians (faith Lcucu) that the Fleas may not bite them, anoint themselves with oyl that is thick and red, pressed out of fruit, which they call Convex, Petrae Califardi, Cecina Chateguins and Tzer- zees, are reported to have written the commendation of a Flea; it was my desire to have seen this, but it was never my chance.

CHAP. XXIX.

Of Insects that want feet, and first of Earth-worms.

Some earthly Insects that have no feet are bred in the earth, some in living creatures, some in planes. Earth-worms or Lumbrici, are called Plana, and Calumella, may be from their liquidity. Also they are called the entrails of the earth, both because they are bred in the bowels of the earth, and because being pressed like the entrails of living creatures they can forth after excursions, so also because they are like them in form and fashion. The Greeks call these Ledou, Erda, Haploopus, and the Syracusians, and the English Meds, Earth-worms; the French, Vres de Terre; the Italians Lumbrich; the Spaniards Lambrioz; the Germans, and those of Flanders, Erdwurmen; the Arabians, Aetarts, Manardus writes, L. 2, op. 4, that Earth-worms were called Ovifculi. Earth-worms are greater in lesser.

The great ones are long Worms, almost like those round ones that are bred in ments bellies, half a foot long, and stretched out a foot long; they are of a weak flesh-colour, and for the most part they have a ring or scale a collar about their neck that is thick, wherein there is a little blood contained: they have no eyes, nor Worms have any. They first breed of putrefied earth, they are afterwards fed by the fame, and lastly they are resolved to earth again. Tho’ they be wounding little hills at the brink of their holes, as I suppose those heaps are their exections; for in them we finde nothing but earth, the nutrimental juice whereof being spent, they cast forth the rest as unprofitable matter at their doors, and they are fenced by it against the rain falling in. At night chiefly when it is rainy weather, they willingly copulate, and flick fall till morning. They are not wrapt together in copulation like Serpents, but they stick fast together by their sides, sending forth a frothy kind of spittle when they copulate: when they are in conjunction, they keep the middle of their bodies, that is the hinder half in their holes, and they are never so fast glued together, but with the least motion of the earth they can easily part: in rainy weather they are whiter, unless it be when they copulate, for then especially they are red. Gcphalae in the middle of April he difsected a female Earth-worm, that was very thick, within the flesh through the whole body, a receptacle descends, that is ringed, covered with a thin membrane: when he dissected it, it flank filthily: in this is the earth contained that they take in; but above this receptacle there lie white eggs very many helped together, next the mouth.

The lesser Worms, for clearer description sake, I will with George Agricola call Aforacides, they are frequently found in dung-hills, and under heaps of stones: some of them are red ones, they call
call them *Dogs*, and *tiers mch define them; some are stark coloured, others have *yellow tails*, and are so called; some also use with clover and are far others without clover and licent, which I take to be the males. *These are bred chiefly in Autumn by reason of no plenty of moisture, as Aphislate* seems to affirm. Both kinds live long in water, but at last they die for want of food. They move from place to place with a certain drawing and pulsation, for the Philosopher faith they do not pocrally tumble along. The great one live in the bowels of the earth, especially in the open air, and where men oft-times resort. In the morning when they withdraw themselves into their holes, when the air is clear they fence them with earth caft up, but in rainy weather they flop them by drawing in some flake, they feed frequently on earth, but moist greedily on a piece of white bread unleavened, as I learned from our Turner, a very credible man and have oft-times seen it. Many of them dye it the Winter too cold, or the Summer too hot. Moreover they are taken by Fishermen, and driven forth of their holes either by digging and flaking the earth, or by pouring in some liquor or strong juice, as of Walnut leaves, Hemp, or strong Lyce. It is good also in tempestuous and dark nights to go into gardens silently, (which they miracely hurt) and to creep upon them when they couple, by the help of fire carried in a horn: for so in one night thousands of them may be intercepted and killed.

Liles of this defpicable creature are obtained to be many; and Nature scarce affords any simple that the hath bellowed more vertues on against diseases. For Earth-worms softest, sweet together, easie pains, and by their earthly and watry moisture together, they duly temper the part affected. Powder of Earth-worms is thus prepared: Wrap up great Earth-worms for some time in earth-motes, that so they may free themselves of that glorus matter that sticks on their outward parts; then press their hinder parts next the tails that they may cast forth their excrements and be cleansed. Then cast them into a vell of white Wine and a little Salt, and gently prelling them with your fingers, cast away that firt Wine: pour on more, and after the Worms are washd, take some part of this away also: for it must not all be cast away, as some would have it, till it be perfectly cleansd, for so that glorus clamy qualy would be lost with it. Thus prepared, they must be gently dried in a furnace, till they will crumble into dust when you touch them. Then the powder being beaten and feared (it will smell like Runner or Cheede) must be kept something far from the free in a glass vell. Otherwise it is best to kill the Worms in pieces in Wine and Salt, and when they are dead, to take them out and to cleanse them. This powder with the juice of Marigolds, wilt cure the Eulep's; with Mead, the Droffe; with white Wine and Myrhe of the Trogodytes, the Jaundie; with boiled Wine, Hydromel, or Wine, the Stone, the Ulcers of the reins and bladder; you may give a draine weight. In three cya-th of water they will break inward Impol muted, and bring them forth, if seven or nine of them be brought into powder. They fly alfo the Dynanche, help Baremenes, bring forth the Second one that slays behind, ease the pains of the Hip-gowt, open the Liver, cure Tertian Agues, kill and drive out all Belly-worms, given in liquors or decoctions that are proper for it. Also the decoction of Earth-worms drinked with the juice of Knot-grass or Comfreyn, is good against continual pilling, especially if it be alfo call'd in by a Clyfer. Also a Clyfer of their decoction easheth the Emews wonderfully. Some, where they infect clostel blood, give the decoction of Earth-worms to drink with great faccets. For the diseases of the Fars almost pist cure, boyl them in Goose-grease and pour that in. Boyled in oyl for the Tooth-ach, and pourd into the ear on that fide the pain is, as Pliny faith, they give ease, or if you drop them into the contrary ear, as Discrepides faith. Thus far for Earth-worms given inwardly, from experience and testimony of Discrepides, Galen Antius, Aegintas, Myreplas, Pliny Valarius.

Also outwardly applied and bruited, they joyvn wounds and nerves in fnder, and heal them in seven daies; wherefore Democritus would have them kept in Honey. Their aches with old oyl, cleaneth corrupt Ulcres; and as Pliny writes, commen the hard edges of them, if it be mingled with liquid Pitch and Simnhick Honey, Discrepides faith Sicilian Honey is called Simnhick. A certain Chirugion now in England of good note, makes a liniment of Earth-worms and Ho ney, whereby he annoints the tent, and imprinkles it with fine powdred Allum, and puts it into a Fiilula, and fo brings forth the core eaten out with no pain, and heals the wound. Also their ayes draws forth things that tick within, and laid on with oyl of Roses cures Kibe-heals, Marcellus.

Severus faith, that when the nerves are cut in fnder, it is good to lay on Earth-worms bruited with Hogs-grease that is old and rank. Marcellus Empiricus adds Grondiel to the Hogs-grease and Earth-worms, with the render tops of Box with Frankince, and this he lays on the nerves cut or pain'd: Pliny faith that the ayes of these and of a wilde Moute, laid on for a platter, with oyl of Roses, is excellent for broken bones.

For the great pains of Horfes in their nerves or joynts, to help them, Ruffius, Abhyrus, Didymus, collect a great number of Earth-worms: whence Cardus gathers that they will eafe all pains. Mendella affirms that contradiction of the nerves will be cured if you annoint them with oyl of Camomil that is well replennishd with Worms, Marcellus faith that the fame is done with Honey and Worms, as before. Antius faith, without doubt they are an excellent remedy for the Gove boiled in oyl and a little wax: so faith Marcellus, but he sometimes mingles Honey with them. Vigo for pains in the joynts, makes a platter of these and Frogs, to which he adds Vipers-grease.

For pains of the joynts: Take joyvn of Worms it, oozes, oyl of Roses, or Ores, what ma
**Chapter 29. Of lesser living Creatures.**

Suffice, mingle them to an ointment. Another that is singular. Take the marrow of a Calis leg compleat, and old yel of Roses, ounces, Earth-worms cleansed with Wine and Salt ij. ounces, let them boil in Balneo to the constellency of a Muclage; with this anoint the neck, shoulders, and the places where the pain is, for it gives great help. Pliny. Marcellus anoints them with Honey, and then he laies on the Mucilage prepared. When any part is waited and receives no nutriments, cleansed Worms must be put into a glas very well luted, that nothing may breathe forth, and so set in a warm oven or in Balneo, and they will then resolve into a clammy moisture; an admirable remedy and approved for the Palsy of the limbs: Take the ashes of tender Earth-worms iiij. pounds, Ginger, Galanga, of each iij. ounces, with clarified Honey incorporate them for an Unquiet, with this for three nights together anoint the Patient, binding his arms forcibly over his belly or stomack, then cover him warm, and let him beware of cold. *Jacobus de parma.* To drive away hoary hairs, women use these ashes mingled with yel while it they comb their head, as Pliny faith, to whom Serenus subscribes in these veris:

> Earth-worms and yel of Olives, free from cares,  
> They will preserve a man from hoary hairs.

We said before how they cure the Tooth-ache. But further the powder of them rubb'd do will preserve the sound teeth, and being injected will make rotten teeth, though it be a grinder, to fall forth; especially, if the tooth be first scarified, and fill'd with powder well sprinkled on it. *Aetius.*

*Gal. 5. s. loc.* bids us do almost the fame out of *Archigenes.* Also they are good with the root of Mulberries boiled in Vinegar of Squills, to wash the teeth. For purulent Ears, poured in with yel they help much, as *Galen* thinks, and cure their inflammations, being boiled with yel of Roses. *Aetius.*

If that your bearing fail, an old disease,  
Is cure'd with Earth-worms boiled with Ducks' grease. *Serenus.*

Myrsfus bruseth Worms with some small quantity of the earth from whence they were taken, and works them together, and anoint that upon ears that are bruised. Marcellus bruseth them with yel of Roses, *Celsus* with yel of Olives. *Faventius* for pains of the ears anointeth the outward parts with yel of Earth-worms, and also pours it into the inward parts. Marcellus bids to bruise Leeks not planted but fowed, odd in number, and as many Worms together, and boil these in the belt Oyl to thirds, and he faith that this yel put into the ears is very good for their greatest pains and deafness. *Athenor* cures clefts of the hands and feet with yel of Earth-worms. For an old pain of the head, they are held very excellent bruised with Vinegar, Frankincense, and Castoreum. *Galen* for the same prepares in his *Eupraxis* such a Remedy: Take xv. Earth-worms, as many grains of Pepper, Vinegar what is sufficient, mingle them, smeer them on. Another: Take Earth-worms, Moufe-dung, white Pepper, Myrrhe, each half an ounce, bruise and mingle them with Vinegar, and anoint that part of the head that the pain lies on. *Myrsfus* will have the Worms to be odd, and to be taken only with the left hand, and so superstitiously anointed. If thou wouldst try, faith Marcellus, whether a swelling in thy neck be the Kings-evil, lay a live Worm upon every dwelling; if it will cure any where, this Worm will turn to earth; if not, he will be alive and receive no hurt: so faith Pliny also. Earth-worms are a part of that noble Plaister of *Arnoldus* (*a Breviorius*) of a Rams skin, or the bloud of a man that is red, against the Rupture: and *Hollarium* commends it to cure *Entomoele* and *Eppholoe.* They also diminish the Stone, both taken inwardly, as also anointed on the thare somewhat thick. *Gal.* What concerns women diseases, bound to the neck they retain the birth, but contrarily applied to the hips, they draw the birth out and the secondone, for they draw mightily whereover they are applied living. In inflammations of the breasts, Earth-worms alone laid on will cure, for they concoct, open, draw forth, and heal Alex. *Benedict.* So *Myrsfus* makes a plaister of them bruised. Lay on Earth-worms with Quinces, or with dried Barley flour, upon Breasts harden'd or inflamed. *Aetius.* But if after delivery women breasts swell, and to use the words of *Serenus*:

> If the swoln breasts do feel great pain,  
> Smear them with Earth-worms 'twill help them again.

For they will concoct the Impofumes and inflammations of the breasts, and after concoction will heal them and void out the matter. For the Shingles, the Indians, faith *Carus* *Clusius,* make an unguent thus: Take Earth-worms, and feed them some time with leaves, fine flour, or flour and milk, and when they are grown fat, boil them in an earthen vessel (always scumming them) when they are strained, boil them again to the constellency almost of a plaister, which well prepared will be almost of a yellow colour; dissoile some part of this in distilled water of Roses, and wash the part affected with it twice a day. A most excellent remedy, faith Clusius, and proved by very long experience. *Pliny* faith they will do the same in Vinegar, who together with *Aetius* and *Myrsfus,* affirms that Worms bruised and laid on the place a Scorpion hath stung, are admirable remedy, for they presently ease the pain, and correct the malignity of the tumour.
Of Earth-worms is known by all to be good against divers infirmities, and the Ancients made it thus. Take Earth worms half a pound, Oyl or Roses, Osphane, two pound, the best white wine two ounces, let them boy in bain'to till the wine be consumed. This cures the nerves relaxed, contracted, almonished, cut in funder, or crooked, it eateh almost all pains, and wash the throat, being anointed on the face and loins. But in the preparing of it, every man follows his own opinion. For some before they adde Oyl, washe and purge them with white wine, some neither wash them nor press out the earth, and perswade to take the white wine, that it may penetrate the sooner: Others use simple Oyl, not Oyl of Roses, others again Oyl of Chamomile. Alfo they shew us many ways to boil them, for one ueth a furnace, another Balthume, another doth it in dung, and some mingle of Chamomile flowers, and of Dill, to affwage pains, some of Hypericon flowers to glee wounds together, others Snails without shells, others with shells, every one as he thinks fit. The Author of Barapalia preparres an admirable water of Worms, fol. 25.4, that is very good for wounds and disease both outward and inward. For Worms of Heres and Oxen. Pelagonius puts live Earth-worms into their nostrils, yet it were far better with a horn to put them down their throats into their stomacks. Tartarius bids give ashes of Earth-worms bruised with feth. to a Hawk, when the cannot mutre. They are also most for Moles, and when they dig, they will break out of the earth in wonderfull halfe. Sows (as Verto writes) will trouble the mud, and dig up the earth with their mouts to feed on them. Albertus faith that Toads, Bellonius Lizards, Tarentinus that Sea Grampers, and experience faith, that Frogs, Eels, Gudgeons, Carp, Roche, Trouts, Darce, and Tenches will greedily devour Earth-worms. Alfo that bird Aristotel calls Αἴγ, some call it Vangellus, and Hens, and all Quails will feed on Worms. But if there be no wife Fisher-men, that caufe Worms to come forth with medicinal juices, for when they are bitter the Fith will not bite, but if they lie a day in Wheat-meal and a little Honey, and then put upon the hooks, they relish better then Ambrosia: And it is no ordinary good we may receve by them, that they forefrewh rain when they suddently come forth of the earth, but if they lie hid the night before, it is a sign of fair weather. Some do make Iron like Steel thus. Take Earth-worms two parts, Radish-roots one part, bruife them, and dillfull the water in a Limbeck. Or take dillfulld water of Earth-worms three pound, juice of Radithes one pound, mingle them, let Iron hot be often quenched in this water, and lie in it ten days, and it will grow very hard. Aanother. Take Earth-worms two pound, juice of Radith one pound, dillfull them at an easie fire, and temper your Iron with this dillfulld water. Alfo draw forth juice of Sorrel, finking Hemlock, and of round Arifolochia, of each alike, and temper your Steel often. The juice of Sow-bread is thought to do the fame. Mr. Fakenbam a famous Phylisten writes thus. Aanother. Take Goats blood, add to it a little salt, let glased pots be buryed in the earth, well luted for thirty days, then dillfull the bloud in Baines, and put as much of the dillfulld water to the fame quantity of the water of Worms. Aanother. Take water of Worms, Rapes, roots of Apple-trees, each alike, dillfull them apart, and mingle equal quantities together, and quench your Iron in that water, as we faid before. A Frenchman nameffje.

Chap. XXX.

Of Worms in living Creatures.

Tadnau thinks they are called Lumbreci from Lumbi the loins. For the Ancients call the belly Lumbos and parysides by Heftobius, and Sudias. Some interpret that, those that are sick of Worms. But more rightly from Earth-worms, they reepreffe in form and nature, doe they borrow that name. Cornellius Celsus calls them Worms, Pliny the living Creatures of the en-trails. The Greekes call them Ψαλίσματα, Σπελεία, Στρατήγοι, and when they are extraordinary great, ζωή, as appears out of Ellen, l. 9. c. 33. You must observe, that Latin writers make difference between Vermes and Vermina or Vermintionem, that is Worms, and difeases from Worms in the belly; for Vermina and Verminatio, are the pains of the belly from Worms, as Cels, Sera, Celsus, Pliny, and Seneca Epif. 97. tellus the Arabianjs call them Emaric, Sulplicantus Elin- ger, the Germans Spulourm, Backhorm, the English Gutworm, the Sclavonians Stirkawks, a word hard to be pronounced. A belly-worm is a living Infect, without feet, bred in the bodies of living Creatures, hurting their operations diversly. I fay, a living Creature, that I might exclude thoSE broad Worms called Tenite, which though they be of substance that grows to the guts, and are in form like to living Creatures, yet they cannot properly be accounted living Creatures, as Hippocrates 1. de morbis, rightly affirmes. I fay an Infect, both because they are of a round body, and because the Ancients do not reckon them amongst Serpents, nor have hitherto ranged them into any proper Classis. I fay without feet, that I might diftinguifh them from Worms with feet. I fay bred in the bodies of living Creatures, because they are not only bred in the guts of living Creatures, but in all the fleshy parts, and in the heart it felf, as it shall appear by the history. And not only men are troubled with them; but alfo Horses, Calves, Dogs, Hogs, Hawks, and all perfect Creatures. I fay that diversely hurts actions, because from them, pains, Confumptions, Convulfions, Epi-lepsies, Frenifes, and divers other mischies follow, especially if they be very great, or very many. And
And all these Worms breed either in parts that are alive or dead. The worms in living Creatures seem to be of three sorts, the round Worms, Guard-like Worms, and Aff a fly, such as are bred often in the Intestines of living Creatures: And not there only, but in other veins and bowels; of which matter I find there was a great controversy amongst the old Authors. For Galen & c. de i.e. aff e. s. assigns certain diseases to certain parts, as worms to the guts, the Stone to the veins and bladder. But I myself with many other persons of the University, saw a stone as great and like a Pigeon's egg, voided by a fool, at Cambridge, by Dr. Larkin the King's profector in physics, who was long tormented with a pain of the Colick, and standing, and he voided that stone in the same form and magnitude, as a most troubleome birth at his fundament. Anastas and Benemienius write that they saw the like. Also by giving but one Clyfter to the choie wife of noble Le- nomai, I brought forth 2 stones like to Medlar seeds, at one time in the year 1595. Many there are that question the credit of Pedemontian Acculamn, Muscinum, Troll aura, Benemieni, and Abbianus, because (besides the opinion of Galen) they have written that they have more then once seen stones in the head, hungs, greater veins, the gall, bladder, under the tongue, in the jouynts, and belly. But since daily experience doth clear them from a lie, we may say that the Greek speake, as Greeks were wont to doe, but that these men speake but the truth. Galen might have remembered, that Hippocrate, Epil. 5. fec. 12. did not rashly affirm, that there was a thirp stone prefixed out of a women's matrix, by the hand of the Murther, as great as the whirle of a Spindel. Thus I thought fit to premise, lest when I should report them, the faith of others and my own experience that worms are bred almost in every part, others should think I relate either a thing very strange, or what is false. Worms seldom appear in the most vehement pain of the Humerus, yet Helleothes teacheth that it so comes to passe at some times, l. i.e. 1. The Pelonians call this disease Sunny Roback, the Germans Hauswurm, and it was formerly frequent in Germany and Hungary, and all that were taken with it fell into the frenzie, or madness, and when they were dead, and their brains opened, a Worm was found there. Then the Physicians gave Garlick with distilled wine once or twice a day, and all that drank of that recovered, the rett dyed. A Phis Shot cured five of his servants that were sick of that disease, with the same remedy, as one writes in a Letter to Gaffur. That Worms are often seen in the brain, Thomas a Viga, faith, som cap. 5. i.e. lae. fec. eff Galen, et Batifas Conidian c. 10. de f b. Hungar. Also Cornelian Gaffuri, in Appendices, spec. Cornubicet, disputing of a pellentiel Semeterian, speaks of a woman in a city near the river Motz, that had a long and vehement pain in her head, when the was dead of it her brain was opened, and there was found a great quantity of filth, and abundance of Worms. That disease is known faith Robus, by the internall corroding of the forpart of the head, and by the most vehement pain, that almost makes them mad. It is cured by neckles, and juices call'd up into the nostrils, that will kill Worms. Robus, l. i.e. 9. But the Worms that are yearly found in the brains of Stags, and sometimes of Goats, Sheep, Rams, (chiefly those that are fat) that Hunters and Butchers know better, than that I need to tell them. They are as big as the greatest Worms, and of the same form with them, as Alexander B. medicius and Matthijs report. Theophrastus mentions thes Hipp. l. i.e. 53, and Alexander Trithemius, l. i.e. 15. It is reported that B. medicus of Athens, when he was young was troubled with the Falling sickniffe, and he went to ask counsell of the Oracle of Apollo, and Apollo answered him thus:

Take a tame Goat that hath the greatest head,
Or else a wide Goat in the field that's bred,
And in his forehead a great Worm you'll finde,
This eases of that kind.

The young man was much troubled at this answer, and he repaired to Theogstus Democritus, that was then ninety years old, to tell him the meaning of the Oracle. This Theogstus told him that nothing could be plainer, for he had learned by long experience, that there were Worms in the heads of Sheep and of Goats, that being wrapt in a black Sheeps skin, and hanged about one neck, would miraculous cure the Falling sickniffe. Some write, as Fines witnesseth, that two Worms are found in the head of a downy Pelahangum, which Worms bound up in a Deers skin, and bound to a woman before the Sun rising, would hinder conception. Concerning Worms of the Abdomen. A woman, faith Pennius, that I knew very well, told me that she had seen more than once, some round Worms, that crept forth by the belly by the Navel.

The Ancients also say, that oft-times Worms will breed in the ears, against which they prescribe these remedies. Take the juice of wide Cucumbers, and the juice of Garden-sage, or that with broad leaves, mingle them both alike, and pour that into the ears. Gal. l. 3. fec. loc. where reckoning up the Compositions of Aduromadin for the ears, he highly commendeth this of Pistis and Hippocolo. Take Opium two oboli, Myrrhe, Spikenard, Saffron, of each three oboli, burnt brasse five oboli, and of round and Stell Alum, each one dram, black Heilcobore two drams, mingle them with sod wine or Ofyl of Roce, and apply them to the ears. Lib. Eup. 2. he writes, that a Locut inflall will destroy Worms in the ear, and he bids apply a sweet Apple to the ear, with a hole in it almost quite through, for the Worm will come forth, excused by the sweet smell of it. Finy much commendeth the root of Cypresse boil'd in water, and the urine of a young boy, and the juice of Hemp, Rse, Bramble, and of Capers powered in. Lastly, many remedie may be fethce from Bbb b 2

Columella,
Colomella, Vegetius, Marcellus Empiricus, Tradissius, Vigo, Tardatus, and all the Arabians, and therefore here I suppose, paffing on to other matters. Monardus prescrib’d to one that had a Poly-pus in his nose, the juice of Tobacco to be injected; whereby the Uter was purged, and many little Worms came forth: Wherefore they breed all in the nostrils, (for all the Arguments that Colomella hath alleaged against it) and are not only cast forth of other parts. Cow-heards know that Worms will breed under the tongue, and the Worm under a Dogs tongue (the carrying of which Worm about one, faith Pliny, will drive off the biting of a mad Dog) doth prove that sufficiently: And Valerius faith he hath seen Worms under mens tongues. It is known sufficiently by experience, that the very Breast and Lungs are not free from Worms; Antonius Boerovinius, Benedicus Renius, Mandella, Antonius Stiusus, are my witneffes, who have seen them cast up, not by vomit or reching, but even by coughing. Alfo Alfaranius, Capite de Tuff, writes, that sometimes a cough is caufed from living Creatures bred in the hollow of the lungs, and cavity of the breast, which being no greater than little Luft-brings, yet when they creep from place to place they make one cough, and when they lie flill it ceafes. Alfo Abdomus Athenaeum, lib. l. tref. t. c. 3. makes mention of them, affirming that the old Physicians faw and wrote of them. Allerus and Gratius faw fome in the liver and spleen, and Platus in the gall bladder. Wherefore, whatever Golen or Avicenna may fay to overthrow this from the perpetual motion of the Lungs, the nearnefs of the heart, and other frivolous Arguments, yet there is no man but will fay, but that reafon muft give place to fence, especi, naturally in things. There was faith Hieronymus Gabouin, a certain Noble woman of Feines (in his Comment of Worms, to which we are indebted for the great part of this History) when he had a long time been torment’d with pain of her stomack, at laft the call’d up a ball of hard flegme, this being diffigect, it seemed like a piece of ftefh, and in that there was a Worm, and thus the woman recovered, whom the neighbours thought to be bewitched. Of Worms the Reins and Bladders, When the reins pufrefe, or the muscle of the bladder, fo-times little Worms are caft out, concerning which I thought good to write these histories out of Femina. A woman thirty six years old, had grea? pain of an Apoftheme in her reins, and the confumed, at length the caft forth little Worms, a fingers breadth long, which I firft saw in the bottom of her urine, Adobe 1587. Randulp a London Physicin, very learned and pious, when he looked on at the defection of the body of one that was dead of the Stone in the kidneys, he found in one of the kidneys that wasm corrupted, it was wrinkled and purfuted, a Worm of a full length. Timothy Bright, a very skilful Ckeck of Queen Mich. Mark that call’d out a Scolependra by her nostrils, &c. Mr. Grant.

Of the Description of Worms in the Intestines.

Vwee fhewed before that there are three forts of Worms that are bred in the guts. It will be worth our labour to describe what each of them is. The round Worms are the firft difference, and that manifest to all men, because these are the most common, and are fo called, because they are indeed round and smooth, not unlike to those worms that breed in dunghills and gardens, which we faid before are called by the
And all these Worms breed either in parts that are alive or dead. The worms in living Creatures seem to be of three sorts, the small Worms, Guard-like Worms, and As a 4rd, such as are bred often in the intestines of living Creatures. And not there only, but in other vessels and bowels; of which matter I find there was a great controversy amongst the old Authors. For Galen 1. de loc. aff. 9. alius, certain diseases to certain parts, as worms to the guts, the Stone to the reins and bladder. But I shall say with many other persons of the University, saw a bone as great and like a Pigeons Egg, voided by Foul, as Cambridge, by Dr. Larkis the Kings professer in physicke, who was long tormented with a pain of the Colic, and wailing, and he voided that bone in the same form and magnitude, as a molt troublesome birth at his fundament. Montanus and Benvenentius write that they saw the like. Also by giving but one Cyster to the choise wife of noble Leosentius, I brought forth 55 flones like to Medlar seeds, at one time in the year 1583. Many there are that question the credit of Pedemonum Arculumus, Guamshi, Trall amus, Benvenentius, and Montanus, becaufe (besides the opinion of Galen) they have written that they have more then once seen flones in the head, lungs, greater veins, the gall, bladder, under the tongue, in the joyes, and belly. But since daily experience doth cerne them from a lie, we may say that the Greek speak, as Grecly were wont to doe, but that these men speake but the truth. Galen might have remembred, that Hippocrates, Epul. 5. fce. 12. did not rashly affirm, that there was a sharp bone preffed out of a womanes matrix, by the hand of the Mowife, as great as the whistle of a Spindle. This I thought fit to premisse, lest when I shall report them, the faith of others and my own experience that worms are bred almost in every part, others should think I relate either a thing very strange, or what is false. Worms seldom appear in the molt vehement pain of the Hemorrhia, yet Hippocrates teacheth it that it doth come to paffe sometymes, l. c. 1. The Pamant call this disease Nymwy Rohac, the Germans Hauptwurm, and it was formerly frequent in Germany and Hungarie, and all that were taken with itfell into the frenzie, or madnede, and when they were dead, and their brains were opened, a Worm was found there. Then the Pluyfians gave Garlick with distilled wine once or twice a day, and all that drank of that recovered, the rett dyed. Thib paulcurng five of his fellows, that were sick of that disease, with the same remedy, as one writer in a Letter to Gepuer. That Worms are often found in the brain, Thauum a Vaga feth, com in cap. 5. de loc. fce. Galen, and Bauffier Constantine c. 10. de f.b. Hungare. Alfo Cornelius Gramma, in Appedice spec. Gremcr, disputing of a pellamental Seminian, speaks of a woman in a citie near the river Me4, that had a long and vehement pain in her head, when she was dead of it her brain was opened, and there was found a great quantity of filth, and abundance of Worms. That disease is known fith Rhefris, by the internal corroding of the forepart of the head, and by the most vehement pain, that almost makes them mad. It is cured by neefings, and juices call up into the nostrils, that will kill Worms. Rhaphis, l. c. 9. But the Worms that are yearly found in the brains of Stags, and sometymes of Goats, Sheep, Rams, (briefly those that are far) that Hunters and Butchers know better than that I need to tell them. They are as big as the greatlest Worms, and of the same form with them, as Alexander B. meditius, and Mathebourn report. Theophratus mentions thefe Hift. ub o. 53. and Alexander Trallianus, l. c. 15. It is reported that D. merus of Athenes, when he was young was troubled with the Falling sicknesse, and he went to ask counsell of the Oracle of Apollo, and Apollo anwered him thus:

Take a tame Goat that hath the greatlest head, Or else a wide Goat in the field that's breed, And in his forehead a great Worm you'll finde, This cures all ickneses of that kind.

The young man was much troubled at this answere, and he repaired to Theognisias Democritum, that was then ninety yrs old, to tell him the meaning of the Oracle. This Theognisias told him that nothing could be plainer, for he had learned by long experience, that there were Worms in the heads of Shepp and of Goats, that being wrapt in a black Sheeps skin, and hanged about ones neck, would miraculously cure the Falling sicknesse. Some write, as Pliny witnesseth, that two Worms are found in the head of a downy Phalamion, which Worms bound up in a Deers skin, and bound a woman to the Sun Rising, would hinder conception. Concerning Worms of the Albemone. A woman, faid Pliny, that I knew very well, told me that she had seen more than once, some round Worms, that eecpt forth of the belly by the Navel.

The Ancients also say, that oft-times Worms will breed in the ears, against which they prescribe the following remes. Take the juice of wilde Cucumbers, and the juice of Garden-sage, or that with broad leaves, mingle them both alike, and pour that into the ears. Gal. l. 3. fec. loc. where reckoning up the Compositions of Aspermacbus for the ears, he highly commends this of Putrus and Hapsium. Take Opum two oboli, Myrrhe, Spikenard, Saffron, of each three oboli, burnt braffe five oboli, and of round and Steil Alum, each one dram, black Hellebor two drams, mingle them with sod wine or Oyl of Roifes, and apply them to the ears. Lib. Epurit. 2. he write, that a Locust will destroy Worms in the ca.5, and he bids apply a sweet Apple to the ear, with a hole in it almost quite through the root of Cyprus boyled in water, and the urine of a young boy, and the juice of Hemp, Rue, Bramble, and of Capers powred in. Lastly, many remedies may be fetcht from

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Columella.
Chap. XXXI.

Of the Description of Worms in the Intestines.

WVEE shewed before there are three sorts of Worms that are bred in the guts. It will be worth our labour to describe what each of them is. The round Worms are the first difference, and that manifest to all men, because these are the most common, and are so called, because they are indeed round and smooth, not unlike to those worms that breed in dung-hills and gardens, which we said before are called by the

Columella, Vegetius, Marcellus Empiricus, Tarrabius, Vign, Tardanus, and all the Arabians, and therefore here Huperfede, passing on to other matters. Mortainus prescribed to one that had a Poly-pus in his note, the juice of tocobac to be injected, whereby the Uter was purged, and many little Worms came forth: Wherefore they breed also in the nostrils, (for all the Arguments that Gabucius hath allledged against it) and are not only cast forth of other parts. Conswards know that Worms will breed under the tongue, and the Worm under a Dogs tongue (the carrying of which Worm about one, faith Piny, will drive off the biting of a mad Dog) doth prove that sufficiently: And Valenfae faith he hath seen Worms under mens tongues. It is known sufficiently by experience, that the very Breath and Lungs are not free from Worms; Antonio Benevenius, Benedatuus Renius, Munduella, Antonius Sivius, are my witniesse, who have seen them cast up, not by vomit or reaching, but even by coughing. Alfo Afluarius, Capite de Toff, writes, that sometimes a cough is cauof from living Creatures bred in the hollow of the lungs, and cavity of the breath, which being no greater than little Lute-stringgs, yet when they creep from place to place they make one cough, and when they lie still it ceateth. Alfo Abenwarm Abhemorae. lib. 1. tred. 1. c. 3. makes mention of them, af- firming that the old Phyficians faw and writ of them. Albertus and Gentilis faw fome in the liver and spleen, and Plateus in the gall bladder. Wherefore, whatever Galen or Avicenna may faie to overthrow this from the perpetual motion of the Lungs, the neerefes of the heart, and other frivo- lous Arguments, yet there is no man but will faie, but that reafon must give place to fenfe, especia- lly in natural things. There was faith Hieronymus Gabucius, a certain Noble woman of Fener (in his Comment of Worms, to which we are indebred for the great part of this history) when she had a long time been tormented with pain of her foftomach, all at the fife up a ball of hard flegme, this being diffefted, it femeed like a piece of fheef, and in that there was a Worm, and thus the woman recovered, whom the neighbours thought to be bewitched. Of Worms of the Reins and Bladders. When the reins putrefie, or the muscle of the bladder, oft-times little Worms are cast out, concerning which I thought good to write these histories out of Fenuius. A woman thirty fix years old, had great pain of an Apotleme in her reinf, and the confirmed, at length the calf forth little Worms, a fingers breadth long, which I firft faw in the bottom of her urine, Aino 1582. Randolph a London Phyfician, very learned and pious, when he looked on at the diffeftion of the body of one that was dead of the Stone in the kidneys, he found in one of the kidneys that was corruptd, it was wrinkled and putrefied, a Worm of a full length. Timothy Bright, a very skillful Phyfician, and to whom we are much indebted for the Epitome of the Ecclefiafical History, faw a Scholar at Cambridge when he lived there, that pilfed out a Worm an inch and half long; but it was not without feet as Worms are, but it had many feet and was very nimble. Alysius renardus Medecinae Digest. 4. Argrentites de ufe. mor. Randulfofum ib. de aegro morb. c. 17. Scholaitas Health lib. de morb. int. cap. de ufe. twt. (to fay nothing of Levius Cardia, and my own experience) do suf- ficiently teftifie that fuch Creatures breed also in the bladder: That Worms come forth of the matrix, like to Alcarides, I did not only fee at Frankfurt in a German woman, at eighty years of her age, but Alysius confirms the fame in his Epifle to Cijer, and Hippocrates. 2. de m. mulier. and Avenwar, lib. 1. tred. 2. have faid the like. Kirvait writes, that there is a Worm to be found in the matrix of a Male, which tied to a woman will make her barren. In India and the Countrays above Egypt there are fome living Creatures like to Worms in form, (they are commonly called Dragons) they are in the Arms, Legs, Shanks, and other brawny parts, also in young children, they breed in secret places under their skin, and more apparently: When they have flayed there for some long time, at fome end of this Dragon the place comes to putrefie, and the skin being open, out comes this Dragons head. Paullus ib. 4. c. 59. Suerius granteth this, but he queftions whether they be living creatures. Moreover, in the bloud it felfeome living creatures breed, like to Worms, that feed to the body, as Pliny writes, Hift. 26. c. 13. Plutarch. 8. Symph. who writes, that a young man of Aibus voded Worms with his feed. Ancira faw them come forth at the groins and buttocks, as he faith ib. 4. to whom Benevenius subcribes c. 100. Alfo they breed un- der Sheeps claves, (faith Columella) and fuch I have seen under the nails of those that were troubled with a Whit-faw. And thofe fure concerning Worms in the bodies of living Creatures. But fuch as breed in dead and corrupt bodies, (whether it be from the disease or the Chirurgeons fault) want a Latin name, but the Greeks call them Elythus, as appears by Hippocrates. The English call them Maggot. Callus would also have them called Eulinn in Latin, borrowing the word from the Greeks, We will speak of thefe in order. And first concerning Worms of the guts, the defcriptions whereof, the caufes, Signes, Symptoms and cure will bring much light to the History of therell.
the Greeks, the bowels of the earth. Thence as all other Worms are blind, without any eyes, and they are a hand length or something more: yet Benninumius, c. 2, affirms that a Smith did vomit up a Worm with groffe flegm, almost a foot and half long, very plain, with a red head that was smooth; and about the bignefs of a peafe; but the body of it was downy, and the tail crooked like the half-moon. Also at Rome, anno 1543, one that was now upon his youthful years, when as for many daies (as Gabucius tells the story) he had been in great torments of his belly, at laft he voided by ftool a great black Worm with black hair, five feet long, as big as a cane. He saw one also that did not exceed the hands length, like to the round Worms, but that the back of it was hairy, and fet as it were with red hairs; but this being call forth by uſing good remedies, he grew very well. One Antoninus a Canon (as Hiftoriusii Montanus tells the story) voided a green Worm, but he died shortly after he had voided that. But for the most part they are smooth and not hairy, a hand long and not a foot, at both ends pointed, as it were with a nib. And they differ fo far from Earth-Worms, that they wear no collar nor girdle: what concerns their colours, I have seen fome red, yellow, black, and partly white, or gold colour. Green ones are seldom seen, yet Montanus saw fome. Gourd-worms are thofe quick Worms that are like unto Gourd-feeds; concerning which the quefion is fo great between Gabucius and Mercurius; for when he treats of a broad V Worm, that is made of an infinite number of Gourd-feeds shut up in a skin; he faith thus: I, faith he, think a broad Worm to be nothing else bar, according to Hipparates, as it were a white faving of the guts, that comprehends all the integuments, between which fome living creatures are bred like unto Gourd-feeds: which may then be fecn when all that is faving is voided, yet oftentimes it is voided by parts: which if they break when they are voiding, then you may behold these Worms like to Cucumer-feeds voided by themselves, fometimes many of them being folded together, fometimes but a few. But if any man fhall fee all that portion, let him know, that that feaping off like a Worm doth not live, but the creatures that are in it, like Cucumer-feeds. I once faw this Worm called a Broad Worm that pafs, to have been of a wonderful length, and it crawled, a woman in a quotidiam Feaver voided it by fpoile, and when I did with admiration much view it, and fought to finde the cause of its motion: that other man, who faid he voided a portion of a broad Worm three daies before, which he would fowe unto me for a wonder, did fhow me with incredible defire I had to fee it; for this portion did move it felf, whence I was more defirous to know the cause of that. At laft feeving diligently, I obferved through the whole hollow part of it, a rank of living creatures like to Cucumer-feeds, which crept for of them as our worms do, fometimes one, fometimes two folded together, oftentimes four, or more, and that part of the faving of the guts that was empty of these creatures did not move at all, but fank down: whence it comes to passe that I think a broad Worm nothing else but fnofty matter bred betwixt the guts, or fqeunely flegm thickened by the coldneffe of the guts, covering the inside of the guts like a coat, which women that afflict the fick call a bed of Worms. Out of which fnofty matter little living creatures like Gourd-feeds proceed, as by way of a conception, which is covered all over by the second membrane in the womb which is first made of the feed. So faith Gabucius. Aquinnia agrees in this opinion, Fen. 16. trafl. 5. cap. 2. the Gourd and broad Worms are bred from the clammy matter that is fiftled in the superficies of the guts, which is comprehended by a flegmatrick pannick covering it as if they were bred from that, and did putrefie within it. Antonius Benninumius a Florentine fays the fame, and more clearly, in com. de mirand. mort. coxif, c. 87. who writes that in the mineral Baths at Aqquinus, that are in the Countrey of the Sennets, he faw a woman that for feven daies together drinking the water, did void thofe Gourd-worms in abundance, that ftook to fett together, one being clofe to the other, that they were in a rank in that was above four cubits long, yet you would judge them to be but one body and one Worm. Johnnes a Bookbinder at Bajil (whileft I studied Phyffeke there in that Acadamy, under Zangereus and Platerus my Matters, anno 1579) voided fuch a Worm ten ells in length without any pain, and not many years before he had voided the like. It confifted of many Gourd Worms; without which it had had no motion nor feeling, and might deferiously have been rejected from the number of living creatures. Platerus had fuch a Worm dried that was eighteen ells long, I faw it. Pliny writes of a Worm a fick perfon voided, was three hundred foot long: wherefore whatsoever Mercurius objects to the contrary, leb. 3. demorb. puer. cap. 7. fince experience proves the thing, is without any firm ground. He faith it cannot be that any living creature can produce fo many young ones, as there appear like unto Gourd-feeds; then, that the guts are not large enough to receive fo many young ones. Thirdly, that this comes to passe by reason of the violent putting them forth that gives the form, because the young one being broken by coming forth, is divided into thofe many pieces like Gourd-feeds. And hence we may conclude that thofe are trifles that the Arabians fpeak of Gourd-worms, forasmuch as there are none fuch: What is that I hear, moft learned Jefus? that thou being gray headed, and taught by long experience, shouldft fo applaud thy own imagination, that thou shouldst dare to deny a thing obvius to fene, and plain to our eyes, and to Gabucius Benninumius, and the Arabians? Go to, No living creature can produce fo many young ones like Gourd-feeds: why not I pray? when as one maid that took phyffeke to kill Worms, as Gabucius affirms, voided 177 round Worms? To fay nothing of that Benninumius reporteth c. 87. of the incredible multitude of them: and he was a man to be believed. And what thou speakest of the capaciousneff of the place, if that be an argument, it is an error to be laughed at.
For the guts will contain not only as many as are in a Gourd, but the Gourd itself prepared, By thy last objection thou dost but mock, but canst not weaken the opinion of Avicekmanus and the Arabians: for as much as in bodies dissected, Gourd-worms have been seen wrapt up in a roll, wherefore they took not their Gourd-form from the violent voiding them at the fundament, or from the manner of putting them forth, as thou either inventest maliciously, or ignorantly believest. I conclude therefore with Gabacinus, that there are Gourd-worms, and the broad worm called Tenia, is not properly a Worm, nor yet a living creature, but something about the entrails like white flavings, as Hippocrates faith, that is filled with thefe Gourd-worms put in fashion of a coat of Mail. Acurides have their name from Acerin, because they bite and tickle very much, and so exercize the patients that are troubled with them: others derive them from Acuridea, which signifies to move. The Ancients called them Beasts-worms, because they were seldom found in men, but often in Horses, Dogs, Hens, and Oxen. And they were so seldom seen in men, that Hippocrates, and Celsus that followed him, either knew them not, or thought them not worth the mentioning, and so they said nothing of them; and yet they write at large of other Worms. They are like the round Worms, but ten times shorter, (for they are seldom above an inch long) and what length foreever they be, they are thicker at the end of the longanum, and the sphincter of the anus they are found, causing a vehement itching in those parts. Galen writes in Lib. de Ling. Hippocrates, that Gour an old man called Acurides long Worms: which difficulty Mercurialis easily opens, for we should read it, faith he, not vauspiex great, but vauspiex small. Moreover, though in consideration of their breadth and thickness they seem long; yet compared with round Worms, they may be called short. These and round Worms are of divers colours, as the matter they are bred of is, or in respect of the heat that concocts them; but Gourd-worms are alwaies the same: whence I should conclude that Gourd-worms breed only from flieg, but the rest from all humours and excrements. Acurides oft-times come forth in great numbers, and before they be voided they prick much.

CHAP. XXXII.

Of the Original of Worms in the guts.

Aristotle lib. 5. Generat. and Hippocrates before him, 4. morb. make the material cause of Worms to be dung. Orbisius l. 3. Aph. 30. and Montanus that followed him being his Master, thought that living creatures might breed in the guts of all kinds of humours: and Mercurialis, who thought they were deceived, was blinde himself at noon-day. But let us examine his Arguments: It is found; saith he, that they will not breed from blood, because blood never produces so much, that living creatures may breed from it: Alfo he affirms from the judgement of Alexander Sylvanus, that living creatures cannot breed in the veins. But experience cuts off the nerves of his first argument; and the Authority of Rhases, Lophaïs, and Pliny, overthrows the second. Alfo they cannot breed of a melancholy humour, because it is cold and dry; nor of yellow choler, because it is bitter, and such creatures are not fed by bitter things, but destroyed. For which opinion, though he urge Aristale, Hippocrates, Galen 4. simp. med. Egineta, lib. 8. c. 27. yet what is there more slender than the opinion of them? For Butchers know that in the mists of Sheep, which is the fountain of melancholy humour, and in the gall of Oxen, which is the receptacle of bitter choler, innumerable worms are oft-times found. And I see no reason why Worms may not breed from yellow choler, as well as in Wormwood; from melancholy as well as in felines, from blood as well as in fugar. But if they be not bred from them, whence have they that matter they breed of? The Physician of Pallas will answer, It remains therefore that they can breed only of raw flieg, which either aUeth from too great quantity of the beast meats for want of heat, or quantity of bad meats corrupt by deprivation: which opinion, though it well agree with Galen, Egineta, Asius, Arcentor, Avicekmanus, Columella, Celsus, Alexander, and chiefly with our Mercurialis, yet in my judgement Hippocrates is in the right, who thought that living creatures are bred in the little world, as well as they are in the great. Therefore as in the earth there are all kinds of humours, heat and spirit, that it may nourish living creatures that breed, & hath man all kinds of mischief that nourisbeth things that breed. Moreover, when as these living creatures do reprefent perfectly Earth-worms, no man in his wits will deny but that they have both the same original. What flieg is there in the earth? yet it breeds round Worms, and Gourd-fushioned, and Acurides, and all forts of Worms, and the warme and warme earth abounds with them, so far is it that they should breed only of raw and corrupt humours. Do we not alfo daily fee that Worms are voided by men that are in health? For I knew a woman of Flanders, that at Francfort on the Main, which from her youth till she was forty years old, did daily void some round Worms, without any impairing of her health, and the was never sick of them. I conclude therefore that from every raw humour of the body Worms may breed; and not only from crude or corrupted flieg. The formal cause depends from internal heat, which is weak, gentle, pleasing, and fit to breed living creatures; wherein that plattick force of Calendick Nature, (to use the word of Avicekmanus) doth make the colours by the degrees
Of lesser living Creatures.

Of the signs and cure of Worms out of Gabucinus.

Let us therefore shew the signs of Worms, beginning from those that are called round Worms; both because they do more frequently vex children, and because they produce more painful symptoms; of which Paulus writes thus: they that are troubled with round Worms, are cruelly torn in their bellies and guts; and they have a tickling cough that is troublesome, and somewhat reddish, some have a hickop, others when they sleep leap up, and rise without caufe; sometimes they cry out when they rise, and then they fall asleep again; their Arteries beat unequally, and they are sick of disorderly Feavers, which with coldness of the outward parts come thrice or four times in a day or a night without any reason for them. Children will eat in their sleep, and put forth their tongues, gnash their teeth, wink with their eyes, they will be very silent, and are angry with those that rowe them up, the balks of their cheeks, in a short time, are sometimes red, sometimes wan-coloured. If the Worms run up to the Stomach, they cause nauseating, nauseaing, and want of appetite; and if the sick are forced to eat, they scarce can swallow it, and if they swallow it down, they vomit it up again, they void many corruptions of meat by their bellies, and they are swoln like a drum, the rest of the body grows unreasonable lean, not by reason of hunger, but by immediate evacuations. These things happen when these creatures creep and gnaw in the belly. A feverish heat sends up ill vapours to the brain,
brain, that arise from putrid moisture collected in the stomach. So writes Paulus. But Attius out of Herodotus writes thus: Those that are troubled with Worms have a most cruel pain of their stomach and belly, and they have a little frequent tickling cough, and yet they spit up nothings: in their sleep they shiver, and rise preternaturally; some again put out their tongues and flout their eyes, and are silent, and cannot endure to be rowded, and cannot watch for weaknesses: some have their eyes bloodshed, their pulses unequal, obscur, deficient, and recurrent; some want an appetite, children while they fast, bite their tongues, and move their mouths as if they sucked, or eat meat. But these things are done for a short time, and by circuits. Moreover some children besides reason, rise with crying, and presently fall down again: some crawl their teeth, which it seems happens when the Worms fly, and gnaw their bellies and guts. And now it appears that some are come up into the stomach, and cause loathing, and bitings: oftentimes so by themselves they are call upward, but sometimes with some flogmatick humour. Some Infants neglect the motion, and are benummed, and like those that are in a swound, they sweat a cold thin humour, and most commonly they are wan-coloured: sometimes the face will be red, especially about the cheeks, but this colour again is changed into more than ordinary paleness. Others again like dotards speak strange words in their sleep, others change their places they lay on, full sleeping, and they are vexed, and turn from place to place: but very few of those do cry, for most of them are void of reason, and are silent. Alto they that are vexed with round Worms, loast their meat, and if they eat any thing, they call it up again, or loath it so much they can hardly swallow it: for they fall into Feavers with vehement cold in the outward parts: some have their bellies swoln like a drum. So faith Attius. But these are the marks he reckons from Hippocrates opinion: Worms in the belly are discovered by these marks: If they be sleepy, and the disease will not let them, and their outward parts be cold, and there be gnawing at their hearts, the urine troubled, and the tongue full of moisture; also they that have Worms in their stomach, are full of spittle; and if any little Worm comes forth they spit no more: therefore all those that have Worms in the mouth of their stomach, do commonly call them up all by vomit, but those that have belly Worms, vomit them by siege. But they all nauseate, and vomit up what they take in. They are like to those that are pricked, that have contractions all over their bodies, and move suddenly and confusedly, and they have torments and pains of their guts. Vapours carried to the head cause Vertigoes. Moreover the manner of diet that the party used will shew the generation of Worms, and all the rest. These are the signs of round Worms; but all these signs must not be sought for in every one, as Paulus faith; but some and the principal of them. I might joyne here many things out of our new writers, unless what they say, and more also were not to be found in Avicenna, whence they borrowed it.

**Signs of broad Worms.**

Paulus gives us these notes of broad Worms: sometimes they abound in those that have Feavers, and sometimes in those that have none. In Chronical diseases they breed, gnawing the stomach, and causing a greedy appetite. They eat the meat so fail, that we need more, and if it be not present, they bite shrewdly; the body growes lean and weak, and unequal. But the most certain sign is, that some bodies like Cucumber-seeds come forth with our excrements: so faith Paulus, and Attius doth not differ from him, but that he faith, that they gnaw the stomach continually, and cause an insatiable appetite, and that the meats eaten soon turn to excrements. That they are affected grow weak of body and sluggis, and are always hungry, for what is living in the guts, when it hath consumed the meat, feeds on the body; but this sign will not fail us, if some things like Cucumber-seeds come forth. The first Hesperides gives are thefe: He writes after this fashion: There is another kind of this, that comes forth like the white flavings of the guts; which have these marks: The party voids seed like Cucumber-seed, and when he is falling he is vexed, and spits much, his liver being affected, sometimes not; and sometimes when this vehemently affects his liver, it drops his speech, and he spits much, and after that it drops: and sometimes there is great pains in the guts, sometimes the shoulders ache, and then it stops again. Sometimes these are the signs of the broad Worms. He that is affected with this Worm, is almost always in health, but when he growes weak, he can hardly endure it, or be recovered. For this broad Worm takes some part of those things that go down into the stomach, and if care be taken it may be cured, but if not, the Worm will not come forth itself, nor doth it kill a man, but growes old with him, &c. Hesperides are alwayes about the botomme of the belly as we said, and there they cause a great itching almost continually, as Paulus and Attius have written; and sometimes, as it is reported, they will make one faint. For that is shewed by their name. For they moving alwayes do continually exercize a man and tire him out. They that are troubled with these, feel alwayes a heaviness about their Precordia and backes. The signs of these are chiefly taken from the filthy smelung of the excrements. That they have Worms their eyes at first shine, their cheeks are wan, in the night they have cold sweats, their mouth is pale, they start in their sleep, in the day they are more feverish, their tongues are dry, their breath commonly stinks, their face is pale, they nauseate and vomit often, they loast meat, they craft their teeth, especially in the night, they put forth their tongues (and they seem to eat) they are angry with those that awake them, they speak strange words, sometimes they are in a lethargy, and pick frares, and their heads ache, they cry out in their sleep, as the disease increaseth, their hearts beat exceedingely, their voice is interrupted, their arteries beat weakly, sometimes in the height of their pain, they are extended, and their mouth foames as in the Epileptick, their belly is swoln like a Tympy; some-
Of lesser living Creatures.

Sometimes the pains abate, and again there follow torments, and Colique pains, with a barren liquid flux of the belly, sometimes they are colitive, and the excrements are hard. These are the signs of Worms, now follow the Prognosticks. The Prognosticks are very necessary in all diseases to know, what will be the event, and to know the condition of the patient serves much for the cure, as Hippocrates, especially in his Prognosticks, hath abundantly shewed; who in the beginning of his book de pruent. Medico, hath delivered it: Especially foretelling here before the patient, things present, past, and to come, and what the sick have neglected, he is thought to understand the condition of the patient; and hence it is that men will better dare to trust the Physitian. But because it is difficult to foresee all this, unlesse we use some artificial conjecture (I call that an artificial conjecture, that comes very near the truth) and who can easily attain this, unlesse he have learned the things that belong to the art, and remember them, and hath with all diligence exercised himself in the practice of it? The things will be thus known. If a man suppose that there is any vital vertue, he must know the disposition of the patient in strength and weakness; and when he is perfect in these, he must study further to know all differences of diseases in the great nee, and manner of them, and then to learn the foreknowledge of the future state. And when he hath learned all these, then he must exercise himself both in comprehending the magnitude of the disease by exact conjecture, and the force of the patient, and how long they may last. Now practicel will help him much in the present, and before he hath diligently learned all these, it will no whit profit him to see sick people: wherefore they that professe physick, proceeding in this method, shall never undergo any disgrace, neither in curing, nor foretelling of future events, which they report some famous Phystianes have fallen into. Hence it may be collected why some Phystianes are more fortunate than others, and what a fraud there is to resemble aPhysitian more fortunate then another; how absurd it is, that is, Galen and Hippocrates have shewed; saying, that a Phystitian must be exercized in all these things in his minde, and he must be diligent, and prudent by nature, that comparing all together, he may get a gross summe of predictions, that shall be useful for himself and for his patient. For if the force of prediction, that always for the most part, what the Physitian foresees will come to passe, while the Physitian is perfect, and the sick doth not neglect his orders But becaue, as it is evident, a Phyitian by predictions may get immortality almost, so chiefly from those things that do belong to this affect, he shall win glory to himself, by telling the sick their condition, who for the most part are children, or ignorant what their disease is. Since therefore Prognosticks are chiefly necessary for this disease, I wil not fail to set down what the Ancients have written of this disease. Paulus a great follower of Galen, writes of these things to this purpose. Worms bred at the beginning of Feavers, have their subsistence from the corruption in the body, about the slate of the disease, from the malignity of the disease, about the declinings, they grow better. For Hippocrates, faith, it is good that round Worms come forth, when the disease comes to a Crisis. But Astius writes thus from the opinion of Herodotus a Phyitian. Worms bred in Feavers, and without, that differ one from the other in multitude, magnitude, colour, and time. For Worms bred at the beginning of a disease, have their being from the corruption that is in the body, about the vigour of it, from the malignity of the disease, about the declination, from the change to better, and they are soon also voided forth, Nature driving them to the outward parts, as the doth the rest of the excrements. But the greater ones are wretd at the lesser, many than few, red than white, living than dead. Our new writers adde to these; if round Worms are call forthe at the beginning of acute diseases, they thaw pellet diseases, but if dead ones be cast forth when the diseases decline, they are an ill sign also, however they appear both these times, it is bad. It may be because that Fever that follows Worms is always naught, because it continues the matter for Worms. It happens also that the Worms are cast out of the fire and grow hot by reason of a Fever, and so are wreth these together, and moved, that they so much the more affect and trouble those that have these Worms. They adde further, that it is proved by experience, that Worms are in the belly, if in the morning you sprinkle cold water on the mouth of children stomachs, for they will all gather to one place. Worms sprinkled with blood, to voided is ill, for they shew great hurt of the guts, to call Worms up by vomit is naught, for it fwi the stomach to be flushed with filthy humours. Frequent cold breathing of children, their bodies yet swelling, is deadly, for it shews they will die the next day. If the eyes of the sick are somewhat held together, and cannot be closed by the fingers of those that stand by, death is at hand. Some there are, it may be following the opinion of Alfarasius, that say that those who are troubled with Aphatic, are not short-lived, but there is a great question to be resolved, and that being done, I shall put an end to those things that concern the Prognosticks taken from Worms. Astius a little before said that live Worms were worse than dead ones. But Rbasit and Antonius that as follows him, thinke the contrary, absolutely preferring the dead ones before the living. In which question, to pife over other men, I shall say what I think, that the strongest affettion is taken from those that are dead, because they must needs be driven forth, and cannot come forth of their own accord; yet I follow Hippocrates, who in a certain place useth some words that are difficult, wherein he would have us to consider diligently what symptoms Vomits breed, for if they come forth without any symptoms they foresaw a good sign. But he makes it clear elsewhere thus. It is necessary that round Worms should come forth with the excrements, when the disease comes to the Crises. So that by this we may understand, that if they be voided any other time, it is done rather symptomatically than by force of nature, and therefore they shew corruption or malignity, as Paulus and Astius distinguish.
The cure.

But because we can never rightly undertake the method of all way of curing Worms, unless the belly in which they are be well disposed, nor can this be unless the whole body be so, and this is excellent well performed by good diet; wherefore that in the first place must be well ordered, for without that all helps are in vain, for the preferring and repairing our health. For this is so famous, and almost the best part of Physick, that that admirable Cony, Celsus, Galen, Pliny, and almost all the old Physicians, could never give it commendations enough. Alexander formerly esteemed it so much, that he almost took away the method of curing by Physick, and wholly turned all curing upon diet. Now this consists not only in the quantity and quality of meats and drinks, but also in all those things that befall us whether we will or no, as in sleeping and waking, motion and rest, as also in the repulsion and emplacement of the whole body and of every part, and in the effects of the moon, but chiefly in the Air that is about us, which not only flecketh to us outwardly, but continually enters into the inmost parts of our body by the drawing in of our breath. As for what concerns those things that we take, because they are such things that every man knows, I shall say nothing of them. For there is no man ignorant, that divers meats, and of ill and naughty juice, and disorderly taken, will breed crudities, and that glutony and drunkenness do our bodies great hurt, yet many kinds of meats, that are hurtful in other diseases, are profitable in theirs. Wherefore we shall as it were besides our purpose, and by the way touch upon these, first adding what Paulus writes. Let the meats of those that have Worms be of good juice, that may easily be dispersed, and passe to the parts, and neither foster the caufe, nor weaken our forces.

Wherefore we grant them wine mingled with water, and let them eat often both for their need, and that the Worms may not gnaw them. If there be a scowring of the belly, it is a sign that many are bred, the meat being not dispersed; and in that case Pears or Quinces must be mingled with our broths; Wheaten bread is a wonderful help, having Annised mingled with it, or Fennel or Salt; or bread that is between Bran and Wheat, called gruyter E, because there are joined together in it, the Bran, the Hulls, and the Flour. Men call also this bread, victuage, because all the Wheat, without taking any thing from it, is made into bread. Also the wheate it fell that the meat is taken from must be the beet, for some of these have much Bran, which is the currier wheate, but the finer wheate is the beet. But wine that is mingled with water, because it gently bires, is held to be very convenient. Mountain birds are fit for their meat, and young wood Pigeons, green Grounded, and Geats-heard, the broth of Milk Chyckes, and Colwerts, and Capers, and pickled Olives eaten; and if there be no Feaver, let them eat their other meats with Mulhard, also four and only things are commended. Also Panick (which Doctors called the honey of Core) is most durable, so be it may be reckoned amongst Core. Also Spelt in the decoction of Myre, and a Piflam with a great quantity of Oyl of unripe Olives besides these, Lypuries, Cloves, Bees, Mints Smallague, R rith, and Fawce eaten are good. Give children before all meat, a decoction of Sebells with Mints. Milk is very hurtful, as also Firth, and Pulfe, and whatsoever is of a cold grosse substance, and hard to be digested. Bread unlevened breeds Worms, for it is good for no man, and so are all moyf meats, that easily turn to corruption within.

For all kind of Worms it is most convenient to use abstinence from such things as bred them. And when they are bred, it is good to eat often a little at a time, and that is beet, when they leave off gnawing. But those that have Acrasides must eat meats of good juice, and of easy digestion, that the force of them may not reach so farre as the right gut. For the matter fit to breed them is so consumed. Thus far for meats and drinks to be taken. But the other kindes that are not so manifest, shall be handled by us also with all brevity. And we shall begin from fleete. It must not be too little nor too much, and in the night rather than in the day, at least two hours after meat. Moreover, to be long iddle is nought, let exercise precede meats, and rest after meats. Nor is any motion to be taken for exercise, but that which makes us breathe more; unless it be when we have taken Physick against Worms; for then we must ride or run, to shake our bodies; for they are more easily call forth by hard exercis, for labour: but children will hardly observe these rules. Care also must be had, that the belly may twice be unburdened, and if that will not do off itself, we must use a Suppository or Clyther to provoke it, made of such ingredients that are fit for this purpose. All affections of the mind whatsoever they be, must be set aside, as quarrelling, anger, sorrow great cares, and thoughts, fear, feares, envy, and all such kindes of perturbations, and chiefly after meat. For these change and turn the body from its natural state. Let men beware of cold North windes, and let them not go barelfoot. The air because it always is about us, cannot be chozen at our pleasure: for it is sometimes a defence for us, and sometimes the caufe that makes Worms, or fosters them: It will be a defence if it be very hot, and dry, pure, clear, and calm; and it will chiefly foster the disease, when it is very cold, or moist, or moved by the North or South wind, or by too great heat, or by very great cold, or other forces, and then it must be thus prepared: To burn in our Chamber wood of Juniper tree or of Citro, or Peach-tree, and such wood as is against Worms. Also to perfume the place with tops of Worm wood, Peach-tree leaves, Citron pills, roots of Pomegranate trees, aloof with Fern, and Iy. But that is the bell that is made with Myrrhe, and Aales. Another remedy that succour the goring spirits, by reason of Worms. Amber greece two peny-weight, Musk one peny weight. Gum Aaback four peny-weight. Roses, Sanders, Cloves, Privet, Frankincence, of each one peny-weight Gallia Medicina so called, six peny-weight, Lignum Aoles burnt to a coyle twenty peny-weight, the quenched coales of Vice-branches, what is sufficient, make them up with Rose Vinegar.
Worms are of times exasperated with vehement remedies, that they bring children to convulsions, fwoonings, and death; wherefore they are not hastily to be given, and at all adventures of Worms. But because that remedies by reason of their different qualities are thought to be good to kill and bring forth Worms, therefore in general, such remedies as heat, drie, cut, and are sharp, bitter, salt, or low, and attenating, are to be used. For either they kill the Worms by their sharpness, or bring them forth by their bitterness, or they allure them to come forth, or else they are known to be good to bring them forth by the looseness that follows. They are brought forth 'tis likely at once, by such fopping means as make the pittages slippery, or by some effectual quality, that is namelesse. There are some good remedies that effectually drive forth Worms, and some by a hidden quality, as thaysings of Harts-borne. But those things are but that kill the Worms, for so long as they are alive they are an occasion of mischief. And they are hardly driven forth when they are killed, wherefore they must be drawn forth by Clylers; otherwise they send a filthy virulent vapour to the brain, and likewise inflame the body, and hurt the appetite and conception. But because Worms happen most to children, who are hard to be dealt withall, I thought it not fit to conceal that wonderful way that Paulus mentions, whereby Aloes, and certain broths are given to them by way of foppings. A certain Cooks Infrument or spoon that is called {c}io{c}eso is put into their mouths as they lie upon their backs, and by a little Clyfter with a strong Pipe, Aloes is forced down their throats, holding their mouths wide open as far as it is possible. Paulus makes mention of this, but doth not tell us what it is. But whatsoever Zemenyst is, we understand two things by it, that it is made defending, that thereby the bitterness of the Aloes is not called. But by that other Infrument that Paulus calls Clyferidium, it is forced in by violence. But force and nature concouring, the motion is most swift, the heavy matter running downwards, and is violently driven in by it. Paulus also describes another Infrument, whereby moyl things are injected into the fundament, it hath many holes quite through it, and there from the matrix are called Metrenchite: But Actius speaks clearer thus. To which purpose you must provide a horn Pipe that is full of holes through it, large at the bottome, and convenient for the largeness of the place, which being thrust in beyond the Sphincter of the Anus, we fill with juice of Cedar, so that the liquor may fire forth every way. But forasmuch as these Infruments are unknown to us, when remedies are given either to kill or drive forth Worms, πόλος the childes nofillis, and then wath its mouth with some sweet or sharp thing, and when he hath drank down the medicament to kill the Worms, his stomache must be fomented with Acacia or Hypocitis with wine. Those things that kill Worms are belt given in sweet milk or honey or Oxymel, or syrup called Acestus. Some first satisfie the children first with three days drinking of them, and then they give the physick afterwards. Also they give Clylers of the fame sweet things, that they may entice those Creatures to the lower parts. If the belly scoure, it is of necessity that the Worms must be killed at last, for the motion of the belly will call them forth. But when the appetite is hurt, and the belly loole, the Worms must be killed with bitter things only, that are somewhat altringent, as with Wormwood amongst hot things, or Southernwood and Worm-feed: Or amongst cold things, with Pomegranate pills, Acacia, juice of Plantain, Purflane and fuch like. Of hot things the feed of Creffes drives forth all belly-worms, bruised and drank in wine or Vinegar, yet more effectually if wide Mints be added, yet it troubles the belly. The meal of Lupins laced with honey or drunk as a Pothe, are outwardly applied to the naveel with Bulls gall, drives them forth. Those that are alio being inbued and eaten with their bitternesse. Also their deception can do much, being drank with Rue and Pepper. Sea Worm-wood boyled, or brayne, or with Rice, adding Honey to it, kils Worms in the guts, and it will do it better with Worm-wood, Southernwood the fame by its bitternesse; Cardamomum kils them. Also the decoction of Hytop drank, or the herb it self laced up with Honey. So Calamint kils Acrarides, and other VVorms, if it be drank with salt and honey, or if it be eaten raw or boyled, or the juice of it given in a Clyfter, or drank. Also the decoction of Thyme, or Rue boyled and drank with Oyl for eather them out. Also wine of Cedar, and the liquor of Cedar it self. Unripe oyl of Olives, if it be drank plentifully, for it is presst out unripe for children. Juice of Oenanth hath the fame operation, as oyl of unripe Olives. But the best thing against VVorms are sweet Apples called St. Johns Apples, for they loothen the belly, and drive out the RVorms; which by what faculy they can do it, (being they are sweet, and of a honey taffe, from whence they borrow their name, and since fo they shall rather feed RVorms) is perhaps, because by this meat the belly is made looffe, and the RVorms follow; and the RVorms that otherwise would flay within, by the force of the excrements, as Fitches in a torrent are carried away, when in Summer great rains fall, and so are they carried downward. For Diogaridies lib. 1. cap. de Melimenta, faith that those Apples make the belly solubile: Also the feed of Coleworts, especially that which grows in Egypt, drank, drives forth RVorms, namely, because the temper of it is drier, and more wilde. The fame is done by Oyl of Palma Christmas drank. Myrrhe also by its bitterness both kills and drives them forth. The decoction of Elecampane, Squils taken with Vinegar and Honey, but the Squils must be first rost, and otherwise it is held to be most pernicious to the entrails. Also they use to give against all RVorms the decoction of the root of Capers in honey and vinegar. And Diogaridies lib. 4. cap. 1. writes, that the herb called small Turn-foill drank with the feed, adding thereto Nitre, Hytop, Creffes, and water, will force out all fortes of RVorms, long and flat. But Paulus unless there be an error in the Prefcvections Cardamomum for Creffes, lib. 7 c. Rocket-feed in wine,will drive out all living Crea-
The Theatre of Insects: or, Book II.

Cold Simples against Worms.

I also seven or five Earth-worms drunk with sweet wine, will drive out all kinds of Vworms: Bitter Almonds and the Oyl is good. Agrick with Honey, but it purgeth with trouble; for it is hurtful to the stomach, by making it slippery and loofe. Storax flavished with Rotin of Turpentine: Aloe drank in cold water or milk, the fame drank in a decoction mingled with Honey, brings them forth without trouble. The feed of Tithymal or the juice of it about five drops mingled with Figs or Dates. The leaves of Agnus Callus, Polygodne, Chamepythe, Centaury the leaf, bruised and drank with Vinegar. Also one peny weight of the root of the same drank in three Cystis of wine, doth help. Herehouse with Wormwood and Lupins, boiled in water and Honey, of each alike, and with wine applied twice or thrice, kills all Worms in the belly: Collins by its bitterness, with water kills all Worms. But Distiforides li. 1. writes that it drives out only broad Vworms, with water and honey; which place Marcellus interpreting, blots out that word [and honey] as put in amifsie, for this reason, because it is contrary, and seems not to agree with the cure for Vworms. For faith he, they are raised and nourished by sweet things, and belly Vworms are not driven forth by them, unleffe perhaps Honey must be therefore added, that they being deceived by the sweetneffe of it, they may take in the bitter Collins in greater quanti- tity, as we use to do in curing children, when we give them bitter or strong poisons, we cover them with some sweet favour, or pleafant smell. In which businesse he seems to feek a knot in a Bull-rush (as we read in the Comedy) and yet he confefeth it to be otherwise. For whether the word Honey be read in Distiforides or not (for I am not yet certain of it, nor hath Basileus set it down) it is sufficient that bitter Medicaments, (such as Collins are, and such like) were given alwaies almost by Distiforides, Pliny, Galen, and others, for to cure Worms, with sweet things, and chiefly with Honey, or Mede, or Ozymel, for the fame reason that Marcellus mentioneth, lib. 4. cap. 57, which Paulus added in these words. Because some men oft times refuse bitter poisons, as having an ill taffe, of these thing herein comprehended, they fhall not give any that are manifeftly bitter, but mingled with some sweet thing, as he saie a little before, that all these medicaments must be mingled with Honey or Ozymel, and so given to drink: Or as Lucetius faith, that the improvident Age of young people may be deceived, or else may be able to take it, being enticed by such a taffe. For children most commonly are subject to Worms. Therefore nothing hindereth but that the word Honey shoule be added, as Marcellus himself testifies, if we read him in some old Copies. Likewise a Cantharis bruised, and drank with a Briony root, drives forth Worms, as Galen writes, lib. de compof. Theriacs. Of cold things, the juice of Moufe-eare, with Ale, of each one Cysthus. Groundef eaten, the juice of Plantain, especially when the belly is loofe, given one spoonful or a small measure to drink, and the herb felf bruised, laid to the navel. Coriander feeds with the juice of Pomegranates and Oyl delthroy the Worms in the guts, or drank with sweet wine. Hot things, as boiled Beets, taken with raw Garlic, by the Nitrous quality it hath, brings them forth, but the juice is hurtfull. A Pomegranate bruised, and boiled in three Himina of wine to one He- mina, drives forth Worms, takes away the pain, and the juice of the root one dram and half weight, will kill them. Sumach of Syria will do the fame, and the feed of Orache. Our new writers adde, that it is manifeft by experience, that the sharpett Vinegar drank when we go to bed will drive out the Worms. But amongst thofe things that prevail much is Corthinia, so called, which was powdered or mingled with Honey or Ozymel, or drank with Honey-wine, doth wonderfully kill Worms, or drive them out half dead. This took its name from the likeneffe of Corally, fince both of them grow in the water, and for sixty years almoft it hath been used to good purpofe to drive forth Worms; if I be not miffaken, this is that which Distiforides lib. 4. and Galen call Pao ou- xane, that is, Sea-mofle; and if that they did not attribute it to the fame force we do to the forth Worms, as we fee in Corallina, as they call it, I fhall not therefore think that it is any thing elfe, besides Distiforides and Galen feem to: For the Ancients did not know the vertues of all Simples, for the true nature of each cannot be found out by any other way than by its effects in phyllick.

A mighty work and fecret from God, than which there can be no greater found out. Also many things are found now adays that were not found out in our forefathers dayes; and no wonder, since these experiments are made by Countrey-men, and fuch as are ignorant of learning, who commonly live only where they grow, besides the negligence of feeking, when there are fo many Physicians it hand every where. Also many things are found out that want names: To this we may add the uncertain way of finding out; for in things that are found, fome were found by chance, faith Pliny, lib. 25. cap. 2. others were revovled by God. But the foulefe cafe of this rarity is, that they who know thofe things will not difcover them, as if they should quife lofe what they acquaint others with. They are as envious indeed as thofe are who either suppress the monuments of Antiquity, or else utterly demolifh them; which they for that end, what is written by the Ancients may be attributed to themselves, or if they have delivered any famous matter, they that write other mens opinions will let that be left. But if there be any that will contend, and fay it cannot be that they shoule be ignorant that Sea-mofle was good to drive forth Worms, to thofe I anfwer, that the Ancients did not commit to writing all the natures of Simples that they knew. For we know many of the precepts of Pythagoras and Secretes; which yet cannot be known out of their Books, because they wrote none. And Pliny though he left fo many Books in writing, yet besides thofe he wrote, his followers take many things for his that he never put in writing. Nor hath that Sover growing in every place, as they report, the fame faculty, but the Apothecaries in fome certain places of Italy fith for it, and they fell it under the name of Corallina. But let this suffice.
Of lesser living Creatures.

This is rather to be enquired into, why, being that Corallina tannis salt, Digestion, Pinia, Galen, and others report it to have a cooling faculty, when as it is known that all salt things are hot, and earthly, not unlike to bitter things that are hot? Whether it be, because the sea-water is salt, yet hath in it a great deal of potable water (as Aristote hath sufficiently demonstrated it) and therefore by that it is the fels hot? Or else because it contains in it much earth, and so it is drier and thicker? But such things as grow in the sea, mutt needs be of the same faculty with it. Because therefore that Sea-moss grows in the sea, Digestion, and others attribute to it a thickening quality, that it contains in it much water fit to drink; and as of an earthly, by that it costs. Lastly all that are troubled with Worms, are helped with the smell of the hair of echinomon (they call it the Indian rat) as Paulus writes.

The juice of Horehound drank in Wine, will drive out of the belly round Worms: Worm-wood Wine drank both the same. The herb of great Turnifoon drank with its seed, adding thereunto Nitre, Hyloph, Creffes, and water, will call them forth. The fruit of female Fern 3 drams drank in Wine, will force out the round and broad Worms of the belly, as Rueflus Worms round, and Marcellus, who interpreted Digestion, do both affirm. But Galen faith that it kills not Afaicades, and round Worms, but Afaicades and broad Worms, for so he writes, lib. Therapeuten. method. cap. 14. broad Worms.

But Wormwood can destroy round Worms, broad Worms require more strong helps, as Fern is, and so doth that Worm the Greeks call 'Ανίσοσ. Theophratius was of this opinion, who writes that female Fern mingled with Honey is good against broad Worms of the belly, if it be mingled with Honey; and for Afaicades, in sweet Wine. For so he fets it down: Female Fern is good against broad Worms and small ones: against broad ones mingled with Honey, but against small ones in sweet Wine. It is certain that Afaicades both are, and are called small Worms. Moreover, Galen lib. de simp. Medic. foctul. 8. ascribes the same virtue to the female Fern, that the male hath. Now Pliny writes that the female will kill only broad Worms and not round. Plin. lib. hift. 27. c. 9. and again, that both, (that is, both male and female) will drive forth Worms of the belly, broad Worms with Honey, the rest with sweet Wine drank for three days, and he excludes neither round Worms nor Afaicades. But Galen in one place excludes both round Worms and Afaicades; and in another place he writes that it will destroy Afaicades with broad Worms. What now shall we say, where Authors are of so many different opinions? shall we say that female Fern will kill all Worms in the belly? For Galen ascribes the same virtue to it he both to the male, but that especially it kills broad Worms, and in the next place Atticus, which being at the bottom of the belly, require a stronger remedy, as Fern is, that the force of it may come so far. But since it can drive forth broad Worms and Afaicades, that are more feldenome, and the one is in the guts, the other fartherth from the stomac, it will far sooner destroy round Worms that lie in the upper guts. Galen therefore will not fight with himfelf in this, for it sufficeth if it will kill broad VVorms, and if it can destroy them, it can more easily destroy Afaicades, and easiest of all round VVorms. But Pliny, as who bef both of all knew that, faith it will drive out the rest alfo, (that is, both round VVorms and Afaicades). But that he faith fo is manifet out of Paulus, lib. c. 53. who in his method of curing round and broad VVorms, mentions Ferns which are all meagine is most properly used to drive forth broad VVorms, Athen. 16. Tertt. tradt. 5. c. 4. thesems this most clearly in these words: The medicines that kill Afaicades are stronger than those that kill long Worms; and those things that kill long Worms and Afaicades will also kill broad Worms. Gith or Nigrella not only eaten but laid in a plaifter to the belly, or anointed on the navil with water, brings them forth. In which place we must note Marcellus, who faith it will drive forth broad VVorms and not round: but Rueflus interprets this by the contrary. If Marcellus have done right, I leave other men to judge, this is certain that Galen is of Rueflus minde, who hath written only that it will kill VVorms; and as I said before, it is taken generally for round VVorms. Paulus and Aetiucus, agree with Rueflus, who in their curative method for round VVorms, often speak of Gith, but never for broad VVorms. Wormwood called Santonicum, of it self or boiled with Rice, adding Honey to it, will kill Worms. The seeds of Nettles bruised, or of Coleworts or Cummim, with water, or Mints with it, or Hyloph with Honey and water or Cretelles seed bruised with Vinegar, kill them. Ceflus lib. 1. 4. 17. Orbifius lib. ad Eunipsum filium, hath written that Calamin, Cardamom, Lupins, and the powder of them in drink, or with Honey by way of Elechuary, or given in Pofca to drink, are sufficient to kill round Worms. Also the leaves and buds of the Peach-tree bruised, and laid upon the belly the can do as much; also Mints in drink and Sorrel. Purslain boyld, the juice of Succory, or the decoction of Sebeflens, or the Sebeflens themselves boyld and eaten are very good. Also the ashes of burnt Harts-horn is thought very effectual for this use, especially of that which grows on the right side of the Stags head. It is burnt thus: Break the Harts-horn, and put it into a new earthen Crucible, and lute it well, put it into the furnace and let it burn till it be white. Scribonius Largus, c. 141. gives it thus: Harts-horn, faith he, ripe with a workmans raph, with water of Sebeflens boyled, give 4 or 5 spoonfuls of it, which were sunk the day before in 3 cyathi, then bruife and give it, adding the water to it. An Oxe thank burnt, and drank with Milk, drives out round Worms, faith Galen. Ceflus with water drives forth broad Worms of the belly. Galen de com. Ther. ad Plf. Cardamom, Garlick eaten. The leaves of female Fern taken with Honey in a Lohock. But the root of the male 3 drams with Honey-water drank, will drive Cccc them
them forth, but better, if it be given with so many oboli of Scammony, or black Hellbore. Al-
so the root of white Chamæleon, drank a fawcer full, for which use it is drunk with
Wine and the decoction of Origanum. Walnuts eaten largely, the pill of the Mulberry-root
boyled in water and drinks; besides that it loofeth the belly, it will force out broad Worms;
also the decoction of Pomegranate roots drives them out and kills them. The decoction of Pom-
granate pis can do as much. The root of wilde Buglos, a fawcer full, with Hylop and Car-
damom drank, doth the like. Aurellius the Interpreter of Deuterides, seems to have followed Paul-
hus, who saith that with Hylop and Cardamom: but Aurellius, faith, with Hylop and Crefles
drank, it will drive forth broad Worms, what was said before of Turfoil, Aurellius feems with
Hylop and Crefles. But the juice of Cedar kills Alcarides, and so doth Calaminst, the juice
of it being drank or given in a Clyfter. The decoction of Wormwood, mingled with oil and
given Clyter-wife, and the decoction of the leffer Century given with Salt-peter and Honey,
hath the fame force, or the decoction of the wilde Gourd, of wilde Saffron, if the right inter-
fine were firft emptied with sharp pickle. The root of female Fern drank for three daies in
3 drams of Wine, drives forth Alcarides. Also old Hogs grease put into the Anus, is excellent
good.

Both Paulhus and Aurellius tellifie that Feavers commonly accompany round Worms, and we
found it true by daily experience. When therefore there is a Feaver, sometimes we muft take
care to curc the Feaver and the Worms, and sometimes taking little care for the Feaver, we
must strive to drive the Worms out of the belly. For many that have neglected them have died
torn and eaten up by them, and some fay they have feen them come forth at the groins. But
we muft firft kill them all, and then drive them forth; they are killed chiefly with bitter things.
When therefore the cureis common both to the Feaver and the Worms, the more fimple reme-
dies are convenient, and where the difafe is uncertain we muft use things that are more milde.
For the Feaver is exasperated with strong remedies if we fhoule be miftaken; but when we are
certain how the matter is, we muft wait for the times of the difafe. For about the firft daies,
and the rather if they fhould appear then, we muft use stronger remedies. But thofe that ap-
pear when the difafe declines, are more easily cured, and the better if there be no infammations
or tenfions of the bowels. As Hippocrates faith well, ib. Apb. 1. c. 24. In acute difafe but fel-
dome, and that at the beginning we muft use purging Medicaments; and this muft be done with
premeditation, for thofe fwel molt, and are regarded as 'tis ofte seen, and therefore about the begin-
ing of thofe difafe, we may use sharper means with profit, but there muft be much cau-
tion, and premeditation ufed therein. Firft examining whether the patient can endure fuch re-
medies, it be prepared rightly for them, and whether we may expect a right Crifis by giving
them. For there is no small danger in an acute difafe, as the ficknefs of Worms is, to ufhe strong
remedies, becaufe all fuch means are potentionally hot. Therefore we that fuffer infammations
and exftentions, muft have Cataplafs of Linifeed, with the like quantity of meal of Lupins ming-
gled, or elle moult fomeraffions or yl of Cineammul, Wine, tops of Wormwood, and Aloeis laid
to their Pracordia; but where moderate Feavers moleft, give children before all meats, the de-
cocion of Myxato-drink, or givethe them the Sebellens themselves to eat with Mints. For thefes
things wonderfully help thofe are troubled with Worms, either becaufe, faith Serapion, they
flick by reafon of their sweetnefs to them, or else there are fo glutinous, that they cannot be
parted from them, and fo muft come forth with them. For Myxa are very clammy, that in
Syria the belt birdline is made of them called Damask-birdline: wherefore becaufe by their
clammines they bring forth Worms, if they trouble the floromach, they muft be given by the
mouth; but if they bein the belly and guts, by clifter: but to fuch as are come to ripe years,
flronger remedies may be given, as the decoction of Wormwood or Southernner, or the force of
the root of the four Pomegranat boiled to thirds, alfo three scruples of waffh Aloeis is given,
which is the molt commendable remedy for thofe that are flrong: alfo we ufe unflawh Aloeis,
and both, if they be feaverith, and but three moneths old. Earth-worms with boyled sweet
Wine may be given confidently; but if they will not drink sweet wine, give them with water and
honey, or as you thinke fit, fearing nothing, not defpifng the meannefs of it, give 9 or 7. But fitte
be not a naked infufion, but a certain knowledge that there be Worms, and that a proper cure
belongs to them, then you muft lay on Cataplafs with Lupins meall boyled in sweet Wice, to
which alfo sometime a root of Briony muft be added. In the mean time anoint the navil well
with Buil gill, or Gith bruised with womans Milk, or with Wormwood, or Southernner, or
Briony mixed with fat old Figs; anoint all the Spina dorsi with Deer-fuet, and cover the upper
belly with a Cerate made of Wormwood and Cyprefs oyl. Moreover a Suppoftier muft be put
up where the belly is bound, efcpecially for children, and if it profit not, then give a Chifter, the
vigour of the difafe abating, made of the decoction of Wormwood, or Southernner, or Can-
fary, with Honey and Nutre. And we fhall endeavoure to draw them out by fuppings, that make
the paflages flippers, such as oyl of unripe Olives, fuppings up by little and little two times a day
of it, for as it is bitter it kills Worms, and as it is gentle it cleans them forth with the dung. But
we muft alwaies inrease the pottions of oyl for they are very commodious. The Worms come
forth, some yet alive, but they are giddy, and as we may fay half killed, and many come out de-
ead with the excrements. Moreover Worms will breed when there is a fcowring of the belly, we muft
cure
cure them by hopping the flux, and by bettering the concoction with meats and Cataplasms. For the more the flux grows, the more the Worms breed; and when the flux ceaseth, the Worms do the like: wherefore we must diligently endeavour that the belly may be fopt and strengthened; we must therefore add to such Cataplasms as serve to stop other fluxes, such things as we said to be good against Worms, and that causeth no fluxes, such as are Wormwood, Southernwood, Santonicum; also Pomegranate pils, Acacia, Hypocistis, Balautia, and the like, with raw Barley-meal. Also Cerats laid on must be made of these. Also fuppings must be used amongst all which the juice of Plantain is belt; and the dry Plantain, for it is good both against the flux and the Worms. Furthermore the V Vine of the Pomegranate prefixed forth with shell and all helps exceedingly. But for nauseating that arieth from V Worms, and growing of the stomach, a grain of Salt held in the mouth, and melted and swallowed down, profits wonderfully, for it should feem the tartness of it, makes them presently fall down. But if a look ap arise from the same causes, pils are good, that have the juice of Radder-spin, Wormwood, Santonicum Water-mints, Scorodium of each four penny weight, boil them to the thicknes of Honey, then add fifty penny weight of powdered Aloes, and make pil of all, and swallow a penny weight, for this will take away the look ap, and kill the Worms. But if from the Feaver or filthy vapours arising from Worms, or the fumes of Medicaments (as most of those are that are given against Worms) rise to the head, so that there be great pain thereof, then anoint the forepart of the head, the forehead and temples with oil of Rofes, or the juice of Acacia, or of Hypocistis mingled with it, for it is most effectual. Others lay on leaven with a little Saffron and Vinegar, on these parts being appointed: for this cures all intemperate sleep, and other perverfe affeces. But amongst thofe men call Syrups, fyrup of Wormwood, Calamint or Horehound are commended: or make one thus: Take juce of Mints, Elecampane root, Wormwood, Rue, purified, for it is taken the foidment being call away, of each of them ha a hemina in weight: of the juce of Succory and Grafs, of each of them seven cyathi in weight, infule in their torrefied Harts-horn, Su- mach, Purflian feed, and flowers of wide Pomegranates. ftrain the decoction and make up all with Sugar, or the purelt Honey of Athens. Another: Take Southernwood, Calamint eight penny weight, Horfe mints, Elecampane-root freef, fix penny weight, boyl them in water to a third part: this decoction is given with fyrup of Wormwood, or Oxymel of Squifs. Alfo Wormwood-wine is much commended for thefe uses, but it is made divers waies, for fome let down Celtick nard 40 draams bound in a linnen clout, into a meafure of new Wine, and after 40 daies they strain it. Others caft a pound of Wormwood into 20 fextrami of sweet Wine, and a fhift part of Pitch, Roífn, and after ten daies they strain it, and lay it up for use. A fyrup againft Worms, with a Feaver and the fymptoms: Take fifteen penny weight of Grafs-root, Purflain- feed, fourk Dock, of each eight penny weight, ten iebeffons, boyl all to thirds, to ftraine the juice of Pomegranates, and Oranges, or lowr Wine, of each one and half cyathi in weight, as much of juce of garden Succory, the bell Sugar what may fuffice, boyl them to a fyrup: you may give Infants half an ounce, and young children one ounce without danger. A Julep that fhall help thofe are affected with Worms: Take Dittany of Crete, Gentian Zedoary, Arabian Coftus, one penny weight, feeds of Coleworts, Dill, Wormwood, Purflain, of each alike as much: water of Mints, Wormwood, Grafs of each half a hemina weight, boyl them to thirds and ftrain them, to thefe add of the bell Sugar twenty penny weight. But in a Feaver you may, give the decoction in water, or Grafs-root. Wheats, Barley, of each fifteen penny weight, to a large quantity to drink. Another moft effectual and very fweet: Dillihed water of Sorrel, Rofes, Grafs, garden Endives, Buglfs, juce of Pomegranates, of each on hemina weight, feeds of Purflain, Orach, Sumach, Citrons, of each three penny weight; Coriander-feed, Myrftle-berrises, wide Smallage, of each two penny weight, feeds of fourk Dock, Coleworts, Cummin, of each the fame weight; red Rofes, Tormentil, Barberries, of each two penny weight, fo much weight of Balautia, five penny weight of the ashes of burnt Harts-horn, white Dittany of Crete eight penny weight; the blefs of Mulberry-roots barkd. Fern-roofs, of each two penny weight, ten Bellets, one penny weight of red Coral, white Sugar what may fuffice, make a Julep. But the moft prefent remedy of all is that the Apothecaries call commonly Diureptpam, but chiefly with Rhubarb, three draams oft being swallowed down; which being it is proved by long experience, fo it hath alfo great reafon for it, that it fhould be preferred before all other remedies. For children enticed by the sweetnefs of the Antidote, will take it down willingly, and the Rhubarb kils the Worms, and the parts are strengthened by it. The Turphec drives them from their nells, and the reft of the ingredients do not only make it pleafant but harmlefs, fo that it is molt fweet, harmlefs and strong all at once: it is made thus: Take white Saffrers and red, Violets, Ginger, of each two penny weight; Annfed, Cinnamon, Saffron, Millick of Chius, each one penny weight; Myrtaria, which the Apothecaries call Turphec, eight penny weight; Rhubarb, ren penny weight. Scammone as it is usually prepared, four penny weight, the pureft Saffron Penny weight, make up all with this: and make Trophees (as the Greeks call them from the form) each three draams weight, where you have need of them, give one for this difafe. Another Antidote: Take Rhubarb, Saffron, Scammone, Wormfeed, Dittany of Crete, each two penny weight, the bell Sugar eighty penny weight, make them up with Grafs-water, and make Tro- chees; one penny weight of this is given to Infants without danger being dissolved in Grafs-water. The powder I use is good, and a powder thus prepared: Take Rhubarb, Agrarick, Germander,
of each two penny weight, Sea-molls four penny weight, Wormicede and Purflain-feed of each two penny weight, unwhashed Aloes fix penny weight, give a scruple of this or two oboli in Wine to children daily. Sometimes all these are bruised and sifted and made into pills with the juice of Wormwood or Mints, and three of them are swallowed down. Another for the same by another Author: Take Harts-horn burnt, the lefs Century, Mints, Pomegranate pils, Carway-seeds, Sumach, of each two penny weight, Carduus Benedictus, feed, thavings of Harts-horn, and of Ivory, of each eight penny weight, the bark of the roots of Mulberries pill'd, Colewurt-seeds, Citron-Apple-seeds, bark of Willows, of each fix penny weight, Purflain-seed, Dittany of Crete, four penny weight of each, Pearls, red Coral, of each two penny weights dry them and bring them to fine powder: one or two drams of this with Wine in winter, and where there is no Fever, or with Oxycrate in summer or to those that are in a Feaver is safely given. An Antidote that kils Worms, diminisheth a Feaver, and helps against pains of the heart: Take Wormfeed, Sea-molls, seed of white Smallage, Harts-horn burnt white, of each alike, infufe them all three daies in Vinegar, wherein let these things first boil, Purflain-seed, Sorrel-seed, Sumach, Coriander, Colewort-seed, and a little Myrrhe; then dry them, and add to them Orange seeds two parts, Citron-seeds one part, make them up with Sugar dissolved in the Wine of Pomegranates, and make morfels, to which you may add some little Cinnamon and Musk. But because it hath been seen oft-times that Medicaments outwardly applied have done much good against Worms, it is but reasonable that I should let down the manner of them: For by these we not only defend our bodies, but also we kill the Worms and drive them out of us: wherefore this may suffice that hath: Lupin-meal, lefs Century leaves of Peach-tree and Howshound, bruise them with Poica and lay them to the belly. Another tried by our master Plutarch: Take the lefs Century boyled in the oyl of Peach-kernels, anoint the Navil with this, and it will drive forth the Worms. Another: Tolf Barly-bread, and infufe it in Vinegar, then prefs it out, and infufe it again in the juice of Peach-leaves, lay it on warm to the belly with a linnen clout. Others mingle Lupine meal, Southernwood and Bull's gall. Again: Take Lupine-meal, Century the lefs, of each four penny weight, Aloes, Bulls gall, of each 4 oboli, make them up with juice of Wormwood, and laid to children very young. Another: Take Wormwood, Guth, ashes of Harts-horn, of each a like quantity, mingle them with Honey and anoint them. Another good for the stomack, that kils Worms, and is good against the belly flux: Take Wormwood, Mints, Roens, Santonicum, Lupin-meal, of each eight penny weight, tosted bread, infufe in the sharpefet vinegar four penny weight, Bulls gall sixteen penny-weight, Mountain-nard, Water-flags, (Galla called Moschatas) Cloves, sweet Cane, Nutmeg, Galanga, Carway-feed, of each twelve penny weight; Hippocyclis, Acacia, Sumach, of each four penny weight, oyl of Myrth, juice of Mints, and Wax what sufficeth, make a plaster. If there be no Fever, the navil and thighs are to be anointed with Honey, in a hot affect with Milk, and then a little Aloes is browed on, for it wonderfull kils Worms, also the noffris are profitably anointed with Theriac and Vinegar. A Circate against Worms out of Paulus: Take Aloes, VVormwood, Lupin-meal, Seriphium, Guth, of each of fix scruples, VWax an ounce and half, oyl of Camomeul what may sufficeth, make them up being bruised dry with Bulls gall. Another out of Actiuis: Lupin-meal, VWormwood in powder, Barley in fine powder, of each seven penny weights; Bulls gall, eight penny weight; ratling of Harts-horn, four penny weight; VWax, twenty fix penny weight; week oyl, twelve penny weight. Another approved: Take Aloes half an ounce, Saffron two oboli, juice of Pomecitrone as many drams, mingle them with sweet white VWine, and apply them to the heart. Another approved: Take Bulls gall, 30 penny weight, chose Frankincence 128 penny weight, Strong-water 2 heminches, distil all these chymically and in a glafs veffel covered with VWax, keep what comes forth, and use it when occasion is. Another very excellent, that kils and cures the Worms: Take VWormwood, Gentian, Century the lefs, bark of the roots of Mulberries, Bay-berries with the kernels taken forth, bark of the roots of the Pomegranate-tree, 4th-root pils, of each 16 penny weight; Marjoram 16 penny weight, Santonicum Aloes, Myrth, Agrimony of each 4th-root, Marjoram of Crete, Germander, Southerness, 3 penny weight, Poly-mountain, Grafs-roots, each 1 penny weight; Staraschas, Chamadrys, Chamemytea, Pomecitrone-feed, each 6 penny weight; ashes of Harts-horn, Santonicum, 4 penny weight, Coloquintida, feed, 2 penny weight, Bulls gall 24 penny weight, the sharpefet Vinegar 1 heminches and 3 cyathis, a gallon of bitter oyl of unripe Olives, and 6 heminches; let the dry things be beaten into most fine powder, and mingle them ten daies together, on the eleventh day let them boil in a double veffel until the Vinegar be consumed: when these are cold, add one heminches of oyl of Bayes, bitter Almonds, and Peach-kernels, of each beaten 24 penny weight; all these, as the former, must be put into a glafs veffel, and be diffilled. Another most excellent and sure: Take Peach-kernels, Garlick, Earth-worms wathed in Vinegar, of each 24 penny weight; Gentian, Dittany of Crete, Grafs-roots, and Piony, pils of Mulberry roots pilled, of each 52 penny weight, Saffron, sweet Cane, Cloves, Aloes, Calbanes, Coloquintida, Ginger, Nutmegs, Callia, long Pepper, Frankincence, fruit of Ballome, red Coral, of each 8 penny weight; the belt Thricack 12 penny weight, Mints, Wormwood, Century the Lees, Peach-tree leaves, headed Leeks, Pennrioyal, Calamints, Plantain, Rue, black Hore-
Horehound, Bay-leaves, Sage, Marjoram, Betony, Scorodum, Orange-pils, and bark of Mulberry roots, of each 16 penny weight; seeds of wide Smallage, Purlflain, Radifh, Colewort, Santonicum, Plantain, headless, Leeks, fea Mofle, garden Smallage, (that is, Parly) each 12 penny weight; the sharpell Vinegar, juice of Quinces, of each one hemina; oyl of Mallick, Spike, liquid Bitumen, (they call it Petrolowyn) oyl of Bases, of each 16 penny weight; the oldest Oyl, or oyl omphacine, 8 hemina; beat the dry things to powder, and mingle them, and in a glased vefell fet them under Horte-dung for a moneth, then boyl them in a double vefell to thirds, drain them when they are cold, and draining them out forcibly, keep in a glafs. what comes forth for your ure. But employ it in aift anoint the temples, then the nofliris, next that the spondyls of the neck, four of them next the throat, then anoint the pulles of the arms, next to that the fomach, I mean by the fomach the mouth of the ventricle, taking the word fomach improperly, for properly it fignifies the fomach; wherein I muft not paffe over the error of our new Physicians, who in affects of the mouth of the fomach, lay their remedies upon the back over against it, which is both contrary to Galen, and alfo to reafon, 2 & 10, de med. cur. libro, yet I believe Thomas Linacer did not rightly interpret that place, if I be not mifaken, who was indeed otherwise a very learned man, and moft skilful in the interpretation of Authors; but it may be that Greek Book was faulty, or for some other reafon. Alfo it seems agreeing to reafon, that for affects of the mouth of the fomach, the remedies should be applied before, immediately under that round griftle, which they call the fiedel or sword-fash'd griftle; for at this place the mouth of the fomach beft receives the force of Cataplamfs and Cerats, forasmuch as there are no bones to keep it out of, but the properly called fomach, that is, the throat is fenced with moft strong bones, as under a fence; for it hath the beft bones before, and the back behinde. But this is spoken by the by. Now between the wetting of one place, and of another, we muft flay fo long as a man might walk about 40 paces; and when these places are wet, we muft use more distance of time, when we anoint the reins and the navil. And thefe three remedies are fo certain, that unless a childe be ready to die, he will recover from the point of death only by anointing these parts. That which is called the broad Worm abounds in thoofe that have no Fever, and breeds in long during diifeses. The method to cure there is the fame as for round Worms. For bitter and sharp potions are moft in ufe, and to eat Garlick or Calamin, Dittany or Pennirroyal; we muft eat Garlick largel for three daies, and old soft Cheefe. Next let a man eat of Meza- donian Fern dried and powdered and sifted, 8 penny weight, with as much Honey as he pleaft; al- ter four hours give the patient Aloe, and Scammony, of each one half dram, in Honey-water 4 cyathi, when he begins to rise to floo1, yet hot water under; Alfo give water to drink in which Lupins, or the bark of Mulberry-tree is boyled, or to which there is added a fawcer full of Pepper, or bruifed Hyop, and a little Scammony: or elfe after the eating of Garlick we speak of, let him vomit, and the next day let him gather as many Pomegranate roots as he can hold in his hand, and bruife them and boyl them in 3 fectarit of water, to a third part remai- ning, let him put a little Nitre to this and drink it full, three hours then paft, let him take ney of 3 oboli, two Potions either of water or falt picke added to it; Then pour forth the hot water into a leafon, as I faid: alfo give Earth-worms to drink, for they are exceeding good. But the juice of mouse-ear is proper for them, drunk two cyathi with one cyathi of Ale: for it quickly drives forth the broad Worms. But this remedy following must first be drank; nor is it thought unfit for thoafe that have Worms, especially if they have no Fever. Out of Pulset. It confines of red Nitre, Pepper, Cardamoms, of each equal parts, mingle all thefe and give of them a spoonfull in Wine or hot Water, for it quickly brings them out. 

Another, which is an Elecratory of Pulset. Take Pepper, Bay-berries cleaned, Ethiopian Cumin, Mallick of Chiant, of each alike, Honey what may ferve turn, give one spoonfull in the morning, and let them sleep upon it; but if you would do this more effectually, add Nitre as much as of each. Another of the fame. Take Fern a fawcer-full, Nitre two penny weight, give it with a spoonful of water, after eucuation, but it is better to add a little Scammony to it. Another of the fame, and of Atius. Take of the bark of the root of a fowre Pomegranate, scraped from the upper part, Pepper, of each four penny weight, Cardamoms fix penny weight, Horehound two penny weight, the beat Honey what is fufficient, give one spoonfull of it after eating Garlick or Leeks. But that the difafe may be wholly driven away, give fome Theriac, for Galen highly commendeth it for this ufe. Another out of Orifabius, that he alwayes used by the experience of his malters, and had a long time proved it for good. It contains Scammony one Scruple, Euforbiwm as much and half as much, the powder of burnt feathers one fcruple, Nitre in weight one Siliqua, give this to drink in honey'd or fweet wine. But it will fall out better if he first eat Garlick or two or three things. Also here is a Plaifer of another Author, that is good againft all Worms, especially broad ones. Take Lupines, Bay-berries cleaned, Bulls-gaiL lay them on the navel, and bind it on with a fwaltheband for one day and night, or else for two or three daies. Against broad Worms from another Author. Take Southern-wood, scraped Harts-horn, Cicus gnadus, and Seftum, of each one penny weight, Cardamoms three oboli, give this to drink with Oyemel. Another for the fame ufe. Take Gum Arabick, one penny weight, Fern three penny weight, Cardamoms one penny weight, Nitre three penny weight, give it in Hydromel or Ale. Also againft the fame, is the Antidote called Dia- pharon. Take Fern eight penny weight, Scammony, Gith, Cardamoms, falt Nitre, of each two penny

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weight, give it in Oxymel or Ale, but add Polyopode four penny weight. It is reported, that Aracides will trouble children, and such as are come to their full growth. But children are continually provoked to excoriation, and after ejection they are the better most commonly, but those that are come to their full growth, observing the trouble of such things that are the cause of them, will thruff their fingers into their fundament, and pull them forth, and further they will foment and abate these biting pains, with pebie-flowes that lie in the Sun on the thores, or else with ftones put into the fire. But for me will admit of none of these helps; yet this disease ought not to be neglected, for Worms will not easily yeeld to remedies, nor are they easily driven forth, but by strong means. Wherefore children must be purged with Suppositoris made of Honey and a little salt, or Nitre, or sharp pickle, and with the concoction of Woodworm mingled with Oyl. Also there ought to be a stronger purging, and when they have voided their excrements, the Longanum, which is the place affected, must be anointed with it. As for Simpleys, they are Acacia, Hypocitlis, the juice of Sumach, with liquid Allome or Nitre, but the Compounds are the Troches of Andron, and those that are called Springades polydye, and with fat Wooll and such like; for the feath is made stronger by Astringents, and looeth its readinesse to breed living Creatures, and thruff forth the Aracides. Andon his Troches are made thus. Take flowers of Garden Pomegranates ten penny weight, Gallis eight penny weight, Myrrhe four penny weight, long Birthwort, and as much Vitriol, Saffron, feffil Allum, dregs of the Oyl of Saffron, Myfi, Frankincence, of each two penny weight, they are powdered and mangled with astringent wine, or with Vinegar. But Sphragis polydye is thus. Take feffil Allum three penny weight, Frankincence four penny weight, Myrheas much, or eight penny weight, Violets two penny weight, flowers of tame Pomegranates twelve penny weight, Bulls gall fix penny weight. Atoes eight penny weight, make them up with sharp wine: But that which is made with fat Wooll is thus made. Take fat Wooll forty penny weight, lead powder, shales of Bitumen, of each ten penny weight, round feffil Allum, Pomegranate shells, Gallis, Myfi, Vitriol, Frankincence, of each five penny weight, Myrthe two penny weight, lees of Oyl eight Hemina. Those that are of riper years must be purged with sharper and hotter remedies, as with Diapica, and with Oyl mixt with wine, in great quantity, and other things infused, as salt pickle, the decoction of Centaurly, with Nitre and Honey, or Coloquintida, Chamalœon, Anchafa, Lupins; then Oyl of Cedar must be given in Clyyster, and after that rett; often repeating the same method of cure, also take salt flesh, sraping away the fat, and cut it long and round, and thruff that into the Anus, and binde it in, to hold it there so long as may be, and then lose it, and injecit again the forefaid things, and let us often repeat the same remedies.

CHAP. XXXIV.

Of Worms that breed without the Bowels, and chiefly of Maggots.

The living Worms that are bred in the head, the brain, the liver, milt, bladder, reins, muscles, proceed from the same caufe Worms in the guts doe, and are destroyed by the same remedies. But those Worms Hippocrates calls Eula, the English call Maggots or Gentils, they are Worms without feet, not unlike to Aracides, but that they are shorter a little, and thicker considering their length: There is no man almoeth that hath not seen the in Garrion and corrupt flesh, and sometimes in limbs that are dead by the negligence of Chirurgions, when they as apply a remedy that purteythes together with the wound or ulcer. Hippocrates calls Eula Worms bred in dead bodies. Sidus calls them it keates, filfe-eaters. Lucrarium calls them cruel Vermis, and Pinetory, Worms from corruption and putrefaction of the excrements boyling forth. Homer in his Ilis, 19 and 24, faith they are Worms arising from putrid matter, that are far smaller in the ears than in other ulcers: And Callus writes, that they are called Eula, which Latin writers call improperly Earmothes, since they agree with them neither in form nor figure nor in any mark whatsoever. Laitly, those small Worms that breed from Flies egges in flesh, in Summer, (the English call them Flieblowers, and the Germans Maggen) as Camenfits observed, are reekoning amongst Eula or Maggots. But those Eula or Maggots that breed in Hogs flesh or Bacon, have a proper name given them by Fætos and Perottus, who call them Tarni, Maggots. Have either a tayl, or they are without a tayl: Hens feed on both kindes of them, and fo it is likely other Birds doe. To make a woman conceive Hippocrates prescribes three or four parts of those that have tayls, bruised with Orangeum and Oyl of Roses, to be laid to the mouth of the matrix. In his first de morb. mulier, and in another place of the same book, he bids apply with Wooll the heads of these Worms mingled with the Secondine of a woman, and Allum of Egy, and goffe greale.

It is reported that Democrates of Athens, when he was a youth, and was sick of the Falling sickneffe, went to Delphos, and enquired of Apollo, what he would advise him to take against this troublesome disease, and that Apollo answered:

Take the greatest Maggot you can finde
In a Wilde Goats head, and cutty binte
That in a sheep-skin, &c.

Democrates
CHAP. 35. Of lesser living Creatures.

Democritus having heard the answer of Apollo, he repaired to Theognostus Democritus, who was then ninety years old, and he wondering at the providence of God, expounded this Oracle that was so doubtfull: Saith he, by nature the head of a wilde Goat is full of abundance of Worms, neer to the bias of the brain, and when he neeleth, many Worms fly forth at his nostrils; you must therefore lay a garment under the Goat, that these Worms may not touch the ground, but that you may catch them before, and so taking one or two of them, put it into a black Sheep-skin and bind it to your tender neck, and this faith he, is a natural remedy against this disease. These things are good against Licegetas bred in ulcers and wounds in man or beast. First cleanse the parts affected, with the gall of Frogs, the juice of Celandine, Sea water, or brackish water, with the decoction of Honey, Worm-wood, Horehound, Peach-leaves, Groundriel, juice of Betes, and Wine; then to kill the Worms, throw on Pepper, Salt Peter, or Allum in powde, Hellebore, Henbane, round Birthwort, Vitriol, or waft the fore-places with the juice of river Calamin, or the decocition of Centuary, or with the juice of Leeks or Horehound. Johannes Agricola prescribes Baglofs, but Pliny prefers Arifitoliachus with Honey; and Paracelsus commends juice of Celandine. Moutmann commends Nitre before all other things. Vegetus bids to waft the lores early in the morning with cold water, and to drench them thoroughly, for he affirms, that the Worms by this means will be so confracted with cold that they will soon fall down. Actius commends Poly, and Worm-wood mingled with Pitch, and he commends the anoynting of the parts with fatsing Spittle. Hildegerdus throws on the pith of Smallage, the thrill of a Tortoise, Bees that are dead in the Hive, the leaves and the bark of the Plum-tree, powdered and sprinkled on the ulcers. Bayrus applies quick lime tempered with the sharpest Vinegar. The places where the Worms are being sprinkled with the juice of Hippis, will be presently cured, faith Tardinus; but what this Hippis is, no man hath determined: Some think it is wilde Tanfey, some say 'tis Potentilla; Genesius understandeth it to be Chickweed, which by its sharp and Nitrous faculty (as the Betes have) kills all the Worms.

CHAP. XXXV.

Of Nits.

Nits in the Greek are called Doros and Cunidas, the Italians call them Lendine, the Spaniards The Name Lianede, the Germans Nits, the English Nit, the Mufcovites call them Guida. These are lit- and descrip- tive white living creatures, molt like to Syrones, if they had but feet, but they are twice almost as small; and their body is somewhat long, out of which Arifitola faith that nothing elfe can breed: Crackt between the nails they make a noise and die, they are not found only in the hair and eye-brows of men, but they abound also in the hair of Oxen and Cattle that are lean, and wanting feet, yet they will flick to folk sometimes, that you may easilie pull off the hair by their roots as pluck them off. Trought is not improperly calls them vergehumes, hair-eaters, for as Snails live on the juice of herbs, so these live on the myoyture of the hairs, and feed thereon. The PhilosopherTheir Original affirms, that they proceed from the corruption of Lece, and therefore are called their eggs. They nay, are like to the flowers of Jefmine that grows with us. For as Jefmine brings flowers without seed, so Lice bring forth egges without young ones in them. They die either for want of nourishment or Their End by using a Comb with close teeth, or by the use of such Medicaments as the old and new Physi- cians prescribe abundantly. Pliny mingleth Allum with Vinegar, or Vinegar with gall of a Calf, and also faith, they are killed with Goats milk. Also he commends Nitre mingled with Terra Se- mia and smeere on, and the powder of Harts-horn drank in wine. Abenazer prescribes, to annoy the hair with the leffer Centauria, and Akirum. Bmilton in Vinegar takes away Nits; as also Oyl mingled with Lie. Marcelus doth very much commend Hogs dung mingled with wine and juice of Roes; also to annoy with Honey and Sal Armeinick, but chiefly Oyl of Radifhes with a strong lie. Hildegardo provides a lie made of Datefrones, which being mingled with Oyl of Radifh roots, will kill the Nits. Ardonus mingles some sublimate of Quick-silver with Spirit of Wine: And he faith also, that if the head be first wet with a Hens egge, and then with the juice of Sow- bread, or Sea-water, that the Nits will never breed again. Gilbert an English man highly commends the gall of any Creature, as also all bitter things, cleaners, and Aromatical Drugs, with the juice of Marigolds.

CHAP. XXXVI.

Of Aurelia, and a Wood-worm called Teredo, without feet.

That which the Latins call Aurelia, the Greeks call Xyromallia, the name is borrowed from the gold- den colour which appears in most of them. It hath no mouth, nor yet any apparent parts, nor doth it void any excrements, nor yet ear, or move, unleffe it be moved by some body, or hurt. That which Pliny writes, that a Chryfallis hath a hard body, I think that is meant in respect of a Catter-
Catterpillar. But that which he adds that it will move if a Spider touch it, though I know this to be true by experience, yet I doubt he borrowed those words from the Philosopher, and interpreted them amiss. For the scene seems to be thus. They move if they be touched, and they are covered with paws like to Cobwebs. Aristotele speaks nothing here of a Spider pulling over them, as Pliny seems to translate it. Aristotele shuts the Aurelia not only out of the number of Insects, but also of living Creatures, and determines them to be but the Catterpillars egges. But what agreement is here with an egge? That is laid by another living Creature, and is void both of actual life and motion. The Aurelia is laid by none, but is changed from one to another, for it changeth its former shape into another shape, and retains both life and motion, not in possibility of being, but actually. But that doth not take away the life of it, because it neither eats, nor increaseth, for Dormice sleep all the Winter and eat nothing. The life of it doth resemble that sleep which is partly waking, wherein men are not properly awake, nor yet asleep; but are alive, and move a little. But I conjecture that the Philosopher wrote this, that he might confirm that Axione of his to credulous perversity, that all Insects either lay egges or little Worms. His words are these. Insects first breed Worms, but that which is called Chrystal, is an Egge, and afterwards from this it bred a living Creature, that at the third changing, both the end of its generation. Yet it is manifest enough by what I said before, that an Aurelia is no Egg, and it ought not to be called a generation, but a transmutation of a Catterpillar into this, and of this into a Butterflie. I say this for that purpose, that such as adore Aristotele for a God, may remember that he was but a man, and that he was subject to humane errors. There are two kinds of Aurelias that I have seen, some are downy, and others smooth, both are of divers colours, and sometimes they are Gold coloured, which are the true Chrystalides, and others that are but baird ones, are without any colour of Gold. They have their Original from the death of the Catterpillars, which as they do waile by degrees in certain days, so by degrees their covering grows continually more hid, and changeth into an Aurelia. These again the next Spring or Autumn, by degrees losing their life, a Butterflie comes forth of them that is bred by the like metamorphosis. What use they serve for, for the good of man kinde, I am wholly ignorant of. I know well enough how much they perplexed Aristoteles, writ by their wonderfull transmutation; and they set forth to us the boundless power of Almighty God.

George Agricola only propounds to us the Teredo without feet, which from the brazen colour of it, he call Kutter-worm: It creeps like a Serpent, faith he, because it wants wings and feet. It is as thin as a small Goose quill, and it is as long as a Scolependra: It is round, and breeds under rotten wood, and sometimes found hard by the Scolependra, or long Ear-wig. You may easily finde the figure of it placed amongst the Scolependra.

CHAP. XXXVII.

Of Water Insects without feet, and first of the Shrimp or Squilla.

Wee said before that all water Insects were with feet or without feet. Some of those that have feet, swim with six feet, as the Lobiler, the Shrimp, the lake Scorpion, the Evet, and the Sea-lowfe; others with four feet, some with more. We shall treat of them severally. The Squilla an Insect differs but little from the fifth Squilla, but that it hath the yards much shorter, and a more red colour, or rather a more earthly colour. Some of these are covered with a thin shell, and some again are smooth and naked. Those with shells live chiefly in small Brooks, and stick to the roots of Reeds or water-flags: They are of a yellowish colour, and sometimes of a white or Ash-colour. They go only with fix feet, the reit that are joyned to them, serve in stead of fins. The naked ones are either soft or hard. The soft ones are represented well enough by this figure, only suppopse their heads to be of a bright Bay colour, and their body died with a dark Ash-colour. All those that are covered with a hard crust are made with joynts, but some have round joynts, others other fashions. The form of the round joynted is exactly represented here, if you suppose him to be easily dyed with a lighter red. And such is the colour of the first and second
Of lesser living Creatures.

Chap. XXXVIII.

Of the Locust, Scorpion, Notonectum, the Grasshopper, the Wasp, the forked Claw, the Newt, the little Heart, and the Louse, all Water-Insects.

The Insect-Locust, is like the Lobster, for that cannot be called either flesh or fish: you see the figure of it: it is of a pale green colour: I have seen three kinds of Lake Scorpions, and I have them by me: the first is somewhat black, the other two are like to white sand.
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...we call some Insects of the water Nonon 24, which do not swim upon their bellies as the rest do, but upon their backs, from whence it is probable that men learned the art of swimming upon their backs also. Some of these have eyes, shoulders, and bodies all black; some are green, some are fiery coloured, and some pitch coloured. For you shall seldom see two of them of the same colour; nature hath so variously adorned them. Water-Grathoppers hold the form described, but their eyes are extreme black, and their bodies are ash-coloured. The Wasp hath a brownish body all over, except the black eyes. The Forked Claw hath almost the same colour, but it is more full; it seems to want eyes, but it hath them hid within, whereby it both sees and perceives the object. The Lizard is of divers colours, and delighting in catching Fifti, it is common about the British shores, where it lyeth in wait to catch Fifti. The Corvus hath the just fashion of a heart, the feet and head being taken away; it hath very little black eyes, and fix legs of the same colour, & each with two claws. The Sea-Lowfe is an Insect that that is an enemy to all kinds of Whales, which by biting and tickling it puts into such a rage, that they are forced to run upon the sand, and hasten to dry land: I know nothing concerning the use of these creatures; but I seriously exhort posterity to search out the use of them.

Chap.
CHAP. XXXIX.

Of the Flea or Aellus, and the Scolopendra found in the Sea.

The Flea, or Sea-Aellus is like to a soft Squills, but it hath but four feet (as I may say by Geminus leave) and by often and long leaps it frees it self from having many feet. It is called Aellus from its leapings, Aristele calls it a Flea; from its bunch-back it is called a Sow: it is of a wan colour with blackness; the length of those that are in rivers is the breadth of one finger, and their breadth is not above half a finger broad. But the Sea-fleas are larger, which when the tye flows are seen also of times in fresh waters. It shews a wonderful deal of agility when men strive to catch it, or do but look upon it.

The Sea Scolopendra, sometimes is of a grey colour, and sometimes you shall fee others that are more red. These are longer and leaner, that is shorter and thicker. I saw both kindes in the year 1578. in coves of Oysters. For they are not found in the deep sea, as Geminus supposes, but in the muddy standing waters, where the Oysters are fatted, there they lye hid, Namemus warned Fisher-men concerning these, when he said:

See therefore that you let not irgende,
The fluid Jullis or deadly Scolopendras.

They are as Aristele writes lesser than the land Scolopendras, but not differing in their form. Namemus the Phythian makes of these a remedy to hinder hair from growing, or a depilatory, and highly commends it in his 34. Chapter. Take Frankincense, Vitriol, of each two ounces, sea Scolopenders three ounces, grind them all well, and mingle them with the powder of Quicklime, then pull out the hairs first, and anoint the places with that.

CHAP. XL.

Of Water Insects without feet, and first of Oripes.

No Philosopher that underlights as he should, will deny but that snow is water turned to fraut, by long subliming in the air. In this Worms are bred which the Greeks call xerox. Aristotile writeth something concerning these, which History I will briefly touch. In snow there are bred hairy Worms, very sluggish, and that more slowly, wherefore I reckon them amongst Worms without feet, so soon as they are taken out of the snow they die, as the Worms bred in the fire die, being taken from thence: with snow that is old and begins to look red, they become red also, but those that are found in new snow are white. It is, faith he, a certain thing that snow can no more corrupt them fire can. And indeed they cannot corrupt, yet in both of them are living Creatures bred, and they are nourished in both. I cannot in any wise content to Euhabodion the Scholast upon Homer, who affirms, that snow growes red from Minium, because those places are of a Cinnabrous quality, whence he conceives, that from the vapours rising from Cinnaber, the snow becomes red: I will not deny but that it is so in some places. But whether the Interpreter be pleased or not, we must needs grant that in some places the snow grows red, where no Cinnaber is. Strabo makes mention of such places in these words. In Charaenses and the Country of Cambicium, and in places near to the mountains of Caucasus, some little beasts are bred in the deep snow, which Apollonides calls echinos, and Theophanes names, that is, Mountain little hairy Worms, like unto the greater Terebrantia. I think their generation as admirable, as of the fire Worms; yet living Creatures are more easie bred in snow, than in fire, because in snow there is much air, earth and spirit, all which the fire consumes abundantly. And if the heat of the Sun happen to be with thefe, I shall use Salligers words, they make dung that smells the sweetest of all ordure. Also they are bred in abundance in Corinthia, as Joach. Vadiun reports. But Strabo in his Comment upon Pomp. Mel. adds a thing that is admirable, saying that these Worms are full of excellent water, which Travailers'
Travailers take, by breaking the bladder or coat it is in, and they drink this pressing it forth gently. For it is very wholesome and seasonable when the fountains are troubled, as it falls out often in great snows.

Chap. XLI.

Of Horfleeches.

Blood-fucker or Horfleech, in Latin Hirudo, in Greek Αβαθαν, in Hebrew Hulakab, in French Sanguin, in Italian Sangue, in Spanish Sanguisuelo, in High-Dutch Ein aegel so das blauzaugen, in English a Horfleech. These are water Worms that thirst exceedingly after the blood of living Creatures, and they will fill themselves with it sometimes till they burst and die. Some of them are without any passage through their belly, some are open behind; we give you the pictures of them here. Europe hath scarce any open behinde, but in America and India they are common. Thofe that are not open behinde, are obfervable to every man, and when they are filled with blood, their skin feems chequered with fibres. Some of them are of divers colours, some green, black, brown, yet not venomous, only the bright bay and Chefmuf colours, that are like to pills of trees. They breed chiefly in standing pools, where Cattel are wont to be watered, for from their feet earth and fowleffe are washed, and fall to the bottome, to fay nothing of the fefiment of their dung, out of which, that want not vital hear, living Creatures are bred. Once bred, they moft greedily thirst after blood, and therefore they lie in wait in the very entrance of the pools, that they may light upon Horfes, Oxen, Elephants, &c. fo soon as they come to drink for thirst of cold water. Pliny writes, that they are fo troublesome to the Elephant, that the beast is by their tickling and fucking in his fount, almost mad; which doth manifeftly fhew the wonderful power of Insects: For what is there greater then an Elephant? and what is there more contemptible than a Horfleech? Yet the grefneffe and wit of the Elephant must give way and yeeld to this Worm. They feed moft on blood of beafts, and watry bloody matter; yet when they want fuffeance, they fill themselves with the fift that rifeh from the water. Pliny faith they vanih in the Spring, l. 95. 51. but we fee that fepan to be moft fitt for the breeding of them. And indeed I can fee no reafon, that when they have overcome the Winters cold, they should not be able to fland out the Springs mildneffe. And this we all know, that Horfleeches will die in the Winter, unleffe they be carefully preferred in warm water, and fed with blood very plentifully. If any man fhawlew a Horfleech, fome periflade usto drink pickle, others inow water: But Aflephades bids us firft to waft the mouth, and to put aoit Sponge wet in cold water into the mouth, that the Horfleech fink-
Their use in physicke is manifold. For some (I tufe Galen words, lib. de different. : faginnae extubren-
di mult, Travét. 10, ) take Horfleches and put them up, and they ufe them diversly: For when
they are made tame they are easily put upon the skin; but thole that are taken mufi be kept
one day, and mufi be fed with a little blood; and so it will be that whatsoever venome they have
in them, they will soon caufe forth. But when we have need to ufe them, that part to which
you will apply your Leeches must be firft rubbed with Nitre, and mufi be appointed, and scratched
with your fingers, that by this means they may fallen the more greedily; but you mufi cast
them into warm water that is contained in a large and a clean vessel, then you mufi lay hold of
them with a Sponge, you mufi cleanse them with your hand from all filth and dirt, and so they
will be fit to be applied. And when you have fet them on, left that part they flick to should
grow cold, you mufi put on warm Oyl: But if they be to be applied to your hands or leet,
you mufi thrust them into the warm water that the Leeches are caufed into. And if they will not
hold fast, you mufi cut off their tails with a pair of Cifzers; for when the blood do runs forth
they will not leave off liquefying until you fprinkle falt or afhes upon their mouth: When they are
fallen off, that venemous quality they ufe to leave behind must be drawn forth with a Cupping
glaffe; and if that may not be done, you mufi ufe a Sponge to foment the place. And if yet
any bloody drops run forth, apply meal and Cummin, and then binde on fome Wool without
a little Oyl. But if yet the bloud will not flop, lay on a limmen clove wet in Vinegar, or burnt
glaffe, or a Sponge firft put into liquid pitch, and afterwards burnt. And this also you mufi ob-
serve, that Leeches draw that bloud that is next the fleth, and not that which is contained in the
Centre of the body. Menc ufe them commonly in lead of Cupping glaffes. Mark also that you
mufi take them off when they have drawn half the bloud. And you mufi beware that the bloud
run not forth fo long, until it be fufficient: For the part it felf will grow cold, both by rea-
on of the Leeches that are naturallly cold, and becaufe of the air that compaffe them about. So
far Galen. But Cardan bids us not to annoy the place with Nitre, but with milk, that they may
fatten the fooner; and withall to pinch the leech clofe, that thriving for revenge he may open
the vein, lib. 7. de rer. var. c. 28. What help they were to Dionifus the Tyrant of Heraclea,
we may read in Hilfories, who repreffenting rather a beaft than a man, for he died with a mighty
great pain, had been eaten by the Worms long before, unleffe Horfleches had been applied
to both his fides, and drawn forth daily fome quantity of the humours he was charged with.
It were too tedious to reckon up all the melancholique and mad people, that have been cured by
applying Leeches to the Hemorrhoids in their fundament. Yet I may not over-paffe the Noble
Richard Cavendifh, (the moft learned Unkle by the fathers fide of that famous Navigator through
the world Thomas Cavendifh) who was perfitely cured of his Gout that had held him many years,
only by applying Horfleches to the Emrods in Any every moneth, fo that now to the great
wonder of all the Court, he walks alone without any help, and being found and void of all pain,
be lives an old man. Alfo Horfleches fet upon the fundiment, will fo wonderfuly pluck back
the humours that run from the whole body to the joynts, that they will prefently eafe the pains
like a Charm. This I proved at Limn upon an excellent Mulitain, one Raffum; who for the
great pains he endured, and by continual waking, fell into a burning Fever, with raving, in the
Dog-dayes, at which time Hippocrates faith it is dangerous to purge. It is in this cafe fuch a re-
medy, that it is to be preferrd before all others, for they draw from the whole body without
any trouble or losse of a mans forces. J. A. Aubert. Exercit. 50. progymn. Fernel. Adul. God-
frid au Caenem, a Venetian, a famous man, and my very great friend, for just and lawfull caufes,
who told me that he saw one who had the joynt Gowe, who lived many years free of all his
pains, only by applying Leeches to the part that was in pain. Med. de Grad. and Sannazola. Ja-
cob Durmet, Apolog, lib. c. 3. perfwade the fame remedy. Alfo Gibertus Anglicus reportes, that the
Lowtie difeafe generally is to be cured with the afhes of Horfleches boyled with Scorax: For
they are not only ufefull for men whileft they are alive, but when they are dead and burnt to
afhes. Pliny reports, lib. 32. c. 7. that Horfleches will black ones hair, if they be corrupted in
black wine for fifty dayes: Others bid us take one fextarius of Leeches, and let them lie to cor-
rupt in two fextarii of Vinegar, in a leaden veffel for fo many dayes, and then to anoynt with
them in the Sun. Sannazola relates, that this medicament is of fo great force, that ufeffe they
hold Oyl in their mouths that die the hair, it will also black their teeth. Meger writes, that live
Frogs purrified in Vinegar, will take off the hair, but the afhes of Leeches anoynted with Vi-
negar will doe the fame.
Chap. XLII.

Of Water-worms.

In waters both salt and fresh, great and small Worms will breed of putrefaction, especially in Summer, very like Earth-worms, but they want that knot or chain about their necks: Also they are by far more sharp and lean; oft-times they lie in the sand, and they cast up earth out of their holes, as Earth-worms do: In sweet waters, that are standing, and not deep, there is found a kind of Worms of a full red, that resemble in shape the Teredo without feet, but that they have greater heads. Their tail is forked, whereby they slay themselves, till lifting up their heads they may finde a place to fasten the rest of their body, and so they creep upon the mud and stones, and so they move in a brandishing manner crookedly. In Summer, when it is clear weather and hot, they come forth together in great numbers, but if the mud move never so little they presently withdraw themselves. The English call them Summer-worms, either because they are seen only in Summer, or they die in Winter. In the Mediterranean Sea there is a round Worm found as great as a great Snake, and of the same colour, but it hath neither head nor tail, as Wickerus observeth. Sometimes it is twenty foot long. What may be the use or nature of these I have not yet observed. But I hope that others will discover that light that shal shew us both. Yet this is certain, that those Worms serve for baits to catch Fish, especially those small red ones, and Fisher-men diligently seek after them for that purpose. We call them Water-worms, because as Earth-worms will not live long in water, so Water-worms put upon dry land soon die, they wanting Air, and these for want of water.

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