

The First Book Of Natural Magick

Chapter I

"What is meant by the name of Magick"

Porphyry and Apuleius, great Platonicks, in an oration made in the defense of Magick, do witness, that Magick took her name and original form from Persia. Tully, in his book of Divination, says, that in the Persian language, a Magician is nothing else but one that expounds and studies divine things; and it is the general name of wise-men in that country. St. Jerome writing to Paulinus, says, that Apollonius Tyaneus was a Magician, as the people thought; or a Philosopher, as the Pythagoreans esteemed him. Pliny, says, that it is received for certainty among most authors, that Magick was begun in Persia by Zoroastres the son of Orimafius; or, as more curious writers hold, by another Zoroastres, surnamed Proconnefius, who lived a little before. The first author that ever wrote of Magick, Osthanes, who going with Xerxes king of Persia in war which he made against Greece, did scatter by the way, as it were, the seeds and the first beginnings of this wonderful art, infecting the world with it wherever he came; Inasmuch that the Grecians did not only greedily desire this knowledge, but they were even mad after it. So then Magick is taken amongst all men for wisdom, and the perfect knowledge of natural things: and those are called Magicians, whom the Latin's call Wisemen, the Greeks call Philosophers, of Pythagoras only, the first of that name, as Diogenes writes; "the Indians call them Brackmans (Brahmans), in their own tongue; but in Greek they call them Gymnosophists, as much to say as naked Philosophers;" The Babylonians and Assyrians call them Chaldeans, of Chaldea a country in Asia; The Celts in France call them Druids, Bards, and Semnothites; The Egyptians call them priests; and the Cabalists call them prophets. And so in diverse countries Magick has diverse names. But we find that the greatest part of those who were best seen into the nature of things, were excellent Magicians: as, amongst the Persians, Zoroastres the son of Orimafius, whom we spoke of before, amongst the Romans, Numa Pompilius; Thespion, amongst the Gymnosophists; Zamolxis, amongst the Thracians: Abbarais, amongst the Hyperboreans; Hermes, amongst the Egyptians and Budda among the Babylonians. Besides these, Apuleius reckons up Carinondas, Damigeron, Hifmoses, Apollonius, and Dardanus, who all followed Zoroastres and Osthanes.

Chapter II

"What is the Nature of Magick"

There are two sorts of Magick; the one is infamous, and unhappy, because it has to do with foul Spirits, and consists of incantations and wicked curiosity; and this is called Sorcery; an art which all learned and good men detest; neither is it able to yield an truth of reason or nature, but stands merely upon fancies and imaginations, such as vanish presently away, and leave nothing behind them; as Jamblicus writes in his book concerning the mysteries of the Egyptians. The other Magick is natural; which all excellent wise men do admit and embrace, and worship with great applause; neither is there any thing more highly esteemed, or better thought of, by men of learning. The most noble Philosophers that ever were, Pythagorus, Empedocles, Democritus, and Plato, forsook their own countries, and lived abroad as exiles and banished men, rather than as strangers; and all to search out and to attain this knowledge; and when they came home again, this was the Science which they professed, and this they esteemed a profound mystery. They that have been most skillful in dark and hidden points of learning, do call this knowledge the very highest point, and the perfection's of Natural Sciences; inasmuch that if they could find out or devise amongst all Natural Sciences, any one thing more excellent or more wonderful then another, that they would still call by

the name of Magick. Others have named it the practical part of natural Philosophy, which produces her effects by the mutual and fit application of one natural thing unto another. The Platonicks, as Plotinus imitating Mercurim, writes in his book of Sacrifice and Magick, makes it to be a Science whereby inferior things are made subject to superiors, earthly and subdued to heavenly; and by certain pretty attractions, it fetches forth the properties of the whole frame of the world, hence the Egyptians termed Nature herself a Magician, because she has the alluring power to draw like things by their likes; and this power, say they, consists in love; and the things that were so drawn and brought together by the affinity of Nature, these they said, were drawn by Magick. But I think Magick is nothing else but the survey of the whole course of Nature. For, while we consider heavens, the stars, the Elements, how they are moved, and how they are changed, by this means we find out the hidden secrets of living creatures, of plants, of metals, and of their generation and corruption; so that this whole Science seems merely to depend upon the view of Nature, as later we will see more at large. This does Plato seem to signify in his Aleibiades, where he said, That the Magick of Zorafres, was nothing else, in his opinion, but the knowledge and study of divine things, wherewith the King's sons of Persia, among other princely qualities, were endued; that by the example of the commonwealth of the whole world, they also might learn to govern their own commonwealth. And, Tully, in his book of Divination's, said, "that among the Persians, no man might be a King, unless he had first learned the art of Magick: for as Nature governs the world by the mutual agreement and disagreement of the creatures; after the same sort they also might learn to govern the commonwealth committed to them." This art, I say, is full of much Virtues

Chapter III

"The Instruction of a Magician, and what manner of man a Magician ought to be."

This is what is required to instruct a Magician , both what he must know, and what he must observe; that being sufficiently instructed in every way, he may bring very strange and wonderful things to us. Seeing Magick, as we showed before, as a practical part of natural Philosophy, it behooves a Magician, and one that aspires to the dignity of the profession, to be an exact and very perfect Philosopher. For Philosophy teaches, what are the effects of fire, Earth, air, and water, the principal matter of the heavens; and what is the cause of the flowing of the sea, and of the diverse colored rainbow; and the of the loud thunder, and of comets, and fiery lights that appear by night, and of Earthquakes; and what are the beginnings of Gold and of Iron; and what is the whole force of hidden nature. Then also he must be a skillful Physician; for both these Sciences are very like and near together; and Physic, by creeping under color of Magick, has purchased favor among men. And surely it is a great help unto us in the kind; for it teaches mixtures and temperatures, and so shows us how to Compound and lay things together for such purposes. Moreover, it is required of him, that he be a Herbalist, not only able to discern common Simples, but very skillful and sharp-sighted in the nature of all plants; for the uncertain names of plants, and their near likeness of one to another, so that they can hardly be discerned, has put us to much trouble in some of our works and experiments. And as there is no greater inconvenience to any artificer, than not to know his tools that he must work with; so the knowledge of plants is so necessary to this profession, that indeed it is all in all. He must be as well, very knowing in the nature of metals, minerals, gems and stones. Furthermore, what cunning he must have in the art of Distillation, which follows and resembles the showers and dew of Heaven, as the daughter the mother; I think no man will doubt of it; for it yields daily very strange inventions, and most witty devices, and shows how to find out many things profitable for the use of man. As for example, to draw out of things dewy vapors, unsavory and gross scents or Spirits, clots, and gummy or filmy Humors; and that intimate Essence which lurks in the

inmost bowels of things, to fetch it forth, and Sublimate it, that it may be of the greater strength. And this he must learn to do, not after a rude and homely manner, but with knowledge of the causes and reasons thereof. He must also know the Mathematical Sciences, and especially Astrology; for that shows how the stars are moved in the heavens, and what is the cause of the darkening of the Moon; and how the Sun, that golden planet, measures out the parts of the world, and governs it by twelve signs; for by the sundry motions and aspects of the heavens, the celestial bodies are beneficial to the Earth; and from thence many things receive both active and passive powers, and their manifold properties; the difficulty of which point long troubled the Platonic minds', how these inferior things should receive influence from Heaven. Moreover, he must be skillful in the Optics, that he may know how the sight may be deceived, and how the likeness of a vision that is seen in the water, may be seen hanging without in the air, by the help of certain glasses of diverse fashions; and how to make one see that plainly which is a great way off, and how to throw fire very far from us; upon which sights, the greatest part of the secrecies of Magick does depend. These are the Sciences which Magick takes to her self for servants and helpers; and he that knows not this, is unworthy to be named a Magician. He must be a skillful workman, both by natural gifts, and also by the practice of his own hands; for knowledge without practice and workmanship, and practice without knowledge, are worth nothing; these are so linked together, that the one without the other is but vain and to no purpose. Some there are so apt for these enterprises, even by the gifts of Nature, that God may seem to have mad them hereunto. Neither yet do I speak this, as if Art could not perfect anything; for I know that good things may be made better, and there are means to remedy and help forward that which lacks perfection. First, let a man consider and prepare things providently and skillfully, and then let him fall to work, and do nothing unadvisedly. This I thought good to speak of, that if at any time the ignorant be deceived herein, he may not lay the fault upon us, but upon his own unskillfulness; for this is the infirmity of the scholar, and not of the teacher; for if rude and ignorant men shall deal in these matters, this Science will be much discredited, and those strange effects will be accounted haphazard, which are most certain, and follow their necessary causes. If you would have your works appear more wonderful, you must not let the cause be known; for that is a wonder to us, which we see to be done, and yet know not the cause of it; for he that knows the causes of a thing done, does not so admire the doing of it; and nothing is counted unusual and rare, but only so far forth as the causes thereof are not known. Aristotle in his books of handy-trades, says, that master-builders frame and make their tools to work with; but the principles thereof, which move admiration, those they conceal. A certain man put out a candle; and putting it to a stone or a wall, lighted it again; and this seemed a great wonder; but when once they perceived that he touched it with brimstone, then said Galen, it ceased to be a wonder. Lastly, the professor of this Science must also be rich; for if we lack money, we shall hardly work in these cases; for it is not Philosophy that can make us rich; we must first be rich, that we may play the Philosophers. He must spare for no charges, but be prodigal in seeking things out; and while he is busy and careful in seeking, he must be patient also, and think it not much to recall many things; neither must he spare for any pains; for the secrets of Nature are not revealed to lazy and idle persons. Wherefore Epicarmus said very well, that men purchase all things at God's hands by the price of their labor. And if the effect of they work be not answerable to my description, thou must know that you have failed in some one point or another; for I have set down these things briefly, as being made for witty and skillful workmen, and not for rude and young beginners.

Chapter IV

"The opinions of the ancient Philosophers touching the causes of strange operations; and first, of the elements."

Those effects of Nature which we often see, have so employed the ancient Philosopher's minds in the searching forth of their causes, that they have taken great pains, and yet were much deceived therein; inasmuch that so many of them held such diverse opinions; which it shall not be amiss to relate, before we proceed any further. The first sort held that all things proceed from the Elements, and that these are the first beginnings of things; the fire, according to Hippasus Metapontimus, and Heraclides Ponticus; the air, according to Diogenes Apolloniates, and Anaximenes; and the water, according to Thales Milefius. These therefore they held to be the very original and first seeds of Nature. Even the Elements, simple and pure bodies (whereas the Elements that now are, be but counterfeits and bastards to them; for they are all changed, every one of them being more or less meddled with one another) those, say they, are the material principles of a natural body, and they are moved and altered by continual succession of change; and they are so wrapt up together within the huge cope of Heaven, that they fill up this whole space of the world which is situated beneath the Moon. For the fire being the lightest and purest Element, has gotten up aloft, and chose itself the highest room, which they call the Element of fire. The next Element to this is the Air, which is somewhat more weighty then the fire, and it is spread abroad in a large and huge Compass; and passing through all places, does make men's bodies framable to her temperature, and is gathered together sometimes thick into dark clouds, sometimes thinner into mists and so is resolved. The next to the fire is the water; and then the last and lowest of all, which is scraped and compacted together out of the purer Elements, and is called the Earth; a thick and gross substance, very solid, and by no means to be pierced through; so that there is no solid and firm body but has Earth in it, as also there is no vacant space that has air in it. This Element of Earth is situated in the middle and center of all, and is round beset with all the rest. And this only stands still and unmovable, where all the rest are carried with a circular motion round about it. But Hippon and Critias held that the vapors of the Elements were the first beginnings; Parmenides held that their qualities were the principles; for all things (said he) consist of cold and heat. The Physicians hold that all things consist of four qualities, heat, cold, moisture, drought, and of their predominance when they meet together. For every Element does embrace as it were with certain arms his neighbor-Element which is next situated to him; and yet they have also contrary and sundry qualities whereby they differ. For the wisdom of Nature has framed this workmanship of the world by due and set measure, and by a wonderful fitness and convenience of one thing with another; for whereas every Element had two qualities, where it agreed with some, and disagreed with other Elements, Nature has bestowed such a double quality upon every one, as finds in other two her like, which she cleaves unto; as for example, the air the fire; this is hot and dry, that is hot and moist. Now dry and moist are contraries, and thereby fire and air disagree; but because either of them is hot, thereby they are reconciled. So the Earth is cold and dry, and water cold and moist; so that they disagree, in that the one is moist, and the other dry; but yet are reconciled, in as much as they are both cold; otherwise they could hardly agree. Thus the fire by little and little is changed into air, because either of them is hot; the air into water, because either of them is moist; the water into Earth, because either of them is cold; and the Earth into fire, because either of them is dry; and so they succeed each other after a most provident order. From there also they are turned back again into themselves, the order being inverted, and so they are made mutually of one another; for the change is easy in those that agree in any one common quality; as fire and air be easily changed into each other, by reason of heat; but where either of the qualities are opposite in both, as in fire and water, there is change is not so easy. So then, heat, cold, moisture, and drought, are the first and principle qualities, in as much as they proceed immediately from the Elements, and produce certain secondary effects. Now two of them, namely heat and cold, are active qualities, fitter to be doing themselves, then to suffer of others. The other two, namely moisture and drought, are passive; not because they are altogether idle, but because they follow and are preferred by the other. There are certain secondary qualities, which attend as it were upon the first; and these are said to work in a second sort; as to soften, to ripen, to

resolve, to make less or thinner; as when heat works into any mixed body, it brings out that which is unpure, and so while it strives to make it fit for his purpose that it may be more simple, the body becomes thereby smaller and thinner. So cold does preserve, bind, and congeal; drought does thicken or harden, and makes uneven; for when there is great store of moisture in the outer parts, that which the drought is not able to consume, it hardens, and the outer parts become rugged; for that part where the moisture is gone, sinking down, and the other where it is hardened, rising up, there must needs be great roughness and ruggedness. So moisture does augment, corrupt, and for the most part works on thing by itself, and another by some accident; as by ripening, binding, expelling, and such like, it brings forth Milk, Urine, monthly flowers, and sweat; which Physicians call the third qualities, that do so wait upon the second, as the second upon the first. And sometimes they have their operations in some certain parts, as to strengthen the head, to succor the reins; and these, some call fourth qualities. So then, these are the foundations, as they call them, of all mixed bodies, and of all wonderful operations; and whatever experiments they proved, the causes hereof raised (as they supposed) and were to be found in the Elements and their qualities. But Empedocles Agrigentinus not thinking that the Elements were sufficient for this purpose, added unto them moreover concord and discord, as the causes of generation and corruption: There be four principal seeds or beginning of all things; Jupiter, that is to say fire; Pluto, that is to say, Earth; Juno, that is to say air; and Nestis, that is to say, water. All these sometimes love and concord knits together in one, and sometimes discord does sunder them and make them fly apart. This concord and discord, said he, are found in the Elements by reason of their sundry qualities where they agree and disagree. Yes, even in Heaven itself, as Jupiter and Venus love all Planets save Mars and Saturn, Venus agrees with Mars, where no other planet agrees with him. There also is another disagreement among them, which rises from the oppositions and elevations of their houses. For even the twelve signs are both at concord and at discord among themselves, as Manilius the Poet has shown.

Chapter V

"That diverse operations of Nature proceed from the essential forms of things."

All the Peripatetics, and most of the latter Philosophers could not see how all operations should proceed from those causes which Ancients have set down; for they find that many things work quite contrary to their qualities; and therefore they have imagined that there is some other matter in it, and that it is the power and properties of essential forms. But now that all things, may be made more plain, we must consider that it will be a great help unto us, for the making and finding out of strange things, to know what that is from whence the Virtues of any thing do proceed. That so we may be able to discern and distinguish one thing from another, without confounding all order of truth. Where one and the same Compound yield many effects of different kinds, as we shall find in the process of this book, yet every man confesses that there is but one only original cause that produces all these effects. And seeing we are about to open plainly this original cause, we must begin a little higher. Every natural substance (I mean a Compound body) is composed of matter and form, as of her principles; for when the Elements meet together in the framing of any Compound, the same Compound retains certain excellent and chief qualities of theirs, where though all help together to bring forth any effects, yet the superior and predominant qualities are held to do all, because they make the power of their inferiors to become theirs. For unless some were stronger then other, their

Virtues could not be perceived. Neither yet is the matter quite destitute of all force. I speak here, not of the first and simple matter, but of that which consists of the substances and properties of the Elements, especially the two passable Elements, the Earth and the water. And those which Aristotle called sometimes secondary qualities, sometimes bodily effects, we may term them the functions and powers of the matter; as thinness, thickness, roughness, smoothness, easiness to be cleft, and such like, are altogether in the power of the matter, how they proceed all from the Elements. Therefore to avoid confusion, it is better to hold that the effects of the qualities come of the temperature or mixture of the Elements, but the effects of the matter from the consistency or substance of them. But the form has such singular Virtue, that what ever effects we see, all of them first proceed from there; and it has a divine beginning, and being the chief and most excellent part, absolute of herself, she uses the rest as her instruments, for the more speedy and convenient dispatch of her actions. And he which is not addicted nor accustomed to such contemplations, supposes that the temperature and the matter works all things, where indeed they are but as it were instruments where the form works. For a workman that uses a graving Iron in the carving of an image, does not use it as though that could work, but for his own furtherance in the quicker and better performance thereof. Therefore where there are three efficient and working causes in every Compound, we must not suppose any of them to be idle, but all at work, some more and some less. But above all other, the form is most active and busy, strengthening the rest; which surely would be to no purpose if the form should fail them, in as much as they are not capable of heavenly influences. And though the form of itself be not able to produce such effects, the rest also must do their parts, yet are they neither confounded together, nor yet become diverse things; but they are to knit among themselves, that one stands in need of another's help. He that scans these things well by the search of reason, shall find no obscurity herein, nor confound the knowledge of the truth. Wherefore that force which is called the property of a thing, proceeds not from the temperature, but from the very form itself.

Chapter VI

"From where Form comes; and of the chain that Homer feigned, and the rings that Plato mentions"

So then, the form, as it is the most excellent part, so it comes from a most excellent place; even immediately from the highest heavens, they receiving it from the intelligence's, and there from God himself. And the same original which the form has, consequently the properties also have. Zeno Citticus holds two beginnings, God and matter; the one of them active or efficient, the other the passive principle. For God, as Plato thinks, when by the almighty power of his deity he had framed in due measure and order the heavens, the stars, and the very first principles of things, the Elements, which wash away by reason of so many generations and corruptions, did afterwards by the power of the heavens and Elements, ordain the kinds of living creatures, plants, and things without life, every one in their degree, that they might not be of the same estate and condition as the heavens are. And he enjoined inferior things to be ruled by their superiors, by a set law, and poured down by heavenly influence upon every thing his won proper form, full of much strength and activity. And that there might be a continual increase among them, he commanded all things to bring forth seed, and to propagate and derive their form, wherever should be fit matter to receive it. So then, seeing that forms come from Heaven, they must needs be counted divine and heavenly things, for such is the pattern and the most excellent cause of them, which Plato, that chief Philosopher, calls the Soul of the World, and Aristotle, Universal Nature, and Avicenna calls it Form-giver. This Form-giver does not

make it of anything, as though it were but some frail and transitory substance, but fetches it merely our of himself, and bestows it first upon intelligences and stars, and then by certain aspects informed the Elements, as being fit instruments to dispose the matter. Seeing therefore this form comes from the Elements, from Heaven, from the intelligences, yes, from God himself. Who is so foolish and untoward, as to say that it does not favor of that heavenly nature, and in some sort of the majesty of God himself. And that it does not produce such effects, as nothing can be found more wonderful, seeing it has such affinity with God? Thus has the providence of God linked things together in their ranks and order, so that all inferior things might by their due courses be derived originally from God himself, and from him receive their operations. For God the first cause and beginner of things, as Macrobius says, of his own fruitfulness has created and brought forth a Spirit, the Spirit brought forth a soul, (but the truth of Christianity, says otherwise) the soul is furnished partly with reason, which it bestows up divine things, as Heaven and the stars (for therefore are they said to have divine Spirits) and partly with sensitive and vegetative powers, which is bestows upon frail and transitory things. Thus much Virgil well perceiving, calls this Spirit, the Soul of the World. The Spirit, says he, cherishes it within, and conveying itself through the inmost parts, quickens and moves the whole lump, and closes with this huge body. Wherefore seeing man stands as it were in the middle, between eternal and those transitory things, and is not altogether so excellent as Heaven, and yet, because of his reason, more excellent then other living creatures. And he has also the sensitive power. Therefore the other living creatures, as it were degenerating from man, are endued only with the two powers that remain, the sensitive and vegetative powers. But the trees or plants, because they have neither sense nor reason, but do only grow are said to live only in this respect, that they have this vegetive soul. This the same poet does express a little after. Seeing then the Spirit comes from God, and from the Spirit comes the soul, and the soul does animate and quicken all other things in their order. That plants and brute beasts do agree in vegetation or growing. Brute beasts with man in sense, and man with the divine creatures in understanding, so that the superior power comes down even from the very first cause to these inferiors, deriving her force into them, like as it were a cord platted together, and stretched along from Heaven to Earth, in such sort as if either end of this cord is touched, it will wag the whole. Therefore we may rightly call this knitting together of things, a chain, or link and rings. For it agrees fitly with the rings of Plato. And with Homer's golden chain, which he being the first author of all divine inventions, has signified to the wise under the shadow of a fable. Wherein he says, that all the gods and goddesses have made a golden chain, which they hung above in Heaven. And it reaches down to the very Earth. But the truth of Christianity holds that the souls do not proceed from the Spirit, but even immediately from God himself. These things a Magician being well acquainted withal, does match Heaven and Earth together, as the Husbandman plants Elms by his Vines. Or to speak more plainly, he marries and couples together these inferior things by their wonderful gifts and powers which they have received from their superiors. And by this means he, being as it were the servant of Nature, does extract her hidden secrets, and bring them to light, so far as he has found the true by his own daily experience, that so all men my love, and praise, and honor the almighty power of God. Who has thus wonderfully framed and disposed all things.

Chapter VII

"Of Sympathy and Antipathy; and that by them we may know and find out the Virtues of things."

By reason of the hidden and secret properties of things, there is in all kinds of creatures a certain compassion, as I may call it, which the Greeks call Sympathy and Antipathy. But we term it more familiarly, their consent, and their disagreement. For some things are joined together as it were in a mutual league, and some other things are at variance and discord among themselves. Or they have something in them which is a terror and destruction to each other, whereof there can be rendered no probable reason. Neither will any man seek after any other cause hereof but only this, that it is the pleasure of Nature to see it should be so. That she would have nothing to be without his like. And that among all the secrets of Nature, there is nothing but has some hidden and special property. And moreover, that by this their consent and disagreement, we might gather many helps for the uses and necessities of men. For when once we find one thing at variance with another, presently we may conjecture, and in trial so it will prove, that one of them may be used as a fit remedy against the harms of the other. And surely many things which former ages have by this means found out, they have commended to their posterity, as by their writings may appear. There is deadly hatred, and open enmity between Coleworts and the Vine. For whereas the Vine winds itself with her tendrils about everything else, she shuns Coleworts only. If once she comes near them, she turn herself another way, as if she were told that her enemy were at hand. And when Coleworts is seething, if you put ever so little Wine into it, it will neither boil nor keep the color. By the example of which experiment, Androcides found out a remedy against Wine. Namely, that Coleworts are good against Drunkenness. As Theophrastus says, in as much as the Vine cannot away with the favor of Coleworts. And this Herb is at enmity with Cyclamine or Sowbread. For when they are put together, if either of them be green, it will dry up the other. Now this Sowbread being put into Wine, does increase Drunkenness, whereas Coleworts is a remedy against Drunkenness, as we said before. Ivy, as it is the bane of all trees, so it is most hurtful, and the greatest enemy to the Vine. And therefore Ivy also is good against Drunkenness. There is likewise a wonderful enmity between Cane and Fern. So that one destroys the other. Hence it is that a Fern root pounded, does loose and shake out the Darts from a wounded body, that were shot or cast out of Canes. And if you would not have Cane grow in a place, do but plow up the ground with a little Fern upon the Plough-shear, and Cane will never grow there. Strangle-tare or Choke-weed desires to grow among Pulse, especially among Beans and Fetches, but it chokes them all. And thence Dioscorides gathers, that if it be put among Pulse, set to Seeth it, it will make them Seeth quickly. Hemlock and Rue are at enmity. They strive each against other. Rue must not be handled or gathered with a bare hand, for then it will cause Ulcers to arise. But you do chance to touch it with your bare hand, and so cause it to swell or itch, anoint it with the juice of Hemlock. Much Rue being eaten, becomes Poison. But the juice of Hemlock expels So that one Poison another. And likewise Rue is good against Hemlock being drunken, as Dioscorides says. A wild Bull being tied to a Fig tree, becomes tame and gentle, as Zoroaster says, who compiled a book called Geoponica, out of the choice writings of the Ancients." Hence it was found out, that the stalks of wild Fig trees, if they are put to beef as it is boiling, makes it boil very quickly, as Pliny writes. And Dioscorides. Small fresh young Figs that are full of milky juice, together with a portion of water and Vinegar, as a remedy against a draught of Bull's blood. The Elephant is afraid of a Ram, or an engine of war so called. For as soon as ever he sees it, he waxes meek, and his fury ceases. Hence the Romans by these engines put to flight the Elephants of Pyrrhus, King of the Epyrotes, and so got a great victory. Such a contrariety is there between the Elephant's Members, and that a kind of Leprosy which makes the skin of a man like the skin of an Elephant. And they are a present remedy against that disease. The Ape of all other things cannot abide a Snail. Now the Ape is a drunken beast. For they are wont to take an Ape by making him drunk. And a Snail well washed is a remedy against Drunkenness. A man is at a deadly hatred with a Serpent. For if he does but see a Serpent, presently he is sore dismayed. And if a women with a child meets a Serpent, her fruit becomes abortive. Hence it is, that when a woman is in very Fore Travel, if she does but smell the fume of an Adder's Hackle, it will presently either drive out, or destroy her child. But it is better to anoint the mouth of the womb in such a case, with the fat of an

Adder. The sight of a Wolf is so hurtful to a man, that if he spies a man first, he speaks. But if he perceives that the man has first seen him, he takes his voice from him, and though he would like to cry out, yet he cannot speak. But if he perceives that the man has first seen him, he makes no ado, but his savage fury ceases, and his strength fail him. Hence came that proverb, *Lupus in fabula*, the Wolf come in the nick. Which Plato speaks of in his *Politicks*. The Wolf is afraid of the Urchin. Thence, if we wash our mouth and throats with Urchin's blood, it will make our voice shrill, though before it were horse and dull like a Wolf's voice. A Dog and a Wolf are at great enmity. And therefore a Wolf skin put upon anyone that is bitten of a mad Dog, assuages the swelling of the Humor. A Hawk is a deadly enemy to Pigeons, but they are defended by the Kastrel, which the Hawk cannot abide either to hear or see. And this the Pigeons know well enough. For wheresoever the Kastrel remains, there also will the Pigeons remain, thinking themselves safe because of their protector. Hence Columella says, that there is a kind of Hawk which the common people call a Kastrel, that builds her nest about houses, that is very good to keep away Hawks from a Pigeon house. If you take the Kastrel's young ones and put them in diverse earthen pots, and cover the pots close. And plaster them round about. And hang them up in sundry corners of a Pigeon house. The Pigeons will be so far in love with the place, that they will never forsake it. Hither belongs that notable disagreement that is between Garlic and Loadstone. For being smeared about with Garlic, it will not draw Iron to it, as Plutark has noted, and after him Ptolomaeus; ThLoadstonene has in it a poisonous Virtue, and Garlic is good against poison. But if no man had written of the power of Garlic against the Loadstone, yet we might conjecture it to be so, because it is good against the Viper, and mad Dogs and poisonous waters. So likewise those living creatures that are enemies to poisonous things, and swallow them up without danger, may show us that such poisons will cure the bitings and blows of those creatures. The Hart and the Serpent are at continual enmity. The Serpent as soon as he sees the Hart, gets him into his hole, but the Hart draws him out again with the breath of his nostrils and devours him. Hence it is that the fat and the blood of Harts, and the stones that grow in their eyes are ministered as fit remedies against the stinging and biting of the Serpent. Likewise the breath of Elephants draws the Serpent out of their dens, and they fight with Dragons; and therefore the Members of Elephants, burned, drives away the Serpent. The Storks drive out the Contries where they are, Lizards, and the sundry kinds of Serpents, and other noisome things in the fields; and the entrails of them all are good against the Storks. The same is done also in Egypt by the bird Ibis. The Indian Rat, called Ichneumon, does harness himself with some of the Lote-tree and so fights against the Asp. The Lamprey fights with Serpents, and with her biting, kills the Basilisk, which is the most poisonous Serpent that is. So also the crowing of a Cock affrights the Basilisk, and he fights with Serpents to defend his Hens. The broth of the Cock is a good remedy against the Poison of Serpents. So the Snail and the Eagle. The Stellion, which is a beast like a Lizard, is an enemy to the Scorpions, and therefore the Oil of him being putrefied is good to anoint the place which is stricken by the Scorpion. A Swine eats up a Salamander, without danger, and is good against the Poison thereof. The Hawk is an enemy to the Chameleon, and his Dung, drunk in Wine, is good against the Poison of the Chameleon. Likewise out of the sympathies of plants, we may gather some secret, which is helpful against some kind of hurt. The Herb *Corruda*, whereof *Sperage* comes, is most fitly planted where Reed grows, because they are of such likeness and nearness; and both of them are inciters to Lust. The Vine and the Olive tree do joy in each other company, as *Africarus* writes both of them are commodious for men's uses. in like manner the *Morhenne* loves the Hart, and the Partridge love each other; and both these are good for the one and the same remedy. So the fish *Sargus* and the Goat. A Dog is most friendly to a man; and if you lay him to diseases part of your body, he takes away the disease to himself, as *Pliny* reports.

Chapter VIII

"That things receive their force and power from Heaven, and from the Stars; and that thereby many things are wrought."

I suppose that no man doubts but that these inferior things serve their superiors, and that the generation and corruption of mutable things, every one in his due course and order, is over-ruled by the power of those heavenly natures. The Egyptians, who first proved and found out the effects of the heavens, because they dwelt in the open Champion-fields, where they had continually fair weather, and there were no vapors sent up from the Earth which might hinder their contemplation of Heaven, so that they might continually behold the stars in their brightness, did therefore wholly bestow themselves in the knowledge of heavenly influences. And whereas others that were not so diligent as they, stood amazed at the causes of things, these men referred all to the heavens and the stars, that all things took their destiny from them, and that the influence of Heaven bare great sway in all generations and corruptions. And thus observing the motions of the stars to and fro, they wrought many wonderful things, for this was their resolution, that to certain hours and set times, there were answerable certain aspects of superior powers, whereby all things were effected. Ptolomy, was of the same mind, who reduced the heavenly influences to a certain order, and thereby did prognosticate many things. And, he thought, the matter so clear, that it need not much proof. And moreover, that the increase and decrease of all plants, and all living creatures, more or less, did proceed from the power and beginning of all things, (for if that should cease, these must needs presently decay) says, that it was necessary for this world to be placed very near and close to the superior motions, that all power might be thence derived. And he saw that all this force of inferior things was caused from the Sun, as he himself fitly shows. The winding course of the Sun, says he, in the oblique circle of the Zodiac, causes the generation and corruption of all transitory things, and by his going to and fro, distinguishes times and seasons. Plato says, that the circular motions of the heavens are the causes of fruitfulness and barrenness. The Sun is the Governor of time, and the rule of life. Hence, Jamblicus following the doctrine of the Egyptians, says, that every good thing comes certainly from the power of the Sun, and if we receive any good from any thing else, yet the Sun must perfect and finish it. Heraclitus, calls the Sun, the Fountain of heavenly light; Opheus calls it the light of life, Plato calls it heavenly fire, an everliving creature, a star that has a soul, the greatest and the daily star. And the natural Philosophers call it the very heart of Heaven. And Plotinus shows, that in ancient times the Sun was honored instead of God. Neither yet is the Moon less powerful, but what with her own force, and what with the force of the Sun which she borrows, she works much, by reason of her nearness to these inferiors. Albumasar said, that all things had their Virtue from the Sun and the Moon. And Hermes the learned, said, that the Sun and the Moon are the life of all things living. The Moon is the closest to the Earth of all planets; (she rules moist bodies, and she has such affinity with these inferiors, that as well things that have fowls, as they that have none, do feel in themselves her waxing, and her waning. The seas and floods, rivers and springs, do rise and fall, do run sometimes swifter, sometimes slower, as she rules them. The surges of the sea are tossed to and fro, by continual succession; no other cause whereof the Ancients could find but the Moon only. Neither is there any other apparent reason of the ebbing and flowing thereof. Living creatures are much at her beck, and receive from her great increase. For when she is at the full, as Lucilius says, she feeds Oysters, Crabs, shellfish, and such like, which her warm light does temper kindly in the night season; but when she is burns half or the quarter light, then she withdraws her nourishment, and they waste. In like manner, Cucumbers, Gourds, Pompons, and such like, as have the store of waterish juice, feel the state of the Moon. For they wax as she does, and when she wains, they waste, as Athenaes writes. Likewise the very stems of plants do follow the state of the heavens, witness the Husbandman, who finds it by experience in his grassing. And skillful Husbandmen have

found the course and season of the year, and the monthly race of the Moon so necessary for plants, that they have supposed this knowledge to be one chief part of Husbandry. So also, when the Moon passes through the signs of the Zodiac which are most peculiar to the Earth, if you then plant trees, they will be strongly rooted in the Earth. If you plant them when she passes through the signs of the air, then the tree so planted, will be plentiful in branches and leaves, and increases more upward than downward. But of all other, the most pregnant sign hereof is found in the Pomegranate. Which will bring forth fruit juice so many years, as many days as the Moon is old when you plant it. And it is a report also, that Garlic, if it will lose its strong flavor. All cut and lopped woods, as timber and fuel, are of much moisture at the new of the Moon; and by reason of that moisture, they wax soft, and so the worm eats them and they wither away. And therefore Democritus counsels, and Visruvius is also of the same mind, to cut or lop trees in the waning of the Moon, that being cut in season, they may last long without rottenness. And that which is more, as her age varies, so her effects vary according to her age, for in her first quarter, she makes hot and moist, but especially moist, from thence all moist things grow and receive their humidity in that time. From that time to the full of the Moon, she gives heat and moisture equally, as may be seen in trees and minerals. From that time to the half Moon decaying, she is hot and moist, but especially hot, because she is fuller of light, thence the fishes at that time commonly are wont to swim in the top of the water. And that the Moon is in this age warm, appears by this, that it does extend and enlarge moist bodies; and thereby the moisture increasing, it causing rottenness, and makes them wither and waste away. But in her last quarter, when she loses all her light, then she is merely hot; and the wives of Chaldea hold that this state of Heaven is best of all other. So they report that there is a Moon-herb, having round twirled leaves of a bluish color, which is well acquainted with the age of the Moon, for when the Moon waxes, this Herb every day of her age brings forth a leaf; and when she wanes, the same Herb loses for every day a leaf. These variable effects of the Moon, we may see more at large, and more usually in tame creatures and in plants, here we have daily fight and experience thereof. The Pismire, that little creature, has a sense of the change of the planets. For she works by night about the full of the Moon, but she rests all the space between the old and the new Moon. The innards of Mice answer the Moon's proportion, for they increase with her, and with her they also shrink away. If we cut our hair, or pare our nails before the new Moon, they will grow again but slowly. If at or about the new Moon, they will grow again quickly. The eyes of Cats are also acquainted with the alterations of the Moon, so that they are sometimes broader as the light is less, and narrower when the light of the Moon is greater. The Beetle marks the ages and seasons of the planets. For he, gathering Dung out of the Mixen, rounds it up together, and covers it with Earth for eight and twenty days, hiding it so long as the Moon goes about the Zodiac, and when the new Moon comes, he opens that round ball of dirt, and then yields a young Beetle. Onions alone, of all other Herbs, (which is most wonderful) feels the changeable state of the planets, but quite contrary to their change frameth itself, for the when the Moon wanes, the Onions increase, and when she waxes, they decay. For which cause the priests of Egypt would not eat Onions, as Plutark writes in his fourth commentary upon the Hesiod. That kind of Spurge which is called Heliofeopium, because it follows the Sun, disposes of her leaves as the Sun rules them, for when the Sun rises, she opens them, as being desirous that the morning should see them rise, and shuts them when the Sun sets, as desiring to have her flower covered and concealed from the night. So many other Herbs follow the Sun, as the Herb Turnsole. For when the Sun rises, she holds down her head all day long, that the Sun may never so much as writhe any of her (there is such love as it were between them) and she stoops still the same way which the Sun goes. So do the flowers of Succory and of Mallows. Likewise the Pulse called Lupines, still looks after the Sun, that it may not writhe his stalk; and this watches the Sun's motion so duly, that like a dial it shows the Husbandman the time of day, though it be ever so cloudy, and they know thereby the exact time the Sun sets. And Theophrastus says, that the flower of the Herb Lotum, is not only open and shut, but also sometimes hides, and sometimes shows here stalk for sunset to midnight, and this, says he, is done about the river Euphrates. So the Olive tree, the Sallow, the Linden tree, the

Elm, the White poplar tree, they declare the times of the Sun's standing, when it turns back again from the poles, for then they hide their leaves, and show only their hoar-white backs. In like manner Winter-ress or Ilium, and Pennyroyal, though they begin to wither being gathered, yet if you hang them upon a stick about the time of the Solstice, they will for a time flourish. The stone Selenites, (as much as to say the Moonbeam) called by others Aphroselinon, contains in it the image of the Moon, and shows waxing and waning of it every day in the same image. Another stone there is, that has in it a little cloud that turns about like the Sun, sometimes hiding, sometimes showing itself. The beast Cynocephalus rejoices at the rising of the Moon, for then he stands up, lifting his fore-feet toward Heaven, and wears a Royal Ensign upon his head. And he has such a sympathy with the Moon, that when she meets with the Sun (as between the old and new Moon) so that she gives no light, the male, or he-Cynocephalus, never looks up, nor eats anything, as bewailing the loss of the Moon; and the female, as malcontent as he, all that while pisses blood. For which causes, these beasts are nourished and kept in hallowed places, that by them the time of the Moons meeting with the Sun may be certainly known as Orus writes in his hieroglyphics. The star Arcturus, at his rising causes rain. Dogs are well acquainted with the rising of the Canicular star; for at that time they are commonly mad, and so are Vipers and Serpents, nay, then the very standing pools are moved, and the Wines work as they lie in the cellar, and other great and strange effects are wrought upon Earth. When this star rises, the Basil-gentle waxes whitherish, and Coriander waxes dry, as Theophrastus writes. The rising of this star was wont to be diligently observed every year; for thereby they would prognosticate, whether the year following would be wholesome or contagious, as Heraclides Ponticus says. For if it did rise dark and gloomy, it was a sign that the air would be thick and foggy, which would cause a pestilence. But if it were clear and lightsome, it was a sign that the air would be thin and well purged, and consequently healthful. In ancient times they feared this star. So that they ordained a Dog to be offered in sacrifice to it, as Columella says, that this star is pacified with the blood and entrails of a sucking Whelp, and Ovid likewise says, that a Dog bred on the Earth, is sacrificed to the Dog-Star in Heaven. The beast or wild Goat, which in Egypt is called Oryx, has a sense or feeling of this star before it rises, for then he looks upon the sunbeams, and in them does honor the Canicular star. Hippocrates says, it is not good either to purge or let blood, before or after this star rises; and Galen shows that many very necessary operations of this star must be observed in critical days, and likewise in sowing and planting. Moreover, the greater stars and constellations must be now, and at what time they go out of the signs, whereby are caused many waterish and fiery impression in the air. And whosoever is rightly seen in all these things, he will ascribe all these inferiors to the stars as their causes, whereas if a man be ignorant hereof, he loses the greatest part of the knowledge of secret operations and works of Nature. But of this argument, we have spoken in our writings of the knowledge of plants.

Chapter IX

"How to attract and draw forth the Virtues of superior Bodies."

We have shown before, the operations of celestial bodies into these inferiors, as also the Antipathy and Sympathy of things. Now we will show, by the affinity of Nature, where all things are linked together as it were in one common bond, how to draw forth and to fetch out the Virtues and forces of superior bodies. The Platonicks termed Magick to be the attraction or fetching out of one thing from another, by a certain affinity of Nature. For the parts of this huge world, like the limbs and members of one living creature, do all depend upon one author, and are knit together by the bond of one

Nature. Therefore as in us, the brain, the Lights, the heart, the liver, and other parts of us do receive and draw mutual benefit from each other, so that when one part suffers, the rest also suffer with it, even so the parts and members of this huge creature the world, I mean all the bodies that are in it, do in good neighborhood as it were, lend and borrow each others nature. For by reason that they are linked in one common bond, therefore they have love in common; and by force of this common love, there is among them a common attraction, or tilling of one of them to the other. And this indeed is Magick. The concavity or hollowness of the sphere of the Moon, draws up fire to it, because of the affinity of their natures, and the sphere of the fire likewise draws up air, and the center of the world draws the Earth downward, and the natural place of the waters draws the waters to it. Hence it is that the Loadstone draws Iron to it, Amber draws Chaff or light straws, Brimstone draws fire, the Sun draws after it many flowers and leaves, and the Moon draws after it the waters. Plotinus and Synefius say, "Great is nature everywhere, she lays certain baits whereby to catch certain things in all places. As she draws down heavy things by the center of the Earth, as by a bait, so she draws light things upward by the concavity of the Moon. By heat, leaves, by moisture, roots, by one bait or another, all things." By which kind of attraction, the Indian wizards hold that the whole world is knit and bound within itself. For (say they) the world is a living creature, everywhere both male and female, and the parts of it do couple together, within and between themselves, by reason of their mutual love, and so they hold and stand together, every member of it being linked to each other by a common bond, which the Spirit of the World, which we spoke of before, has inclined them unto. For this cause Orpheus calls Jupiter, and the Nature of the World, man and wife, because the world is so desirous to marry and couple her parts together. The very order of the signs declares, that the world is everywhere male and female, for the former is the male, the latter is the female. So also trees and Herbs have both sexes, as well as living creatures. So the fire is to the air, and the water to the Earth, as a male to the female. So that it is no marvel, that the parts of the world desire so much to be matched together. The planets are partly male, and partly female, and Mercury is of both sexes itself. These things the husbandman perceiving, prepares his field and his feed, for heavenly influences to work upon, the Physician likewise observes the same, and works accordingly, for the preservation both of our bodies, and of universal nature. So the Philosopher who is skillful in the stars (for such is properly a Magician) works by certain baits, as it were, fitly matching earthly and heavenly things together, and planting them as skillfully one within another, as a cunning Husbandman plants an old Grass into a young stock. Nay, he lays earthly things under heavenly things, and inferiors so fitly for their superiors everywhere to work upon, as if a man should lay Iron before the Loadstone to be drawn to it, or Crystal before the Sun to be enlightened by it, or an Egg under a Henhen to hatch it. Furthermore, as some can so cherish Eggs, that even without the help of living creatures, they will make them live, yes and oftentimes they will prepare such matter, so cunningly, that even without Eggs, or any apparent seeds, they will bring forth living creatures, (as they will bring forth Bees, of an Ox, and a Scorpion, of Basil;) working together by the help of universal nature upon the vantage of fit matter, and a seasonable or convenient time. Even so the Magician, when once he knows which and what kinds of matters Nature has partly framed, and partly art has perfected, and gathered together, such as are fit to receive influence from above, these matters especially does he prepare and Compound together, at such a time as such an influence reigns, and by this means does gain to himself the Virtues and forces of heavenly bodies. For where there is any matter so directly laid before superior bodies, as a looking-glass before ones face, or as a wall right before ones voice, so does it presently suffer the work of the superiors, the most mighty agent, and the admirable life and power of all things showing itself therein. Plotinus in his book of Sacrifice and Magick, says, "That the Philosopher s considering this affinity and bond of Nature, wherewith all natural things are linked each to other, did thence frame these inferiors, and these inferiors in their superiors, earthly things in heavenly things in earthly but yet after an earthly sort." For when should we suppose it to be that the plants called Sun-followers, should still follow the Sun's motions? And likewise the Moon-followers, the Moon's motion? Wherefore surely even in Earth we may behold both the Sun and the Moon, but

yet by reason of their quality upon Earth, and so in Heaven we may behold all plants, and stones, and living creatures, but yet as following the heavenly natures. Which things the Ancients perceiving did apply and lay some earthly things to some heavenly, and thence brought down the celestial forces into these inferiors, by reason of their likeness one with the other, for the very likeness of one thing to another, is a sufficient bond to link them together. If a man does heat a piece of paper, and then lays it a little under the flame of a candle, though they do not touch each other, yet he shall see the paper presently burn, and the flame will still descend till it has burned all the paper. Let us now suppose the paper thus heated, to be that affinity which is between superiors and inferiors, and suppose we also, that this laying of the paper to the candle, to the fit applying of things together, both for a matter, and time, and place. Let us suppose yet farther, the flame taking hold of the paper, to be the operation of some heavenly body into a capable matter, and last of all, we may suppose the burning of the paper, to be the altering of that matter into the Nature of the celestial body that works upon it, and so purifies it, that in the end it flies upward like burning flax, by reason of some heavenly seeds and sparks which it has within itself.

Chapter X

"How the knowledge of secret things depends upon the survey and viewing of the whole World."

We are persuaded that the knowledge of secret things depends upon the

contemplation and view of the face of the whole world, namely, of the motion, state and fashion thereof, as also of the springing up, the growing and decaying of things. For a diligent searcher of Nature's works, as he sees how nature does generate and corrupt all things, so does he also learn to do. Likewise he learns of living creatures, which though they have no understanding, yet their senses are far quicker than ours, and by their actions they teach us Physic, Husbandry, the art of building, the disposing of household affairs, and almost all arts and Sciences. The like may be observed in metals, gems, and stones. The beasts that have no reason, do by their nature strangely shun the eyes of Witches, and hurtful things. The Doves, for a preservative against enchantments, first gather some little Bay tree boughs, and then lay them upon their nests, to preserve their young, so do the Kites use White Brambles, the Turtles Swordgrass, the Crows Withy, the Lapwings Venus-hair, the Ravens Ivy, the Hens Carrot, the Partridges Reed-leaves, the Blackbirds Myrtle, the Larks grass, the Swans Park-leaves, the Eagle uses Maidenhair, or the stone Erites for the same purpose. In like manner they have shown us preservatives against Poisons. The Elephant having by chance eaten a Chameleon, against the Poison thereof, eats of the Wild Olive, whence Solinus, observes, that the same is a good remedy for men also in the same case. The Panthers, having swallowed up the poisonous Herb Aconitum, wherewith the hunters smear pieces of flesh to destroy them, against the Poisons thereof seek out man's Dung. The Tortoise, having eaten a Serpent, dispels the Poison by eating the Herb Oregano. When Bears have tasted the fruit of the Mandrake, they eat Pismires against the Poison thereof. There is a kind of Spider which destroys the Hart, except presently they eat Wild Ivy, and whensoever they light upon any poisonous food, they cure themselves with the Artichoke, and against Serpents they prepare and arm themselves with Wild Parsnip, so do the Ring-doves, Coughs, and Blackbirds use Bay leaves. The little Worm Cimex is good against the biting of Asps, as Pliny shows by hens, who, if they eat that Worm, are all day after, free from the hurt of Asps. Goats care not for Basil-gentle, because it brings a lethargy, as

Chrysippus writes. The same beasts have also shown us what Herbs are good to cure wounds. When the Hart is wounded by the Cretians, they seek out the Herb Dittany, and presently the Darts fallout of their bodies. And so do the Goats . The Elephant being wounded, seeks out the juice of Aloes, the thereby is cured. The same beasts have also found out purgations for themselves, and thereby taught us the same. An Ass eats the Herb Asplnum to purge his Melancholy, of whom the Physicians have learned to minister the same Herb for the same purpose. The Hind purges herself with large Cumin, before she brings forth, that her birth may come the more easily from her. Aristotle says, that Boars feed upon the Herb Arum, or Wakerobin, to keep them soluble. Pigeons and Cocks feed upon Pellitory, for the sharpening of their stomach. Dogs eat Grass to purge all their noisome Humors, which otherwise would make them mad. Of all these, men have learned to use such medicines against the like diseases. The Lion being sick of a Quatrain auge, eats and devours Ape, and so is healed. Therefore we know that Ape's blood is good against an Ague. The griping of the belly and guts, is healed by looking upon Geese and Ducks, and Vegetius writes, and Cosumella says, that if a Duck does but look upon a sick Horse, she heals him. And Pliny says, that if you lay a Duck to the griping of ones belly, she takes away the disease, and dies of it herself, and Marcellus writes, that it is good for one that is so troubled, to eat the flesh of the Duck. Goats and Does are never Purblind, because they eat certain Herbs. Hawks, as soon as they feel their sight dim, they eat Sowthistle. Elephants, against diseases of their eyes, drink Milk. Serpents have caused Fennel to be very famous, for as soon as they taste of it, they become young again, and with the juice thereof repair their sight, whence it is observed, that the same is good to repair a mans sight that is dim. Hares feed upon Herbs that have juice like Milk, and therefore in their bellies they have a cream, whence Shepherds have learned to make cream of many such Herbs pressed together. Partridges eat Leeks, to make their voices clear, eat nothing but oil of Leeks, certain days of every month. These beasts have likewise found out many instruments in Physic. The Goats, when their eyes are bloodshot, let out the blood, the she-Goat by the point of a Bulrush, the he-Goat by the pricking of a thorn, which lets out the evil Humor, and yet never hurts the eye, but restores him his perfect sight. Hence, men learned by such means to cure the eyes. The Egyptians say, they never learned of men to minister Clysters, but the bird Ibis, which uses it to herself or the looseness of her body. And of the same bird also they learned their diet, to eat largely at the waxing and sparingly at the waning of the Moon. Bear eyes are often dimmed, and for that cause they desire honeycomb above all things, that the Bees stinging their mouths, may thereby draw forth, together with the blood, that dull and gross Humor. Whence Physicians learned to use letting blood, to cure the dimness of the eyes. The Gullie-gut, when he is full of meat, he pitches himself between two trees, so to force out excrements.

Chapter XI

"That the likeness of things shows their secret Virtueless."

Whoever looks into the writings of the Ancients, namely, Hermes, Orpheus, Zoroastres, Harpocraton, and other such like skillful men as have invented and registered the secrets of this art, shall find that they gathered all from the likeness of seeds, fruits, flowers, leaves and roots, as also of the stars, metals, gems, and stones, that likeness, I say, which these things have to the diseases and parts of a mans body, as also of other living creatures. And out of those writers, afterward Hippocrates, Dioscorides, Pliny and the rest, culled out as many such secrecies as they found to be true, and recorded them in their own books, except some certain things, which they thought were no secrecies, but either of folly or of envy, accounted them to be ordinary and plain matters. I will relate

two or three examples of those former secrecies. Theophrastus, speaking of those Herbs that resemble the Scorpion and Polypus, says, that some Herbs have a peculiar kind of form, as the root of the Herb Scorpius, called by some Walwort, the root of Polypody. For that is like a Scorpion, and is good against the sting of him. And this is rough, and full of hollow partitions like the Polypus, and is of force to kill him. And in another place he says, that many things are written of the force of plants, not without just cause, as for example, to make fruitful and barren; both with, the Herb Ragwort is forcible unto; for they grow double, a greater and a smaller, the greater helps generation, and the smaller hinders it. And this Herb is called Testiculus. Some Herbs are good for procreation of a male, and some of a female, as the Herb which is called Marisica, and Foeminipara, both are like each other. The fruit of the Foeminipara is like the moss of an Olive tree, the fruit of the Maripara is double like a man's Stones. The fruit of White Ivy will make feed barren, but the fruit of Arsemery will make it fertile, which fruit is a small grain, like to Millet. The leaves of the Herb Harts-tongue will make a man quite barren, if the Herb itself be barren, for there is Harts-tongue that bears fruit, and this will make a man fruitful. It is a thing to be noted in a Bur, that a flower grows within the roughness and prickles of it, which does not show itself, but conceives and brings forth feed within itself, much like as Weasels and Vipers do. For they bring forth Eggs within themselves, and soon after bring forth young ones, so the Bur contains, and cherishes, and ripens the flower within itself, and afterward yields fruit. But these things have both the active and passive parts of generation. Dioscorides writes, that the Herb Scorpius resembles the tail of the Scorpion, and is good against his biting. So says he, that the Herb Dragon, both greater and the less, is full of speckles like a Serpents Hackle, and is a remedy against its hurts. So the Herb Arisaron in Egypt, and Wakerobin, and Garlic, bear seeds like a Snake's head, and so Bugloss and Orchanet bear seeds like a Viper's head, and these are good to heal their venomous bitings. Likewise Stone-crop and Saxifrage are good to break the stone in a man's bladder. And many other such things he there sets down. Galen says, that the Lark has a crested crown, of the fashion of the Herb Fumitory, and that either of them is good against the Colick. Pliny has gathered into his books, many things out of the ancient works that were extant in his time. We will relate some of them. He says, that an Herb which grows in the head of an image, being wrapt in a cloth, is good for the Headache. Many men have written of Holy-wort. It has a Fly Beetle in the stalk, that runs up and down in it, making a noise like a Kid, (where it receives the name), and this Herb is passing good for the voice. Orpheus found out by his wit, the properties of stones. The stone Galatites, in color like milk, if you cast the dust of it upon the back of a goat, she will give milk more plentifully to her young, if you give it a nurse in her drink, it increases her milk. Chrisial is like unto water, if one is sick of an Ague keep-it, and roll it in his mouth, it quenches his thirst. The Amerthist is in color like wine, and it keeps from Drunkenness. In the stone Achates you may see fruits, trees, fields and meadows, the powder of it cast about the horns or shoulders of Oxen as they are at plough, will cause great increase of fruits. The stone Ophites resembles the freckles and spots of Serpents, and it cures their biting. If you dash the stone Galcophonos, it sounds like Brass. Stage-players are wont to wear it, because it makes one have an excellent voice. The stone Hematites being rubbed, is like blood, and is good for those that bleed, and for blood-shot eyes. And the stone Sinoper is of the same both color and Virtue. The residue I will not here set down, because I have handled them more at large, in that which I have written of the knowledge of plants.

Chapter XII

"How to Compound and lay things together, by their likeness."

We have shown how that nature lays open the likeness of Virtue and properties, not let us show how to Compound and lay those things together. For this is a principle of most use in this faculty, and the very root of the greatest part of secret and strange operations. Wherefore here you must imitate the exact diligence of the Ancients, studying to know how to apply things together with their likes, which indeed is the chief matter where the most secrecies do consist. It is manifest that every kind of things, and every quality can incline and draw, and allure some things to it, and make them become like itself. And as they are more active, so they more easily can perform it. As for example, fire being very active, does more easily convert things into itself, and so water into water. Avicenna says, that if any thing stand long in Salt, it will become wholly Salt, if in an unsavory vessel, it will become unsavory. He that converses with a bold man, shall be bold, if with a fearful man, he shall be fearful. And look what living creature converses among men, the same will be tame and gentle. Such positions are usual in Physic, as, all parts of the body, are nourished by their like, the brain by brains, teeth by teeth, lights by lights, and the liver by the liver. A man's memory and wit is helped by a Hen's brain, and her skull, if it be put into our meat while it is new, helps falling sickness, and her maw, if you eat it before supper, though you hardly digest it, yet is it good to strengthen the stomach. The heart of the Ape, takes away the palpitation of a man's heart, and increases boldness, which is seated in the heart. A Wolf's Yard boiled and minced, is good to eat for the procuring of lust, when strength begins to fail. The skin of a Ravens heel is good against Gout, the right-heel-skin must be laid on the right-foot, if that be gouty, and left upon the left. And finally, every member helps his like. But these things, Physicians write of, whole sayings it is not our purpose here to rehearse. Furthermore, we must consider and be well advised, what things such or such a quality is in, and whether it be there only after a common sort, or else in some great measure, and whether it be an affection, or perturbation, and whether it come by chance, by art, or by nature, as for example, heating, cooling, love, boldness, barrenness, fruitfulness, fatness, babbling, or such like, and whether it can cause any such matter as we would work thereby. For examples sake, if you would make a woman fruitful, you must consider with your self the most fertile living creatures, and among the rest, an Hare, a Cony, or a Mouse; for an Hare is big even after she has brought forth, she genders every month, and brings not forth all her young all at once, but now and then one upon sundry days, and presently goes to Buck again, and so conceives while she gives suck, and carries in her womb at once, one young that is ripe, another that has no hair, and a third that is but lately conceived. Again, you must consider the parts and Members where that property lies, and minister them to your patient. As, to make a woman fruitful, you must give her the womb and Curd of an Hare, an to the man, the Stones of an Hare. In like manner, any particular creature that was never sick, is a help against all disease. If you would have a man become bold or impudent, let him carry about him the skin or eyes of a Lion or a Cock, and he will be fearless of his enemies, nay, he will be very terrible unto them. If you would have a man talkative, give him tongues, and seek out for him water Frogs, wild Geese and Ducks, and other such creatures, notorious for the continual noise-making, the tongues whereof, if you lay under the head or side of a woman as he is sleeping, because they are most clamorous in the evening, they will make her utter her night-secrecies. Other things we omit, as being superfluous and unprofitable here, seeing we have largely handled them in our books of plants.

"That particular creatures have particular gifts, some in their whole body, others have them in their parts."

Particular creatures are not destitute of excellent and strange properties, but are very powerful in operation, more then ordinarily their kind yields. And this is by reason either of some hidden property, or rather of the heavenly aspects and influences working diversely in diverse particulars, as Albertus supposes, and in one particular more then in most other of the same kind. These sundry effects and inclinations of such particulars, a Magician must also be well acquainted with, that knowing sundry ways whereby to work, he may make choice of the fittest, and such as may best serve his present use and need, for this is our task, to reach the way and method of searching out, and applying of secrecies, which done, no further thing can be required of us. Therefore to our purpose. Albertus says, that there were once two twins, one of them would open doors and gates if he did but touch them with his side, and the other would shut them as fast when they were open. Some cannot away to look upon a Cat, a Mouse and such like, but presently they swoon. So, many have the gift from Heaven to heal the Kings-evil, and diverse other forces. And that which has troubled much, man surgeons, and they could not heal it, has at length been healed only with spittle. Again, we must well consider, what kinds of qualities are incident to what kinds of parties, as, commonly queens are impudent, ruffians, are luxurious, thieves are fearful, and such like passions, as writers everywhere mention. Moreover, some natural things have not only such properties in themselves, but they are apt also to communicate them unto others. A Harlot is not only impudent in herself, but she also naturally infects therewith, all that she touches and carries about her, so that if a man does often behold himself in her glass, or put on her garments, it will make him as impudent and lecherous as she is. The Loadstone does not only draw to itself that Iron which it touches, but also all Iron things near it, the same ring which the Loadstone draws to itself, will draw many rings if they be near, so that it will be like a chain, the Virtue of the Loadstone passing out of one ring into another. And the like may be observed in other things. We must note also, that the Virtues of some things are feared in whole substance, of other things, in some of their parts. The Sea-Lamprey stops a ship, not principally with any one part, but with her whole body. And there be many like examples. On the other side, many things work by some of their parts, as the Cockatrice and the Basilisk, by their eyes. Likewise Pismires shun the wings of a Rere-mouse, but her head and heart they do not shun. So they shun the heart of an Houpe, but neither the head, nor yet the wings. The like may be observed in other things.

Chapter XIV

"Of those properties and Virtues which things have while they live, and of such as remain in things after death."

We must consider that almost all those Virtues which are found to be excellent in things while they are alive, do quite perish in death, and seldom are of any force afterward. If the Wolf sees us, his eyes make us dumb, the eyes of the Cockatrice and Basilisk will kill us forth-right, the Sea-lamprey stays the course of a ship, the Struthio-camelus can digest Iron. But none of these being dead, work ought, for when they perish, their Virtues also perish with them. Therefore it is a wise rule in natural Magick, that if a man will work any thing by living creatures, or by any of their parts or properties, he must take the benefit of them while they be alive, for if they die, their Virtue dies also. For the fowl,

says Albertus, is a chief help, and strikes a great stroke in those qualities which are in living creatures, so that they being alive, are endued with many operative Virtues, which their death, (especially if it be natural, that their Humors are quite wasted) takes from them, as Physicians do much observe. Draw out a Frogs tongue, take away from the Ray or Fork-fish his Dart, the eyes or Stones out of any creatures head, or any such operative thing, not after they are dead, but while they are yet alive, and throw them into the water again, that if it be possible they may live still, left their Virtue should decay, but rather that by their living, they might quicken those their natural properties, and so you may work better thereby. And thus we must do in all things else, which I spare to speak of any further. Sometimes yet the properties of things are operative, yes, and that more forcibly, after death, the Wolf is hurtful and odious to Sheep after he is dead. For if you cover a drum with a Wolf's skin, the sound of it will make Sheep afraid, when most other creatures will not be afraid, nay, Sheep will make a heavy noise, whereas it contrariwise causes such clamorous creatures as hear it, to hold their peace. So if you cover it with a Bear skin, the sound thereof will make Horses run away. And if you make Harp-strings of all their guts severally, and put them together upon the instrument they will always jar, and never make comfort. The beast Hyena, and the Panther, are naturally at variance, therefore the skin of a dead Hyena makes the Panther run away, nay, if you hang their several skins one against the other, the Panther's skin will lose the hairs. So a Lions skin wastes and eats out the skins of other beasts, and so does the Wolf's skin eat up the Lamb's skin. Likewise, the feathers of other fowls, being put among Eagle feathers, do rot and consume of themselves. The beast Florus, and the bird Egithus are at such mortal enmity, that when they are dead, their blood cannot be mingled together. The Pigeon loves the Kestrel so well, that she loves the Dove-house much the better, where a dead Kestrel is. In like manner, Herbs, and other simples, retain many operative qualities even after they are dried up. These things must be well considered by a Magician, left ignored he be deceived in their workings.

Chapter XV

"That all Simples are to be gotten and used in their certain seasons."

Seeing all inferior, especially plants, receive their Virtue from the heavens, therefore we must have a special care to take them in their due seasons. For as Heaven varies the constitutions of the year, so does it vary plants, they being much nourished by the temperature of the air, and the time of year, as Theophrastus says, is all in all from them. Whence that proverb was justly right, that it is the year, and not the field, which brings forth fruit. Which may be understood two ways, either as the vulgar sort mean, or after a more peculiar manner. Concerning the vulgar understanding thereof, Dioscorides shows, that we must have a special care both to plant, and to gather all things in their right seasons, for they are operative only as their season is observed, but otherwise of no force. The time of gathering, must be calm and fair time. If we gather of them too soon or too late, they lose their best Virtue. Roots must be plucked up in the fall of the leaf, for then they are fullest, both of moisture and Virtue, their force hiding itself with them when their leaves fall, which lasts long in them, being at that seasons gathered. Flowers must be gathered in the spring, because then they have most Virtues And leaves must be gathered in the summer. The like we must observe in other things. Know also, that some things lose their Virtues quickly, others keep it along time, as experience and the rules of Physic teach us, that some things may be kept many years, others being long kept, are good for nothing. Whence it comes, that many experiments prove false, because that which we work by, happily has lost his Virtues being kept too long. But there are certain peculiar times to gather them in

(which the vulgar sort observes not) where the heavenly constellations bestow upon them some singular Virtues proceeding from the most excellent nature and quality of the stars. in which times if they be gathered, they are exceedingly operative. But there can be no set and just time assigned, by reason of the diverse places in respect of the Sun, for as the sunbeams come nearer or further off, so the Earth fructifies sooner or later. Yet we will give some general observations. Roots are to be gathered between the old Moon and the new, for then the moisture is fallen into the lower parts, and that in the evening, for then the Sun has driven in the moisture, and by the stalk it is conveyed down into the root. The time serves well to gather them, when their wrinkles be filled out with moisture, and they Chap because they have so much juice, as if they were about to break in pieces. Leaves are then to be gathered, as soon as they have opened themselves out of the spring, and that in the morning about sun-rising, for then they are moister then in the evening, the Sun's heat having drunk up their moisture all day long. Flowers are then to be gathered, when they begin to feed, while their juice in in them, and before they wax limber. Stalks are then to be gathered, when the flower is withered, for then especially are they profitable. And seeds must be then gathered, when they are so ripe that they are ready to fall. There are some more peculiar observations. Hot and slender Herbs should be gathered when Mars and the Sun are lords of the celestial houses, moist Herbs, when the Moon is lord, but you must take heed that you gather them not in the falling houses thereof. These things well observed in gathering plants, will make them very profitable for physical uses.

Chapter XVI

"That the Countries and places where Simples grow, are chiefly to be considered."

Many are deceived in plants, and metals, and such like, because they use them that came next hand, never heeding the situation of the place where they grow. But he that will work soundly, must well consider, both the aspect of the heavens, and the proper nature and situation of the place, for the place works diversely in the plants, according to his own diverse temperatures, and sometimes causes such an alteration in the Virtues of them, that many, not only young Magicians, but good Physicians and Philosophers too, have been deceived in searching them out. Plato makes mention hereof: "God has furnished the places of the earth with diverse Virtues, that they might have divers operations into plants and other things according to their kind." And so Porphyry says, "that the place is a principle of generation, as a father is." Theophrastus would have Hemlock gathered and fetched from Sufa, because Thrasias was of opinion, that there it might safely be taken, and in other very cold places. For whereas in Athens the juice of it's Poison, odious among the Athenians, because it is given to kill men in common executions, and Socrates there taking it, died presently, yet here it is taken without danger, and beasts feed on it. The Herb called Bears-foot, that which grows on the Hill Oeta and Parnasfus, is very excellent, but elsewhere, of small force. Therefore Hippocrates, when he would cure Democritus, he caused it to be fetched from the Hills. And in Achaia, especially about Cabynia, there is a kind of Vine, as Theophrastus says, the Wine whereof causes untimely births, and if the Dogs eat the Grapes, they will bring forth abortives. And yet in the taste, neither the Wine nor the Grape, differ from other Wine and Grapes. He says also, that those physical drugs which grow in Euboea, near unto Age, are good, but near to Telethrium, which is a shadowed and waterish place, they are much worse and drier. In Persia there grows a deadly tree, whose Apples are Poison, and present death. Therefore there it is used for a punishment. But being brought over to the Kings into Egypt, they become wholesome Apples to eat, and lose there harmfulness, as Columella writes. Dioscorides says, that the drugs which grow in steep places, cold

and dry, and open to the wind, are most forcible, but they that grow in dark, and waterish, and calm places, are less operative. Wherefore if we find any difference in such things, by reason of the places where they grow, that they have not their right force, we must seek them out there where the place gives them their due Virtues

Chapter XVII

"Certain properties of Places and Fountains, which are commodious for this work."

Difference of places ,works much in the different effects of things. For the place of the waters, and slow of the Earth, has many miraculous Virtues, which a Magician must needs be well acquainted with. For often we see, that some things are strangely operative, only by reason of the situation of the place, the disposition of the air, and the force of the Sun, as it comes nearer or farther off. If one ground did not differ from another, then we should have odoriferous Reeds, Ruses, Grass, Frankincense, Pepper, and Myrrh, not only in Syria and Arabia, but in all other countries also. Likewise many properties are derived out of waters and fountains, which otherwise could not be made, but that the waterish Humor in the Earth, conveys his scent and such like properties, into the root of that which there grows, and so nourishes up the matter which springs out, and causes such fruit as favors of the place, according to his own kind. Zama is a city in Africa, Ismuc is a town twenty miles from it. And whereas all Africa besides, is a great breeder of beasts, especially of Serpents, and that town there breed none at all, nay, if any be brought thither, it dies. And the Earth of that place also kills beasts, wherever it is carried. In the great Tarquine Lake of Italy, are seen trees, some round, some triangle, as the wind move them, but now four square. In the Country beyond the River Po, that part which is called Monsterax, there is a kind of Corn called Siligo, which being thrice sown, makes good bread-corn. Near to Harpasum a town of Asia, there is a huge rock, which if you touch with one finger, will move, if with your whole body, it will not move. There are some place of the Earth that are full of great fires, as Aetna in Sicily, the Hill Chimaera in Phaselis, the fire whereof Ctefias writes, will be kindled with water, and quenched with Earth. And in the country of Megalopolis, and the fields about Arcia, a coal falling on the Earth, sets it on fire. So in Lycia, the hills Ephesti being touched with a torch, flame out, in so much that the stones and sands there do burn in the waters, wherein if a man make a gutter with a staff, he shall see rivers of the fire run therein. The like things are reported of waters. For seeing they pass under the Earth, through veins of Alum, Pitch, Brimstone, and the like, therefore it is that they are sometimes hurtful, and sometimes wholesome for the body. There are also many kinds of water, and they have diverse properties. The river Himera in Sicily, is divided into two parts. That which runs against Aetna, is very sweet, that which runs through the Salt vein, is very Salt. In Cappadocia, between the cities Mazaca, and Tuava, there is a lake, where into if you put Reeds or timber, they become stones by little and little, and are not changed from stones again, never can anything in that water be ever changed. In Hierapolis, beyond the River Maeander, there is a water that becomes gravel, so that they which make water-courses, raise up whole banks thereof. The rivers Cephises and Melas in Boeotia, if cattle drink of them, as they do continually to make them conceive, through the dams be white, yet their young shall be russet, or dun, or coal-black. So the Sheep that drink of the River Peneus in Thessaly, and Astax in Pontus, are thereby made black. Some kinds of waters also are deadly, which from the poisonous juice of the Earth become poisonous, as the well of Terracina called Neptunius, which kills as many as drink of it, and therefore in old times it was stopped up. And the lake Cychros, in Thracia, kills all that drink of it, and all that wash themselves with it. In Nonacris, a country of Arcady, there flow very

cold waters out of a stone, which are called the Water of Styx, which break to pieces all vessels of Silver and Brass, and nothing can hold them but a Mule's foot, wherein it was brought from Antipater, into the country where Alexander was, and there his son Folla killed the King with it. In the country about Flascon, the way to Campania, in the field Cornetum, there is a lake with a well in it, wherein seem to lie the bones of Snakes, Lizards, and other Serpents, but when you would take them out, there is no such thing. So there are some sharp and sour veins of water, as Lyncesto, and Theano in Italy, which I sought out very diligently, and found it by the way to Rome, a mile from Theano, and it is exceeding good against the Stone. There is a well in Paphlagonia, whosoever drinks of it, is presently drunken. In Chios is a well, that makes all that drink of it, sottish and senseless. In Sufa is a well, who so drinks of it, looses his teeth. The water of Niles is so fertile, that it makes the clods of Earth to become living creatures. In Ethiopia is a well, which is so cold at noon, that you cannot drink it, and so hot at midnight, that you cannot touch it. There are many other like wells, which Ovid speaks of. Ammo's well is cold all day, and warm both morning and evening. The water of Athamas, set wood on fire, at the fall of the Moon. There is a well where the Chicanos inhabit, that turns into stones all that touches it, or drinks of it. Crates and Sybarites make hair show like Amber and Gold, the water of Salami, and the Ethiopian lakes, make them mad or in a trance that drink of it, he that drinks of the well Clitoris, never cares for wine after, the River Lyncestious makes men drunken, the Lake Phones in Arcady, is hurtful if you drink it by night, if by day, it is wholesome. Other properties there are also of places and fountains, which he that would know, may learn out of Theophrastus, Times, Poffidonius, Hegefius, Airspeeds, Meirodorus, and the like, who have very diligently sought out, and registered the properties of places, and out of them, Pliny, Solinus, and such writers have gathered their books.

Chapter XVIII

"That Compounds work more forcibly, and how to Compound and mix those simples which we would use in our mixtures."

Now we will show how to mix and Compound many Simples together, that the mixture may cause them to be more operative. Proclus, in his book of Sacrifice and Magick, says that the ancient priests were wont to mix many things together, because they saw that diverse Simples had some property of a God in them, but none of them by itself sufficient to resemble him. Wherefore they did attract the heavenly influences by compounding many things into one, whereby it might resemble that one which is above many. They made images of sundry matters, and many odors compounded artificially into one, so to express the essence of a God, who has in himself very many powers. This I thought good to allege, that we may know the Ancients were wont to use mixtures, that a Compound might be the more operative. And I myself have often compounded a preservative against Poison, of Dragon-herbs, the Dragon-fish, Vipers, and the stone Ophites, being led therein by the likeness of things. The Herb Dragon-wort, both the greater and smaller, have a stalk full of sundry-colored specks any man eat their root, or rub his hands with their leaves, the Viper cannot hurt him. The Dragon-fish being cut and opened, and laid to the place which he has stung, is a present remedy against his sting, as Aetius writes. The Viper itself, if you flay her, and strip off her skin, cut off her head and tail, cast away all her entrails, boil her like an Eel, and give her to one that she has bitten, to eat, it will cure him. Or if you cut off her head being alive and lay the part next the neck, while it is hot,

upon the place which she has bitten, it will strangely draw out the Poison. Many such Compound medicines made of creatures living on Earth, in the water, in the air, together with Herbs and stones, you may find most wittily devised, in the books of Kyranides and Harpocraton. But now we will show the way and manner how to Compound simples, which the Physicians also do much observe. Because we would not bring forth one effect only, but sometimes have use of two or three, therefore we must use mixtures, that they may cause sundry effects. Sometimes things will not work forcibly enough, therefore to make the action effectual, we must take unto us many helps. Again, Sometime they work too strongly, and here we must have help to abate their force. Often, we would practice upon some certain member, as the head, the heart, or the bladder, here we must mingle some things which are directly operative upon that part, and upon none else, whereby it falls out, that sometimes we must meddle contraries together. But to proceed. When you would do any work, first consider what is the chief thing which your simple, or Compound should effect, then take the ground or foundation of your mixture, that which gives the name to your Compound, and let there be so much of it, as may be proportionally work your intent, for there is a just and due quantity required for their working. Then put in the other ingredients, as sauce and seasoning, to help the principle to work more easily and in due time. So we mingle sweet things with unsavory, and with bitter, that it may smell and taste well. For if we should mingle only unsavory and bitter receipts, they that we give it unto would loath it, and their animal Spirits would so abhor it, that though they took it, yet it could not work in them. So we meddle soft and hard things together, that they may go down more pleasantly. Sometimes there is so little in a recipe, that the heat of the body wastes it before it can work, here then is required a greater quantity. For, this does not hinder the working, but gives the natural heat somewhat to feed upon, that in the mean space the recipe may have fit time to work. As for example, If we would catch birds by bringing them to flee, here we must take the nut Methella, which is of that force, as to cause sleep and heaviness of brain, and let this be the ground of our mixture. Then to make it more lively in working, put thereto the juice of Black Poppy, and the Dregs of Wine. If it be too hard, and we would have more liquid, that so it may fill out the pulse or other baits which we lay for them, put thereto the juice of Mandrakes, and Hemlock, and an Ox gall. And that it may not be bitter or unsavory, put Honey, Cheese or Flour amongst it, that so it may be fitter to be eaten. And when once the birds have tasted of it, they lie down to sleep on the ground, and cannot flee, but may be taken with hands. The like must be observed in other things.

Chapter XIX

"How to find out the just weight of a mixture."

We must also have a special care to know the right ministering of a Compound, and how to find out the just proportion of weight therein, for the goodness of the operation of things, consists chiefly in the due proportion and measure of them. And unless the mixture be every way perfect, it avails little in working. Wherefore the Ancients were wont to observe not only in compounds, but also in Simples due to weight and measure, and their experience has left it unto us. If then you bestow your pains in this faculty, first you must find out the weight of the simple medicine, how much of it would serve such a purpose as you intend, and to that, you must proportionally frame your Compound, observing a due proportion, both in the whole and every part thereof. Let the chief Simple, the ground of your mixture, be half the weight, and the other ingredients altogether must be the other half, but how much of each of these other ingredients, you must gather by your own conjecture and experience. So then your whole Compound must be but as much as if it were only a Simple recipe,

for we do not Compound things, to make the recipe greater, either in quantity or in Virtues but only because it should be more speedy in operation, as we showed before. You must therefore work advisedly, and as the operation of the Simples alter, so you must alter their weight, by putting to and taking from, and wittily fitting all things, that they may effect that which you would. This is the reason, why in our experiments, which we have set down in the next books, we have described the parts thereof by their several weights. And lest the divers names of weights should hinder thy working, we have used those weights and names which Cornelius Celsus used before us. For so it is fittest for all men's satisfaction.

Chapter XX

"How to prepare Simples."

Having shown the way how to Compound and find out the just weight of our composition, it now remains to teach how to prepare Simples, which is a matter chiefly necessary for this work, and greatest skill is seen in it. For the operation of Simples, does not so much consist in themselves, as in the preparing of them. Without which preparation, they work little or nothing at all. There be many ways to prepare Simples, to make them fitter for certain uses. The most usual ways are, steeping, boiling, burning, pounding, resolving into ashes, Distillation, drying and such like. To Macerate or steep anything, is to drench and to soak it in Liquor, that it may be thoroughly wet both within and without, so that the more subtle and intimate part of it may be drained and squeezed out, and the grosser and earthly part be left behind, to receive that Humor in the very middle, which we would have in it. Boiling we then use, when we cannot otherwise well get the juice of anything. For by boiling we draw out of the center into the circumference, when we cannot do it by steeping, though thereby the slighter vapors may be resolved. So we use to burn, to roast, to pound down things, that we may take away all their moisture from them, for by this means, they may the more easily be resolved, and the sooner converted into Liquor, and the better mingled with other things to be put to them. So we roast or broil things when otherwise we cannot break them, that they might become dust, yet always we must take heed that we do not so burn them, as they may loose their strength, nor so boil things but only as they may be fitter to receive that subtle Humor and quality, which we would convey into them. Distillation of things is used, as well to get out water that may be of greater strength, thereby to work more easily and handsomely, as also because the slighter and more subtle parts of medicines are fittest for us, the grosser parts must be cast away, as being an hindrance to our purpose. And the like we must conceive of other operations. These things I thought fittest for this work. He that would be instructed more at large herein, let him look into the next books....