

g. Plin. lib. 24.
cap. 17.

4. *Pythagoras* telleth of the herb *Callicia*, which will turn water into ice.

5. *Ophiusta* is an herb growing in *Ethiopia*: it is of a wannish colour, dangerous to be looked on: and being drunk, it doth so terrifie the minde with a sight of angry and dreadfull serpents, that through the fear of them men have sometimes killed themselves.

6. *Hemlock* (as some relate out of *Galen*, in his book *De temperamentis*) is meat to storks, and poyson to men.

7. *Sardonias*, or *Crow-foot* (as some write out of *Solinus*) is an herb which moveth laughter.

8. Upon a mountain of *Cyprus* called *Arcadie*, is an herb or plant growing, which if a man cut, there issueth a liquor like warm blood: if with this blood, thus warm, one man should touch another, he would love him affectionately whom he toucheth. Contrariwise, if the blood be cold, the touch will ingender hatred. My author calleth this plant, *Flabias*. See *Dw Bart*. Summarie.

9. Moreover, in the same authour I finde (as he hath it from one *Rhamnusius*, in his Navigations) that in the island called *Australle*, there is an herb found, upon which whosoever lieth down, he is first taken with an heaviness of the head, then with sleeping, and consequently with death.

10. Magicians make use of the herb *Anacramperos*, which (as I finde in *Plinie*) by the very touch thereof causeth love to grow between man and man, abolishing all former hatred.

11. The like is reported in a manner of the herb *Sowbread*, which being made into little flat cakes, and taken inwardly, is a good amorous medicine, and will make one in love. *Ger*.

12. Also they report, saith *Dioscorides*, that the herb *Snap-dragon* or *Calves-snout* being hanged about one, preserveth a man from being bewitched, & maketh him

gracious

x. Item ibid.

A bleeding herb.

g. Plin. 24. cap. 17.

gracious in the sight of the people. *Gerard. ex Dioscor.*

13. Enchanters also make great brags of the herb *Ethiopia* (which, I think, some call by the name of *Moly*)

14. And of the herb *Achimedias*: the first whereof being cast into rivers, will drie them up; or being applied to any thing lockt or shut, will presently open it: the other being cast into an armie in the time of battel, causeth the souldiers to be in fear, and runne away. Thus say some: Neither hath *Plinie* forgotten these two last herbs: but he mentions them with a kinde of derision, as in the 26 book and 4 chapter of his naturall historie is apparent; where he wondereth why enchanters would not make use of them in time of danger and extremitie. And for mine own part, this I cannot but say, that it is great pitie the secrets of nature should be soiled by infamous magick, and by the superstitious ignorance of forcerers.

15. Unto these, *Apollodorus* hath added the herb *Aschynomen*, which draweth in the leaves when the hand of any one approacheth to touch it.

16. Like unto which is the herb *Sentida*, growing in *India*: for if any one come neare and touch it, or throw sand, or any thing else upon it, presently it becometh as if it were withered, and closeth up the leaves; so continuing as long as the man standeth by: but so soon as he is gone, it openeth fresh and fair: and touching it again, it withereth as before.

These, you see, are rarities: and being now ready to passe away from them, I should come to speak something of grain; as *wheat*, *rie*, *barley*, *lintels*, *oats*, *peas*, *beans*, *rice*, with such other like; and gladly would I do it, but that (me thinks) I am called another way: for lo I have discovered the tops of yonder trees; and one by one, I mean to view them.

M m. *Vitex*,

It is pitie that
natures secrets
should be soiled
by magick.

c. Puteolus Pil.
grom. part. 1. lib.
5. cap. 12.

Here the authour
beginneth to
speak of trees.

Agnus castus.

a Lib. 24. cap. 9

Ibid.

b Mc Genia.

Vitex, or the chaste tree (which the Greeks call ἀγνος, and λύγος, because, saith ^a *Plinie*, certain matrons among the Athenians, desirous to live chaste, did lay the leaves of it in their beds under them) is called in the Latine *Salix marina*, or *Salix amerina*, or *Piper agreste*, or *Agnus castus*. And, as *Plinie* writeth, it is of two kindes; the greater, and the lesser. The first groweth up much like a willow tree: but the other brancheth out and spreadeth more, having whiter and downier leaves then the former. Our ^b countreyman, and an excellent Herbalist, saith that it groweth up after the manner of a bushie shrubbe or hedge tree, having many twiggie branches, very pliant and easie to be bent like unto the willow: the flowers are of a light blew colour, and very sweet in sinell; the leaves long and narrow; and the fruit small and round like unto the grains of pepper. And note that the flowers grow at the uppermost end of the branches, clustering close together.

Some say that it is a plant hot and drie in the second degree; others name the third.

It is a singular medicine for such as would live chaste, in what sort soever it be taken, whether in powder, or decoction, or the leaves worn about the bodie.

Also it driveth away windiness of the stomach, openeth and cureth the stoppings of the liver and spleene, with sundry such other needfull cures.

Willow is of a much like nature; and therefore it is yet a custome, that he which is deprived of his love, must wear a willow garland. Also the green boughs with their leaves may well be brought into chambers, and set about the beds of those who are sick of agues: for they do mightily cool the heat of the aire; which thing cannot but be a wonderfull refreshing to the sick patient.

Tamarisk is a little tree well known; the decoction of whose branches being drunk in wine, and a little vineger,

Willow.

From whence came the first use of willow garlands.

Tamarisk.

Good for the spleene or milt.

vineger, is of great vertue against the hardnesse or stopping of the spleene or milt: for this tree doth by nature so waste the milt, that swine which have been daily fed out of a vessel made thereof, have been found to have no milt at all.

Rose is cold in the first degree and drie in the second, somewhat binding, especially the white *Rose*. The red is lesse cold, more drie, &c. As for the damask and musk *Rose*, it is hot, and moist withall. The damask water is sweetest; but the red is wholesomest. And of the red *Rose* leaves a conserve may be made, which is good, not onely to cool, but also to comfort the principall parts of the bodie, viz. the head, heart, stomach, liver, spleene, and reins. Thus you may make it. Take the buds of red *Roses* somewhat before they be ready to spread; cut the red part of the leaves from the white, shake out the yellow seeds: then take the red leaves and beat them very small in a stone mortar with a pestle of wood; and unto every ounce of *Roses* put three ounces of sugar, by little and little, in the time of the beating, and beat them all together untill they be perfectly incorporated: then put it in a glasse or gallipot; stop it close, and set it in the sunne for a season, and it is made. And know that it will remain in full vertue for a yeare or two, but then it decayeth.

Myrtle is a little low tree growing in some hot countreys, having small dark leaves, bearing berries which are of a binding nature, and good to stop any issue of blood. This is a tender plant, not able to endure any cold; and (as authours affirm) it was wont to be worn of the Romane captains garland-wise in triumph; namely then, when they had obtained any victorie without slaughter of men. Also in times past this tree was consecrated to *Venus*: and thereupon I finde in *Plinie*, that amongst the Romanes there was an altar belonging to *Venus*, which

M m 2

they

*Rose.*The temper and vertue of *Roses*.Conserve of *Roses*, what it is good for.

How to make the conserve.

Myrtle.

Good against fluxes.

Myrtle garlands.

Myrtle berries
used for pepper.

Ebone.
A smoke good
for the eyes.

Sethim.

Palm.

A token of vic-
torie.

Latoⁿa delivered
by the Date.

Plane.

they call by the name of *Murtia*. The said authour also affirmeth, that before pepper was found out, the myrtle berries served in stead thereof. See *Plin. lib. 15. cap. 29.*

Ebone is a tree growing in India and Ethiopia, in taste being sharp and biting. If it be burnt, it yeelds a sweet smell, the smoke whereof is not offensive, but good against many diseases of the eyes: as also the green wood is so full of sap, and withall so fattie, that it will flame like a candle. Some have said that it bears neither fruit nor leaves; but this is a false opinion, as they have witnessed who have seen the tree, and taken the true picture of it. The outward parts are white, but within it is black. That which groweth in India, is not in such estimation as the Ethiopian *Ebone*; for it is spotted with white and yellow.

Sethim is a kinde of tree something like a *White-thorn*; the timber whereof never rotteth. Of this tree, Noah, according to Gods command, made the ark; as we reade in *Genesis*.

Palm, or *Date* trees, are both one. This tree groweth plentifully in Egypt, and other parts of Africa; but those which are in Palestine and Syria are the best: they grow likewise in most places of the East and West Indies.

The branches of this tree were wont to be carried as a token of victorie, because they are of this nature, viz. that they will shoot upward, though oppressed with never so great weight: neither do the leaves of it ever fall. *Elianus* remembreth another propertie; for (saith he) the report runneth thus, that in *Delus* the Olive tree and the Date tree flourish most fruitfully, which when *Latoⁿa* had touched, she was suddenly disburdened of child-birth, whereas before she could not be delivered. *Elian. lib. 5.* Also they grow by couples, male and female: but the female is onely fruitfull.

The *Plane* tree, called *Platanus*, is a spreading tree with

with broad leaves: in times past it was greatly esteemed in Italie for the shadow thereof; insomuch that (as *Plinie* reporteth) they often bedewed it with wine to make it grow. The old Romanes were wont to banquet much under these trees. And there is, saith *Plinie*, no greater commendation of this tree, then that it keepeth away the sunne in summer, and entertaineth it in winter.

We reade of *Xerxes* King of Persia, that he was strangely enamoured on this tree, having it in such singular admiration that he became a servant to it. For in Lydia (as *Elianus* writeth) when *Xerxes* happened to see a tall and loftie fair *Plane* tree, he made a whole dayes tarrance by it; and, no necessitie constraining him so to do, he pitched his pavilions and tents in the void and emptie places round about the same. He also hang-ed precious jewels of great value upon it, adorning and beautifying the boughs and branches with chains of gold, with bracelets and tablets, with spangles and such like costly things, yeelding thereunto great worship and reverence; appointing also an overseer to keep, preserve, and defend the same from all casualties. This was a strange crotchet; and little or nothing the better was the poore tree for all this love and braverie.

Pepper (whereof there are divers sorts) groweth at the foot of other trees, climbing upon them like to ivie, and is in bunches like grapes.

Ginger groweth like young reeds, with a root like a lillie: it is plentiful in *Malabar*, or *Malawar*, a province in India *intra Gangem*.

Cinnamon is the inner bark of a tree as big as an olive; with leaves like bay leaves, and fruit like an olive: the drying of the bark maketh it roll together. Within three yeares the tree yeeldeth another bark, as before. They of *Ormuz* call it *Darchini*, that is, wood of China: and selling it at Alexandria, they call it *Cinnamomum*,

M m 3 which

A banqueting
tree.

c. *Parish. 6. 17.*
lib. 2.

Pepper.

Ginger.

Cinnamon.

which is, *quasi Amomum ex Sina delatum. Purch. ex Garcia ab horro.*

Nutmegge
and *Mace.*

The *Nutmegge-tree* is like a peach or pear-tree, and groweth most in *Banda* an island in Asia, and in *Java*. The fruit is like a peach, the inner part whereof is the *Nutmegge*, which is covered and interlaced with the *Mace*. For when the fruit is ripe, the first and outermost part openeth; as it is with our walnuts; then the *Mace* flourisheth in a fair red colour, which in the ripening becometh yellow.

Cloves.

Cloves grow in the *Moluccos* on trees, like bay-trees, yeelding blossomes, first white, then green, afterwards red, then hard; and this hard thing is the *Clove*. When they be green they yeeld the pleasantest smell in the world. And (as it is reported) being ripe they are of such an extraordinary heat and drinesse, that in two dayes they will suck out and drie up such vessels of water, as shall happen to stand in the same room where they are. These spices and drugs, with many other, are the fruits of India.

Cypresse.

The *Cypresse* is a tree growing on drie mountains, and most commonly in hot countreys. It is very tall, and the timber thereof is yellowish and of a pleasant smell, especially being set neare to the fire; and of such durable nature, that it doth neither rot nor wax old, nor yet cleaveth or chappeth it self. See *Plin. lib. 16. cap. 33. & 42.*

Pine.

The *Pine* is a tree of the same nature, not subject to worms or rottenesse, and therefore much used, where it groweth, to make ships. The leaves are hard-pointed, sharp and narrow, continuing green all the yeare; and the shadow thereof^d will not suffer any plant to grow under it.

Cedar.

Cedar is a tall great tree which groweth in Africa, and Syria; many of them upon mount. Libanus. They be straight

straight and upright like the Firre-tree: their leaves are small, thick, and of a sweet smell. This tree hath fruit on it all times of the yeare, which fruit is like to that of the Firre & Pine-tree; but greater and harder: and at this day (as some affirm) there are found upon mount *Libanus*, *Cedars* planted by King Solomon: the truth of which I will not stand to justifye.

Terebinth is a tree from whence Turpentine issueth.

Picea is a tree that droppeth pitch; it groweth in Greece, Italy, France, Germanie, and all the cold regions even unto Russia. It remaineth alwayes green like unto the *Pine*; and, by some, is supposed to be a wilde kinde of *Pine*: especially seeing the *Pine* affordeth Rosin, Pitch and Tarre. Yet some attribute Pitch to the great *Cedar*, Rosin to the wilde *Pines* chiefly, and Tarre to the *Pine* called the *Torch-Pine*.

There is a tree in India, called the Indian *Coquo*, or *Cocus*, being the most strange and profitable tree in the world; of which in the islands of *Maldiva* they make and furnish whole ships: so that (save the men themselves, saith one) there is nothing of the ship or in the ship, neither tackling, merchandise, or ought else, but what this tree yeeldeth. It groweth high and slender, the wood is of a spongie substance; easie to be sewed, when they make vessels thereof, with cords made of *Cocus*. It hath a continuall succession of fruits, and is never without some: they grow like a kinde of nut, which is of a very large size, having two sorts of husks as our walnuts; the uppermost whereof is hairy like hemp, and of this they make cordage; and of the next they make drinking-cups. When the fruit within these shells is almost ripe, it is full of water, which, as it ripeneth, changeth into a white harder substance: at the first this liquour is sweet, but with theripening groweth sowre. The tree affords a very medicinable juice; and, if it stand one

Terebinth.
Picea.

Cocus.

c Mr Pottel's pil-
grim. part 1.
lib. 5. cap. 12.

houre

houre in the sunne; it is good vineger; but distilled, it may be used in stead of wine or *Aqua-vita*. There be wayes also to make sugar of it, and of the meat in the nut dried they make oyl: Of the pith or heart of the tree they make paper: of the leaves they make coverings for their houses, tents, mattes, and the like. Nay, their apparell, firing, and other necessary commodities, they gather from this tree. Thus some. Or, according to others, it is thus described: In the isle of *Zebus* there is a fruit which they call *Cocos*, formed like a *Melon*, but more long then thick: It is inclosed with divers little skinnes, so strong and good as those that environ a Date stone. The islanders make thread of the skinnes, as strong and good as that which is of hemp. The fruit hath a rinde like a drie Gourd, but farre more hard: which, being burned and beaten to powder, serveth for medicine. The inward nut is like unto butter; being both as white, and as soft, and besides that, very savoury and cordiall. They make use of this fruit also in divers other things. For if they would have oyl, they turn and tosse it up and down divers times: then they let it settle some few dayes, at which time the meat will be converted into a liquor like oyl, very sweet and wholesome, wherewith they oftentimes anoint themselves. If they put it into water, the kernell is converted into sugar; if they leave it in the sunne, it is turned into vineger. Towards the bottome of the tree they use to make a hole and gather diligently into a great cane the liquor that distilleth, which amongst them is of as much esteem as the best wine in these parts: for it is a very pleasant and wholesome drink.

Arbore de rais.

There is also among the Indians a tree called *Arbore de rais*, or the tree of roots, called also the *Indian fig-tree*, and by some affirmed (with more confidence then reason, saith one) to be the tree of Adams transgression. It groweth

groweth out of the ground, as other trees, and yeeldeth many boughs, which yeeld certain threads of the colour of gold, which growing downwards to the earth do there take root again, making as it were new trees, or a wood of trees, covering sometimes the best part of a mile.

There is also another tree which some call the *Indian mourner*, or *Arbore triste*, the sad and sorrowfull tree. It hath this propertie, that in the day time and at sunne-setting you shall not see a flower on it: but within half an houre after, it is full of flowers, which at the sunne-rising fall off, the leaves shutting themselves from the sunnes presence, and the tree seeming as if it were dead. The Indians have a fable of one *Parifatico*, who had a daughter, with whom the sunne was in love; but lightly forsaking her, he grew amorous of another: whereupon this damosel slew her self, and of the ashes of her burned carcase came this tree. A prettie fiction this: *Ovid* himself hath not a better.

In the island of *Hierro* (being one of the seven islands of the *Canaries*) is a tree which distilleth water incessantly from the leaves thereof, in so great abundance, that not onely it sufficeth those of the island (for there is no other water in the island) but also might furnish the necessary uses of a farre greater number of people. This strange tree is alwayes covered with a little mist, which vanisheth by degrees, according as the sunne sheweth himself.

When the Spaniards (saith my authour) took upon them to conquer this isle, they found themselves almost discomfited, because they saw neither fountains, springs, nor rivers: and enquiring of the islanders where they had their water, they answered that they used none but rain-water, &c in the mean time kept their trees covered, hoping by this subtiltie to drive the Spaniards out of the

Nn

isle

Arbore triste.

A weeping tree.

isle again. But it was not long before one of their women, entertained by a Spaniard, discovered the tree with the properties of it; which he at the first held for a fable, untill his own witnesse saw it was true; whereupon he was almost ravished with the miracle: but the woman was put to death by the islanders, for her treacherie.

Barnacle tree.

In the north parts of Scotland and in the islands adjacent called *Orchades*, are certain trees found whereon there groweth a certain kinde of shell-fish, of a white colour, but somewhat tending to a russet; wherein are contained little living creatures: For in time of maturitie the shells do open, and out of them by little and little grow those living creatures; which falling into the water when they drop out of their shells, do become fowls; such as we call *Barnacles* or *Brant Geese*: but the other that fall upon the land, perish and come to nothing. Mr *Gerard* affirmeth that he hath seen as much in *Lancashire*, in a small island which is called the *Pile of Foulders*: for there be certain boughs of old trees, and other such like rubbish cast up by the sea, whereon hangeth a certain spume or froth, which in time breedeth unto a shell: out of which by degrees cometh forth a creature in shape like a bird; sending out first a string or lace, as it were, of silk finely woven, and of a whitish colour; then follow the legs, and afterwards more and more, till at the last it hangeth by the bill: soon after it cometh to maturitie and falleth into the sea, where it gathereth feathers, and groweth to a fowl bigger then a mallard, and something lesse then a goose, being somewhat coloured like to our mag-pies. This Mr *Gerard* testifieth to be true upon his own knowledge; as in his *Herball* is apparant.

And thus (gentle reader) I would here end, not onely this Chapter and Section, but also the first part of my book,

book, were it not that I have a desire to speak a word or two of things growing under ground, and within the earth: which, as briefly as I can, shall be handled in the following Appendix.

An Appendix to the two former Sections; discoursing somewhat concerning Metalls, and such like things as are under ground.

IN the second dayes work I had occasion to speak of Fiery, Aerie, and Watery Meteors: all which by the Philosophers are named bodies imperfectly mixt, being but a little durable. And now, being to speak of things under ground, I am come to bodies more perfectly mixt, and of a longer continuance, because they consist of a more solid and constant concretion of Elements.

Their names in generall, are either *Mineralia*, Minerals; *Fossilia*; or *Metalla*.

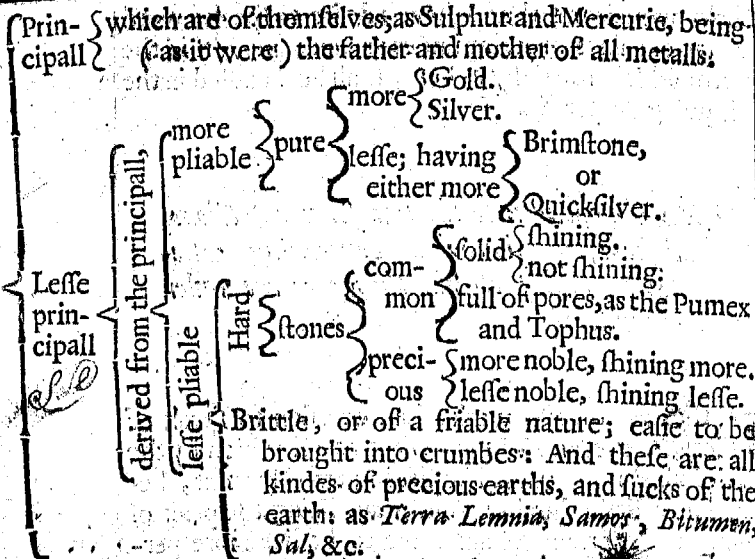
They are *Mineralia*, because they are generated in Mines; that is, in the veins, pores, and bowells of the earth.

They are *Fossilia*, from *Fodio*, to dig, because they are digged out of the earth.

And they are *Metalla*, *Metalls*, from the Greek word *μεταλλαν*, which is to search, or finde out; because, with much labour and cost, they are sought out of the veins and bowells of the earth.

That name which I insist upon, is this last: And that the kindes of Metalls may the better be remembred, this short table would be observed.

Metalls are either



Of these kindes I purpose to speak a word or two, which shall be as it were to explain the table to such as know it not.

The first, or principall metalls, are *Sulphur*, and *Mercurie*: These are of themselves, because other metalls do not help to make them, but they help to make other metalls.

Brimstone. *Sulphur* or *Brimstone*; is said by some to be the fat of the earth with fiery heat decocted unto his hardnesse; which is the cause that it so speedily is enflamed, and burneth even in water.

Or thus. *Sulphur* is a metallick substance or matter, consisting of a more subtile Exhalation; fat and unctuous, shut up within the veins of the earth. It will burn sooner then the fat of beasts: for although it be fatter then *Brimstone*, yet it is farre colder.

Mercurie

Mercurie or *Quicksilver* is a slimie water, mixt with a pure white earth; which metall; for the matter whereof it doth consist, is thin, cold and heavie. *Quicksilver.*

Or thus. *Quicksilver* is a metallick matter, consisting of a waterie vapour, more subtil then ordinary; which is mixed with earth to conglutinate or knit it together; and, by the heat of *Sulphur*, it is digested into what it is. It pierceth metalls, because of the extreame thinnesse; which, together with the heat of it, makes it be in continuall motion: and the motion, by a Metaphor, causeth it to be called *Quicksilver*. Moreover, it is also called *Mercurie*, because as *Mercurie* is joynd to all the Planets, so this to all metalls: or as *Mercurie* is moved many wayes, so this is apt for any motion.

The lesse principall metalls are derived from these first. I call them lesse principall because they are not of themselves, but produced by the help of the other two.

These I divide into two sorts; the pliable, and the lesse pliable. P

Pliable metalls are pure: and that, either more or lesse. The more pure, are *Gold* and *Silver*.

Gold is the onely purest of all metalls, and is composed of a most pure red *Sulphur*, and of the like *Quicksilver*: they are red, but not burning: This metall is onely perfect; all other be corruptible. It is perfect, because it is concocted with sufficient heat, and mixture of *Sulphur*: whereas all other metalls, either are not so well concocted, or else they have not the due quantitie of *Brimstone*: and (as it is affirmed by the Alchymists) because nature in all her works seeketh the best end; she intendeth of all metalls to make gold: but being hindered; either for want of good mixture, or good concoction, she bringeth forth other metalls; although not so precious, yet in their severall uses, every way as profitable; if not more: for it is scarce a question whether there be more use

Metalls derived from the two first.

Pliable metalls of the purest kinde.

Gold.

Moore's *Algebra*.

use to the necessitie of mans life, in Iron and Lead, then is in Gold and Silver. Gold never rusteth, both because of the purenesse of its parents, free from poisonous infection; and also because it is so solidly composed that no aire (which causeth all things to corrupt) can be received into it.

This perfection, together with the rarenesse, and beautie of it, hath caused fond mortals to doat so much upon it as they do. Nay, will not one pound or ounce of this go further then ten, either ounces or pounds of honestie? The Poets saying agreeth to it,

*Aurea nunc verè sunt secula, plurimus auro
Venit honos.*

This is the golden age, not that of old:

For now all honour's to be bought with gold.

And hereupon I think it is, that most men dispraise this metall, and yet but few who would not have it.

*Diversas hominum videam cum sparsa per artes
Ingenia; est cunctis ars tamen una viris.*

Omnibus idem animus gratos sibi querere nummos.

Omnis inexhaustas undique pascit opes.

When I behold the wits of men inclin'd

To divers arts, Fall of them do finde

In this one art to meet; they shun no pain

With'd wealth to heap up, and augment their gain.

Nay, they are not common fetches and plots, but strange and bloudie damned practises which are often used to get and obtain the riches of the world. Which Ovid could discern a long while since; and therefore he saith,

Effodiuntur opes irritamenta malorum:

Famque nocens ferrum, ferroque nocentius aurum.

Riches (those fond enticements unto ill)

Are digged up; and iron which doth kill.

But Gold it is which doth more harm to men

Then iron blades, though steel'd, though sharp,
though keen.

Or,

Or, as another saith,

Aurum, destructor vita, princepsque malorum,

O quam difficiles noctis ubique dolos!

O utinam natum nunquam mortalibus esses,

Dulcia suppeditas qua nocumenta viris!

Gold, lifes destroyer, and of mischiefs chief;

Oh what strait wiles dost thou knit, past beliefe!

Would thou hadst ne're been born to mortall
wights,

Sith harm to men rests in thy false delights!

These are the complaints. But it is neither in Gold nor Iron or the like, that these evils rest; the causes of ill ought rather to be imputed to the devil and wicked men. For true it is,

All goods are good to good men that well use them,

But they are bad to fools who do abuse them.

And thereupon saith Du Bartas,

I know to man the earth seems (altogether)

No more a mother, but a step-dame rather;

Because (alas) unto our losse she bears

Bloud-shedding Steel, and Gold, the ground of cares:

As if these metals, and not mans amisse,

Had made sinne mount unto the height it is.

To pick a lock; to take his neighbours purse,

To break a house, or to do something worse;

To cut his parents throat, to kill his prince,

To spoil his countrey, murder innocence.

For, as a cask, through want of use grown fustie,

Makes with his stink the best Greek malmsey mustie:

So Gods best gifts, usurpt by wicked ones,

To poison turn through their contagions.

What pains do not men take to winne gold? every man hath one way or other to hunt after it: but the Alchymist, despising all other wayes, as slow, unnaturall, and unprofitable, laboureth, either to help nature in her
work,

work, as of imperfect metals to make perfect, or else to force nature to his purpose, by his quintessences and Elixers; so that what by purging, what by concocting, what by mixing of Sulphur and Quicksilver, and much other like stuffe, at length he turneth the wrong side of his gown outward, all the teeth out of his head, and his bodie from health to a palsie, and then he is a Philosopher, and so he must, nay, will be called.

It is said of Gold that it waxeth cold towards daylight: insomuch that they who wear rings of it, may perceive when the day is ready to dawn.

Silver is the most pure metall next unto Gold: it hath an indifferent good concoction, but it wanteth sufficient heat in the mixture, and thereupon it looketh pale. It is a metall begotten of pure white Mercurie, and of cleare white Brimstone or Sulphur.

The lesse pure pliable metalls, consist some of them of more Brimstone; some of more Quicksilver: neither are any of these two so pure, as those in the mixture of Gold and Silver.

Brasse is an impure metall, consisting most of a red and thick Sulphur, and of a little Quicksilver something impure: that which cometh from *Cyprus* is called *Copper*, and is the purest, as being of best digestion, and nearest unto Gold; * *Brasse*, *Latten*, and such like; being no other then divers kindes of *Copper*. In ancient time; this metall was in greater esteem then Iron: for they did not onely make their armour of it, but their bucklers also and their lances; because they would not be worn, either with age or use.

Copperas is a minerall of a neare nature unto *Brasse* or *Copper*: it is said by some to be mixed of humours strained by drops into small holes. And perhaps it is nothing else but the more raw and impure substance of that which is the matter of *Copper*, with lesse Quicksilver

in

*Silver.*Pliable metalls
lesse purp.*Brasse and
Copper.** Some say
Brasse is not nat-
urally, but arti-
cially made.*Copperas.*

in it, and that also of a baser qualitie. It is hot and drie in the fourth degree, vehemently binding, being of great force to season and preserve raw flesh, (as some affirm) and is also good to beget sound flesh in festered fores, and to stench blood. It is of a green, yellow, and a skie colour: but the best hath white spots in it. See more afterwards in *Viriol*.

Iron is a common metall, necessary for the use of mans life, engendred of a most impure Quicksilver mixed with a thick Sulphur impure and adust. Or thus; It is an impure metall consisting of much crude, earthie, adust Sulphur, and a modicum of filthie and bad Mercurie. This (saith the Philosopher) although it be hard, yet by daily use it is worn and wasted: the reason being in regard that it hath in it least of Mercurie, and most of an earthie Sulphur. The quenching it in water makes it harder and harder: but if it be quenched in the juice of bean-shells or mallows, it becometh soft: and so also doth the often heating it, and cooling it without quenching. *Plinie* calleth it *optimum pessimumque vita instrumentum, the best and worst instrument of life.*

Steel is a kinde of Iron, but the purest and the hardest; or Iron refined. Naturall steel, which we call *Chalybs*, in times past was gotten out of a place in Thracia, where the people called *Chalybes* inhabited: their use was to go naked, and digge this metall out of the earth.

Metalls consisting most of Mercurie, are these; *Lead*, and *Tinne*.

Lead is a raw and indigested metall, but of better digestion then commixtion: for it is mixed with a grosse earthie substance, which causeth it to be in colour so black, and so ready to foul. It is begotten of much un-
pure, thick, and drossie Mercurie; and by refining is made whiter. The kindes of this are varied by reason of the matter whereof it consisteth, and by reason of the heat

O o by

*Iron.*How to soften
Iron.

h Lk. 36. 20. 21. 22.

*Steel.**Lead.*

by which it is decocted: and thereupon it comes to passe that we have one sort which we call *Black-lead*; another farre whiter and clearer, as being better concocted, and more purely composed. It is of a cold and binding nature; and if it lie in the wet, moisture will increase the weight. England hath store of it.

Tinne.

Tinne, whereof great plentie also groweth in the West parts of England, in beautie and colour cometh nearest unto Silver; and of Silver wanteth nothing but soliditie and hardnesse. Some think that it is composed of Silver and Lead: but the more common opinion is, that the greatest part of it is Mercurie, white without, and red within, having a portion also of Brimstone or Sulphur not well mixed, being as it were Lead whited with Silver: for it is a raw and undigested metall, very porous and uncompact, which causeth it to crash when it is either broken or bitten. And thus farre of metalls pliable.

Metalls lesse pliable which are hard.

The lesse pliable (as I shewed in the table) are either hard, or brittle; & cannot be easily hammered; wrought, or melted to a desired form.

Stones.

The hard ones, are all kinde of stones. And of stones, together with bodies friable or brittle, it is doubted whether they be in the number of metalls or no; because there is great difference in the matter of their composition, &c.

To which it is answered, that although they be not in the number of such kinde of metalls as are pliable, and will melt; nor yet abound with that matter of mixture which they do: nevertheless they may bear the name of metalls, according to that generall name specified in the derivation of the word *Metalla*. And in that regard I made a difference of metalls, and drew them out in the former table. Wherefore I proceed: and following them who derive stones after this manner, I say that stones

stones are bodies perfectly mixt, without life, hard, of a drie and an earthie exhalation, mixed with a certain unctuositie; and by the durance of time, together with the force of heat and cold, and a minerall vertue, conglutinated or knit together. Or thus; they be engendred of a watrie moisture, and fat earth mixed hard together. By which it appeareth that the matter of stones is a watrie humour, and a thick unctuous earth: which is not so to be understood as if the other two elements were separated from their mixture; but because they have not such precedencie as the former. And for their efficient causes besides the minerall vertue; it is said to be heat and cold. Heat bringeth the slow humid unctuous matter through the thin parts of the earth (as the Philosophers affirm) and cold condenseth it, and makes it thick. They live not with a vegetative life, as plants and trees which have their nourishment from within; but their augmentation proceeds from an outward accretion by the apposition of particulars adhering to them, when they lie in place convenient: and, in time, their vertues may be abated, by being long out of their right *Ubi*; in which regard some supposed that they had life, and died.

What stones are, and whereof they consist.

Stones live not a vegetative life.

The common stones are of a more impure and grosse matter then the other. Some whereof are solid; some more full of pores.

Common stones.

In the solid, the parts are more continued, and better compacted: yet so, as some have a kinde of shining in them; others are dark and dull. The shining solid stones, are chiefly all kinde of marbles: of which I finde three sorts. 1. *Alabaster*; which is of colour very cleare and white. The Greeks call it *αλαβαστρινς*: and about Thebes in Egypt it is especially found; there being the greatest plentie of it. 2. *Ophites*, which is a kinde of marble having spots like a serpent. 3. *Porphyrites*, which is the red marble, mixed or interlaced with white spots. The

Alabaster.

Ophites.
Porphyrites.