

Texts primarily dealing with physical alchemy

17th Century:

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Table of alchemical equipment and operations by Athanasius Kircher

This systematic table of alchemical operations and apparatus is found in Athanasius Kircher, *Mundus Subterraneus...* Amsterdam, 1665. Tomus II., page 260.

Chymia is engaged about :-

Equipment

Place

Furnaces

OPEN

Proving

Bellows

COVERED

Simple

Calcining

Cementing

Reverberating

Dissolving

Ascending

by the dry way

in a flask

in a sand bath

by the wet way

in a water bath
Descending
Compound
Athamor
With auxiliary furnaces

Vessels

HEATED

made from special materials

Glass
Phials
Circulating vessels
Pelicans
Double pelicans
Philosophers Egg
Mineral
Metal
Subtiliation
in flasks
in boiling vessels

Fusion
Moulds
Casting cones
Earthenware
made only of earthenware
for fusion
Ash cupels
Crucibles
not for fusion
cementation box
containing another vessel
sand bath
muffle furnace

made from any materials

Superior alembic
closed alembic for cooking
alembic with a beak
Inferior alembic
Cucurbites
Retorts

NOT HEATED

for storing
Receptacles
Dishes
for transferring
Funnels
Separating funnels

Instruments

Instruments for use in the fire

Always necessary
thin items

gridiron
iron rod or poker
thick item
shovel

optional
wooden
dyoptra (for protecting the eyes against the fire)
metallic
iron plate
Mortar

Sources of heat

Natural rays of the Sun
Artificial
simple
for digesting
Athamor
Dung-bath
for separating
gently
Ash-bath
fiercely
indirect
Sand-bath
Bath of iron filings
directly
Coal fire
flames
mixed bath
of sea water
of dew

Operations

Solution

Calcination

Corrosion
by vapours
by immersion
in the wet way
by Amalgamation
by Precipitation
in the dry way
by Cementation
by Commixtion

Ignition
by Combustion
by Reverberation
by Incineration
by Vitrification

Dissolution

SUBTILIATION

by operations of short duration

by Elevation
in the dry way
Sublimation
in the wet way
directly
in an Alembic
in a bladder
obliquely
through a side Retort
by Descension
by heat
by cold
Deliquium
Filtration

by operations of long duration

Exaltation
by Circulation
by Ablution
Digestion
by Putrefaction
by Imbibition
by Cohobation
by Coration
by Extraction

LIQUEFACTION

simple
proving
through Cineritium (ashes)
through Antimony

Coagulation

by cold
by heating

The three alchemical flasks of Oldfield

These alchemical three flasks were bequeathed by an adept, Clement Oldfield, to Queen Elizabeth I, who after some subterfuge sold them to Roloff Peterson of Lubeck. This correspondence is preserved in the Domestic State Papers. I show here the summaries of the contents of each letter from the Catalogue of the State Papers.

Elizabeth Vol. LXXV. 66. [1570?] Note of the contents of the letter to Her Majesty written from J. Peterson, native of Lubeck. On the subject of alchemy: offering to her three wonderful alchemical glasses; and of the undertaking by Robert Smythe, on the peril of his head, to bring 40,000 dollars into the Queen's coffers by their means.

Elizabeth Vol. CCXLV. 130. [Oct. 20. 1593. Lubec.] Roloff Peterson to the Queen. Clement Ouldfeld, born in Kent, came to lodge in his house at Lubec, 11 Sept. 1587, and continued there until 6 Sept. 1593, when he died; he studied alchemy night and day, and had brought himself to such perfection that, if the Lord had spared his life six months longer, he believed he should have reaped his heart's desire. The day before he died, he secretly informed the

writer that he had at last found out and long kept a secret of such value, and so far exceeding all other, that none but high and mighty Princes should participate, he then delivered to him three glass bodies, containing alchemical preparations, sol, luna, etc. and explained these, and sundry others. After this he told him he had a most wonderful secret, which, in the hands of any man but meanly skilful in this art, would work wonderful things, and wished the writer to make profit thereby, in regard of his kindness; but inasmuch as the great and infinite treasures that might be attained by these means rather appertained to the majesty of kings and princes than to men of his estate, he bound him by an oath to present the same to the Queen of England, and wait her answer six months, before opening the matter to any other, or making profit thereof, which he might then do if she refused; after this he yielded up the ghost. If Her Majesty will send any skilful man to be further advertised, and to see the things, is ready to discharge his trust; but if he has no knowledge within six months, shall esteem himself freed from the covenant, and at liberty to dispose thereof. [2 pages.]

Elizabeth Vol. CCXLVII. 36. [Feb. 2nd. 1594.] Promise by Rob. Smith of Great Yarmouth, that whereas he has delivered into the hands of Sir Thos. Wilkes, clerk of the Council, a letter to the Queen from Roloff Peterson, of Lubec, offering to present three glasses or bodies in alchemy, one of Sol, one of Luna, and the other of Mercury, as the gift of Mr. Ouldfield, born in Kent, and has offered Sir Thomas, at the peril of his head, to bring 40,000 dollars into Her Majesty's coffers for these glasses or bodies, without one penny of expense, if it will please her Majesty not to meddle with the receiving of them; and whereas doubts were moved as to how Her Majesty might consider the virtues of these glasses or bodies, as being without error or deceit, and whether she would accept them or the money; he confirms on his allegiance and life, the first two particulars, and offers to bring Roloff, if he lives, and the glasses or bodies, before Her Majesty, to be examined, after which, if she shall refuse the bodies, he will be bound as before, to procure the money at his own charge.

Elizabeth Vol. CCXLVII. 72. [Feb. 20th. 1594. Hampton Court.] Instructions to Rob. Smith, of Yarmouth, sent by the Queen to Lubec. He having received the Queen's reply to a letter from Roloff Peterson, of Lubec, is to repair thither, deliver the letter, receive the three glass bodies, and bring them to Her Majesty. He is to ascertain from Peterson whether the materials therein were considered by Ouldfield to be brought to full perfection, and if anything is lacking, what it is. Also to recover any books or papers of Ouldfield relating thereto, or other of his books which treat of alchemy; also a secret menstruum, without which the materials aforesaid can hardly be brought to perfection. All these things are to be brought to Her Majesty, in order to ascertain their value, and either detain them, or return them, on the consideration mentioned. [Copy. 1 1/2 pages.]

Elizabeth Vol. CCL. 9. [Sept. 30th. 1594. Greenwich.] Declaration by the Queen, that whereas Clement Oldfield made a bequest, containing certain secrets of alchemy, to Roloff Peterson of Lubec, on condition of their being first offered on composition to Her Majesty, the said bequest shall be delivered unopened to the deputy of the Merchant adventurers at Stade, for Peterson; or if she is pleased to keep it, he shall receive 500 l. for the same within six months. [Copy.]

Elizabeth Vol. CCLI. 57. [March 13th. 1595.] Instructions for Rob. Smith, sent on Her Majesty's service into Germany. You shall repair to where you know the persons remain, with whom you are to confer on the service for which sent, and speedily bring to Her Majesty's coffers the sum which you promised, for the materials bequeathed to her by Clement Oldfield, deceased. As she has promised the said materials, or 500 l., before 20th April next, to Roloff Peterson, of Lubec, you are, if possible, to inform her before that time, whether you can compass the matter. If unable so to do, you are to tell Peterson that the person to whom the Queen sent for advice as to those materials is ill, and cannot attend before June, and to request a postponement till June 15, when the money or the goods will be delivered him by the governor of the Merchant Adventurers at Stade, who has received orders to that effect. If you conclude with the parties to whom you resort for the promised sum, it may be paid at Stade, part in hand, and part on bond, and the materials delivered, without trouble or alteration, as left by Oldfield, on June 10. All secrecy is to be observed, that it may not be supposed that the Queen has any other interest in the said materials than as a princess to whom, for their rareness and preciousness, they were offered; but that, there being now in the realm some acquainted with them, she has left them to the disposition of a servant of hers, by whom you are deputed to make such benefit as their value allows. Peterson is to be led to suppose that your journey to Germany is to bring to Her Majesty a person who can inform her about the materials. You are to send a speedy report of the result of your mission, that orders may be given accordingly. [2 1/2 pages.]

Elizabeth Vol. CCLI. 58. [March 14th. 1595.] The Council to Alderman Saltonstall, governor of the Merchant

Adventurers of London, resident at Stade. We send you three cases, two of wood, and one of black cotton, all sealed, with glass bodies therein, which you are to send to the company, to be safely kept until further orders. If before or about 24th April next, Roloff Peterson of Lubec shall claim, by a writing from Her Majesty, either the said cases or a sum of money in lieu thereof, he is requested to postpone his claim till June 10, since a person for whom Her Majesty sent to judge to quality of the things contained in the glasses could not hitherto come to England because of sickness, but she has now sent into that country a special messenger for him. You are to keep your having the glasses a secret from Peterson, Rob. Smith, and all others, and only to deliver them on order from [Sir] Thos. Wilkes. [1 1/2 pages. Copy.]

Elizabeth Vol. CCLIV. 46. [Oct. 1595.] Protest to be made by the deputy governor of the Merchant Adventurers at Stade. In Sept. 1594, the Queen received from Roloff Peterson of Lubec certain material of alchemy, sealed up in glass cases, and promised that they should be returned safe and unopened in six months, to the Merchant adventurer's deputy at Stade, for restoration to Peterson, or else that he should be paid 500 l. Before the time appointed, the Queen, as she could not obtain information in time of the virtues supposed to be in the materials, returned them to the said deputy, requesting Peterson to wait an answer till Rob. Smith had procured a person from Germany to inform her of their qualities. Peterson promised to wait till Sept. 30, when he declared he could wait no longer, and demanded the 500 l. Sent the Queen word, and received her directions, that as Peterson will not be content to wait till she can procure a skilful person - who is not easily to be found - to test the value of the materials, Her Majesty returns them. Thereupon, I, the deputy, hereby tender to him the three glass bodies, to see that they have been unopened, and am ready to deliver them to him on his delivery of the Queen's note thereon. Peterson having refused to receive the same, I, the deputy, protest my freedom from any charge or damage relating to the said goods, and declare that neither I nor Her Majesty is bound to pay the 500 l., unless she had retained the goods. I think Peterson forgets the high state of the sacred person he deals with, in claiming the money without having intimated his dislike of the delays. [6 pages.]

Colours to be observed in the Great Work

This is contained in *Aurifontina Chymica: or, a collection of fourteen small treatises concerning the first matter of philosophers, for the discovery of their (hitherto so much concealed) Mercury. Which many have studiously endeavoured to hide, but these to make manifest, for the benefit of Mankind in general.* London, 1680.

Colours to be observed in the Operation of the Great Work.

YOU must expect to have it exceeding Black, within 40 days after you have put your Composition into the Glass over the Fire; if it be not black, proceed no further, for it is unrecoverable: it must be as black as the Ravens Head, and must continue a long time, and not utterly to lose it during five months.

If it be Orange colour, or half Red, within some small time after you have begun your Work, without doubt your Fire is too hot; for these are tokens that you have burnt the Radical humour and vivacity of the Stone.

Know ye not, that you may have Black or anything mixed or compounded together with moisture: But you must have Black which must come and proceed of Perfect Metalline Bodies, by a real Putrefaction, and to continue a long time.

As for the colours of Blew and Yellow, they signifie that the Solution and Putrefaction is not yet perfectly finished, and that the colours of our Mercury are not yet well mingled with the rest.

The Black aforesaid is an evident sign, that in the beginning the Matter and Composition doth begin to purge it self, and to dissolve into small Powder, less than the Motes in the Sun; or a glutinous Water, which feeling the heat, will ascend and descend in the Glass: at length it will thicken and congeal, and become like Pitch, exceeding Black; in the end it will become a Body, and Earth, which some call Terra foetida; for then by reason of the perfect Putrefaction, it will have a scent or stink like unto Graves newly opened, wherein the Bodies are not thorowly consumed. Hermes doth call it Terra foliis, but the proper name is Leton, which must be blanched and made white. This blackness doth manifest a Conjunction of the Male and Female, or rather of the four Elements.

Orange colour then doth shew that the Body hath not yet had sufficient digestion, and that the humidity (whereof the colours of Black, Blew, and Azure do come) is but half overcome by the dryness.

When dryness doth predominate, then all will be white Powder: It first beginneth to whiten round about the outward

sides of the Glass; the Ludus Philosophorum doth say, that the first sign of perfect whiteness, is the appearing of a little hoary circle passing upon the Head, shewing it self round about the Matter on the outward sides of the Glass, in a kind of Citrine colour.

The Six Keys of Eudoxus, opening into the most Secret Philosophy.

Taken from M.A. Atwood *Suggestive Inquiry into the Hermetic Mystery*.

The Six Keys of Eudoxus

THE FIRST KEY

1. The First Key is that which opens the dark prisons in which the Sulphur is shut up: this is it which knows how to extract the seed out of the body, and which forms the Stone of the philosophers by the conjunction of the spirit with the body -- of sulphur with mercury.
2. Hermes has manifestly demonstrated the operation of this First Key by these words: In the caverns of the metals there is hidden the Stone, which is venerable, bright in colour, a mind sublime, and an open sea.
3. This Stone has a bright glittering: it contains a Spirit of a sublime original; it is the Sea of the Wise, in which they angle for their mysterious Fish.
4. But the operations of the three works have a great deal of analogy one to another, and the philosophers do designedly speak in equivocal terms, to the end that those who have not the Lynx's eyes may pursue wrong, and be lost in this labyrinth, from whence it is very hard to get out. In effect, when one imagines that they speak of one work, they often treat of another.
5. Take heed, therefore, not to be deceived here; for it is a truth, that in each work the Wise Artist ought to dissolve the body with the spirit; he must cut off the Raven's head, whiten the Black, and vivify the White; yet it is properly in the First operation that the Wise Artist cuts off the head of the Black Dragon and of the Raven.
6. Hence, Hermes says, What is born of the Crow is the beginning of this Art. Consider that it is by separation of the black, foul, and stinking fume of the Blackest Black that our astral, white, and resplendent Stone is formed, which contains in its veins the blood of the Pelican. It is at this First Purification of the Stone, and at this shining whiteness, that the work of the First Key is ended.

THE SECOND KEY

1. The Second Key dissolves the compound of the Stone, and begins the separation of the Elements in a philosophical manner: this separation of the elements is not made but by raising up the subtle and pure parts above the thick and terrestrial parts.
2. He who knows how to sublime the Stone philosophically, justly deserves the name of a philosopher, since he knows the Fire of the Wise, which is the only instrument which can work this sublimation. No philosopher has ever openly revealed this Secret Fire, and this powerful agent, which works all the wonders of the Art: he who shall not understand it, and not know how to distinguish it by the characters whereby it is described, ought to make a stand here, and pray to God to make it clear to him; for the knowledge of this great Secret is rather a gift of Heaven, than a Light acquired by the natural force of reasoning; let him, nevertheless, read the writings of the philosophers; let him meditate; and, above all, let him pray: there is no difficulty which may not in the end be made clear by Work, Meditation, and Prayer.
3. Without the sublimation of the Stone, the conversion of the Elements and the extraction of the Principles is impossible; and this conversion, which makes Water of Earth, Air of Water, and Fire of Air, is the only way whereby our Mercury can be prepared.
4. Apply yourself then to know this Secret Fire, which dissolves the Stone naturally and without violence, and makes it dissolve into Water in the great sea of the Wise, by the distillation which is made by the rays of the Sun and Moon.
5. It is in this manner that the Stone, which, according to Hermes, is the vine of the Wise, becomes their Wine, which, by the operations of Art, produces their rectified Water of Life, and their most sharp Vinegar. The Elements of the Stone cannot be dissolved but by this Nature wholly Divine; nor can a perfect dissolution be made of it, but after a proportioned digestion and putrefaction, at which the operation of the Second Key of the First Work is ended.

THE THIRD KEY

1. The Third Key comprehends of itself alone a longer train of operations than all the rest together. The philosophers have spoken very little of it, seeing the Perfection of our Mercury depends thereon; the sincerest even, as Artefius, Trevisan, Flammel, have passed in silence the Preparation of our Mercury, and there is hardly one found who has not feigned, instead of showing the longest and the most important of the operations of our Practice. With a design to lend you a hand in this part of the way, which you have to go, and where for want of Light it is impossible to know the true road, I will enlarge myself more than others have done on this Third Key; or at least I will follow in an order, that which they have treated so confusedly, that without the inspiration of Heaven, or without the help of a faithful friend, one remains undoubtedly in this labyrinth, without being able to find a happy deliverance from thence.
2. I am sure, that you who are the true Sons of Science will receive a very great satisfaction in the explaining of these hidden Mysteries, which regard the separation and the purification of the Principles of our Mercury, which is made by a perfect dissolution and glorification of the body, whence it had its nativity, and by the intimate union of the soul with its body, of whom the Spirit is the only tie which works this conjunction.
3. This is the Intention, and the essential point of the Operations of this Key, which terminate at the generation of a new substance infinitely nobler than the First.
4. After the Wise Artist has made a spring of living water come out of the stone, and has pressed out the vine of the philosophers, and has made their wine, he ought to take notice that in this homogeneous substance, which appears under the form of Water, there are three different substances, and three natural principles of bodies -- Salt, Sulphur and Mercury -- which are the spirit, the soul, and the body; and though they appear pure and perfectly united together, there still wants much of their being so; for when by distillation we draw the Water, which is the soul and the spirit, the Body remains in the bottom of the vessel, like a dead, black, and dredgy earth, which, nevertheless, is not to be despised; for in our subject there is nothing which is not good.
5. The philosopher, John Pontanus, protests that the very superfluities of the Stone are converted into a true essence, and that he who pretends to separate anything from our subject knows nothing of philosophy; for that all which is therein superfluous, unclean, dredgy -- in fine, the whole compound, is made perfect by the action of our Fire.
6. This advice opens the eyes of those, who, to make an exact purification of the Elements and of the Principles, persuade themselves that they must only take the subtile and cast away the heavy. But Hermes says that power of it is not integral until it be turned into earth; neither ought the sons of science to be ignorant that the Fire and the Sulphur are hidden in the centre of the Earth, and that they must wash it exactly with its spirit, to extract out of it the Fixed Salt, which is the Blood of our Stone. This is the essential Mystery of the operation, which is not accomplished till after a convenient digestion and a slow distillation.
7. You know that nothing is more contrary than fire and water; but yet the Wise Artist must make peace between the enemies, who radically love each other vehemently. Cosmopolite told the manner thereof in a few words: All things must therefore being purged make Fire and Water to be Friends, which they will easily do in their earth, which had ascended with them. Be then attentive on this point; moisten oftentimes the earth with its water, and you will obtain what you seek. Must not the body be dissolved by the water, and the Earth be penetrated with its Humidity, to be made proper for generation? According to philosophers, the Spirit is Eve, the Body is Adam; they ought to be joined together for the propagation of their species. Hermes says the same in other terms: "For Water is the strongest Nature which surmounts and excites the fixed Nature in the Body, that is, rejoices in it."
8. In effect, these two substances, which are of the same nature but of different genders, ascend insensibly together, leaving but a little faeces in the bottom of their vessel; so that the soul, spirit, and body, after an exact purification, appear at last inseparably united under a more noble and more perfect Form than it was before, and as different from its first liquid Form as the alcohol of Wine exactly rectified and actuated with its salt is different from the substance of the wine from whence it has been drawn; this comparison is not only very fitting, but it furthermore gives the sons of science a precise knowledge of the operations of the Third Key.
9. Our Water is a living Spring which comes out of the Stone by a natural miracle of our philosophy. The first of all is the water which issueth out of this Stone. It is Hermes who has pronounced this great Truth. He acknowledges, further, that this water is the foundation of our Art.
10. The philosophers give it many names; for sometimes they call it wine, sometimes water of life, sometimes vinegar, sometimes oil, according to the different degrees of Preparation, or according to the diverse effects which it is capable of producing.
11. Yet I let you know that it is properly called the Vinegar of the Wise, and that in the distillation of this Divine Liquor there happens the same thing as in that of common vinegar; you may hence draw instruction: the water and the phlegm ascend first; the oily substance, in which the efficacy of the water consists, comes the last, etc.

12. It is therefore necessary to dissolve the body entirely to extract all its humidity which contains the precious ferment, the sulphur, that balm of Nature, and wonderful unguent, without which you ought not to hope ever to see in your vessel this blackness so desired by all the philosophers. Reduce then the whole compound into water, and make a perfect union of the volatile with the fixed; it is a precept of Senior's, which deserves attention, that the highest fume should be reduced to the lowest; for the divine water is the thing descending from heaven, the reducer of the soul to its body, which it at length revives.

13. The Balm of Life is hid in these unclean faeces; you ought to wash them with this celestial water until you have removed away the blackness from them, and then your Water shall be animated with this Fiery Essence, which works all the wonders of our Art.

14. But, further, that you may not be deceived with the terms of the Compound, I will tell you that the philosophers have two sorts of compounds. The first is the compound of Nature, wherof I have spoken in the First Key; for it is Nature which makes it in a manner incomprehensible to the Artist, who does nothing but lend a hand to Nature by the adhibition of external things, by the means of which she brings forth and produces this admirable compound.

15. The second is the compound of Art; it is the Wise man who makes it by the secret union of the fixed with the volatile, perfectly conjoined with all prudence, which cannot be acquired but by the lights of a profound philosophy.

16. The compound of Art is not altogether the same in the Second as in the Third Work; yet it is always the Artist who makes it. Geber defines it, a mixture of Argent vive and Sulphur, that is to say, of the volatile and the fixed; which, acting on one another, are volatilized and fixed reciprocally into a perfect Fixity. Consider the example of Nature; you see that the earth will never produce fruit if it be not penetrated with its humidity, and that the humidity would always remain barren if it were not retained and fixed by the dryness of the earth.

17. So, in the Art, you can have no success if you do not in the first work purify the Serpent, born of the Slime of the earth; it you do not whiten these foul and black faeces, to separate from thence the white sulphur, which is the Sal Amoniac of the Wise, and their Chaste Diana, who washes herself in the bath; and all this mystery is but the extraction of the fixed salt of our compound, in which the whole energy of our Mercury consists.

18. The water which ascends by distillation carries up with it a part of this fiery salt, so that the affusion of the water on the body, reiterated many times, impregnates, fattens, and fertilizes our Mercury, and makes it fit to be fixed, which is the end of the second Work. 19. One cannot better explain this Truth than by Hermes, in these words:

When I saw that the water by degrees did become thicker and harder I did rejoice, for I certainly knew that I should find what I sought for.

It is not without reason that the philosophers give this viscous Liquor the name of Pontick Water. Its exuberant ponticity is indeed the true character of its virtue, and the more you shall rectify it, and the more you shall work upon it, the more virtue will it acquire. It has been called the Water of Life, because it gives life to the metals; but it is properly called the great Lunaria, because of its brightness wherewith it shines....

20. Since I speak only to you, ye true scholars of Hermes, I will reveal to you one secret which you will not find entirely in the books of the philosophers. Some of them say, that of the liquor they make two Mercuries -- the one White and the other Red; Flammel has said more particularly, that one must make use of the citrine Mercury to make the Imbibition of the Red; giving notice to the Sons of Art not to be deceived on this point, as he himself had been, unless the Jew had informed him of the truth.

21. Others have taught that the White Mercury is the bath of the Moon, and that the Red Mercury is the bath of the Sun. But there are none who have been willing to show distinctly to the Sons of Science by what means they may get these two mercuries. If you apprehend me well, you have the point already cleared up to you.

22. The Lunaria is the White Mercury, the most sharp Vinegar is the Red Mercury; but the better to determine these two mercuries, feed them with flesh of their own species -- the blood of innocents whose throats are cut; that is to say, the spirits of the bodies are the Bath where the Sun and Moon go to wash themselves.

23. I have unfolded to you a great mystery, if you reflect well on it; the philosophers who have spoken thereof have passed over this important point very slightly. Cosmopolite has very wittily mentioned it by an ingenious allegory, speaking of the purification of the Mercury: This will be done, says he, if you shall give our old man gold and silver to swallow, that he may consume them, and at length he also dying may be burnt. He makes an end of describing the whole magistry in these terms: Let his ashes be strewed in the water; boil it until it is enough, and you have a medicine to cure the leprosy. You must not be ignorant that Our Old Man is our Mercury; this name indeed agrees with him because He is the first matter of all metals. He is their water, as the same author goes on to say, and to which he gives also the name of steel and of the lodestone; adding for a greater confirmation of what I am about to discover to you, that if gold couples with it eleven times it sends forth its seed, and is debilitated almost unto death; but the Chalybes conceives and begets a son more glorious than the Father.

24. Behold a great Mystery which I reveal to you without an enigma; this is the secret of the two mercuries which contain the two tinctures. Keep them separately, and do not confound their species, for fear they should beget a monstrous Lineage.

25. I not only speak to you more intelligibly than any philosopher before has done, but I also reveal to you the most essential point in the Practice; if you meditate thereon, and apply yourself to understand it well; but above all, if you work according to those lights which I give you, you may obtain what you seek for.

26. And if you come not to these knowledges by the way which I have pointed out to you, I am very well assured that you will hardly arrive at your design by only reading the philosophers. Therefore despair of nothing -- search the source of the Liquor of the Sages, which contains all that is necessary for the work; it is hidden under the Stone - - strike upon it with the Red of Magic Fire, and a clear fountain will issue out; then do as I have shown you, prepare the bath of the King with the blood of the Innocents, and you will have the animated Mercury of the wise, which never loses its virtue, if you keep it in a vessel well closed,

27. Hermes says, that there is so much sympathy between the purified bodies and the spirits, that they never quit one another when they are united together: because this union resembles that of the soul with the glorified body; after which Faith tells us, there shall be no more separation or death; because the spirits desire to be in the cleansed bodies, and having them, they enliven and dwell in them.

28. By this you may observe the merit of this precious liquor, to which the philosophers have given more than a thousand different names, which is in sum the great Alcahest, which radically dissolves the metals -- a true permanent water which, after having radically dissolved them, is inseparably united to them, increasing their weight and tincture.

THE FOURTH KEY

The Fourth Key of the Art is the entrance to the Second Work (and a reiteration in part and development of the foregoing): it is this which reduces our Water into Earth; there is but this only Water in the world, which by a bare boiling can be converted into Earth, because the Mercury of the Wise carries in its centre its own Sulphur, which coagulates it. The terrification of the Spirit is the only operation of this work. Boil them with patience; if you have proceeded well, you will not be a long time without perceiving the marks of this coagulation; and if they appear not in their time, they will never appear; because it is an undoubted sign that you have failed in some essential thing in the former operations; for to corporify the Spirit, which is our Mercury, you must have well dissolved the body in which the Sulphur which coagulates the Mercury is enclosed. But Hermes assumes that our mercurial water shall obtain all the virtues which the philosophers attribute to it if it be turned into earth. An earth admirable is it for fertility -- the Land of Promise of the Wise, who, knowing how to make the dew of Heaven fall upon it, cause it to produce fruits of an inestimable price. Cultivate then diligently this precious earth, moisten it often with its own humidity, dry it as often, and you will no less augment its virtue than its weight and its fertility.

THE FIFTH KEY

The Fifth Key includes the Fermentation of the Stone with the perfect body, to make thereof the medicine of the Third order. I will say nothing in particular of the operation of the Third work; except that the Perfect Body is a necessary leaven of Our Paste. And that the Spirit ought to make the union of the paste with the leaven in the same manner as water moistens meal, and dissolves the leaven to compose a fermented paste fit to make bread. This comparison is very proper; Hermes first made it, saying, that as a paste cannot be fermented without a ferment; so when you shall have sublimed, cleansed and separated the foulness from the Faeces, and would make the conjunction, put a ferment to them and make the water earth, that the paste may be made a ferment; which repeats the instruction of the whole work, and shows, that just so as the whole lump of the paste becomes leaven, by the action of the ferment which has been added, so all the philosophic confection becomes, by this operation, a leaven proper to ferment a new matter, and to multiply it to infinity. If you observe well how bread is made, you will find the proportions also, which you ought to keep among the matters which compose our philosophical paste. Do not the bakers put more meal than leaven, and more water than the leaven and the meal? The laws of Nature are the rules you ought to follow in the practice of our magistry. I have given you, upon the principal point, all the instructions which are necessary for you, so that it would be superfluous to tell you more of it; particularly concerning the last operations, about which the Adepts have been less reserved than at the First, which are the foundations of the Art.

THE SIXTH KEY

The Sixth Key teaches the Multiplication of the Stone, by the reiteration of the same operation, which consists but in opening and shutting, dissolving and coagulating, imbibing and drying; whereby the virtues of the Stone are infinitely augmentable. As my design has been not to describe entirely the application of the three medicines, but only to instruct you in the more important operations concerning the preparation of Mercury, which the philosophers commonly pass over in silence, to hide the mysteries from the profane which are only intended for the wise, I will tarry no longer on this point, and will tell you nothing more of what relates to the Projection of the Medicine,

because the success you expect depends not thereon. I have not given you very full instructions except on the Third Key, because it contains a long train of operations which, though simple and natural, require a great understanding of the Laws of Nature, and of the qualities of Our Matter, as well as a perfect knowledge of chemistry and of the different degrees of heat which are fitting for these operations. I have conducted you by the straight way without any winding; and if you have well minded the road which I have pointed out to you, I am sure that you will go straight to the end without straying. Take this in good part from me, in the design which I had of sparing you a thousand labours and a thousand troubles, which I myself have undergone in this painful journey for want of an assistance such as this is, which I give you from a sincere heart and a tender affection for all the true sons of science. I should much bewail, if, like me, after having known the true matter, you should spend fifteen years entirely in the work, in study and in meditation, without being able to extract out of the Stone the precious juice which it encloses in its bosom, for want of knowing the secret fire of the wise, which makes to run out of this plant (dry and withered in appearance) a water which wets not the hands, and which by a magical union of the dry water of the sea of the wise, is dissolved into a viscous water -- into a mercurial liquor, which is the beginning, the foundation, and the Key of our Art: Convert, separate, and purify the elements, as I have taught you, and you will possess the true Mercury of the philosophers, which will give you the fixed Sulphur and the Universal Medicine. But I give you notice, moreover, that even after you shall be arrived at the knowledge of the Secret Fire of the Wise, yet still you shall not attain your point at your first career. I have erred many years in the way which remains to be gone, to arrive at the mysterious fountain where the King bathes himself, is made young again, and retakes a new life exempt from all sorts of infirmities. Besides this you must know how to purify, to heal, and to animate the royal bath; it is to lend you a hand in this secret way that I have expatiated under the Third Key, where all those operations are described. I wish with all my heart that the instructions which I have given you may enable you to go directly to the End. But remember, ye sons of philosophy, that the knowledge of our Magistry comes rather by the Inspiration of Heaven than from the Lights which we can get by ourselves. This truth is acknowledged by all artists; it is for good reason that it is not enough to work; pray daily, read good books, and meditate night and day on the operations of Nature, and on what she may be able to do when she is assisted by the help of our Art; and by these means you will succeed without doubt in your undertaking. This is all I have now to say to you. I was not willing to make you such a long discourse as the matter seemed to demand; neither have I told you anything but what is essential to our Art; so that if you know the Stone which is the only matter of Our Stone, and if you have the Understanding of Our Fire, which is both secret and natural, you have the Keys of the Art, and you can calcine Our Stone; not by the common calcination which is made by the violence of fire, but by a philosophic calcination which is purely natural. Yet observe this, with the most enlightened philosophers, that there is this difference between the common calcination which is made by the force of Fire and the natural calcination; that the first destroys the body and consumes the greatest part of its radical humidity; but the second does not only preserve the humidity of the body in calcining it, but still considerably augments it. Experience will give you knowledge in the Practice of this great truth, for you will in effect find that this philosophical calcination, which sublimes and distills the Stone in calcining it, much augments its humidity; the reason is that the igneous spirit of the natural fire is corporified in the substances which are analogous to it. Our stone is an Astral Fire which sympathizes with the Natural Fire, and which, as a true Salamander receives it natively, is nourished and grows in the Elementary Fire, which is geometrically proportioned to it.

Phantom alchemical plants of Quersitanus

The first book, chapter 10 of Quercetanus [Du Chesne] *The Practise of Chemicall, and Hermetical Physicke...* London, 1605, contains an interesting description of alchemically produced phantom plants.

Another [demonstration of the living forces in salts] I received from a most learned and famous Polonian, a skilfull Physitian, above 26 yeers since.

This man was so excellently, and phylosophically skilfull in the preparing of ashes out of all the parts of any maner of plant, with all the Tinctures and Impressions of all the parts of the plant, and would in such wise conserve all their Spirites, and the Authours of all their faculties, that hee had above thirtie such plants prepared out of their ashes of divers sorts, conteynes in their several glasses, sealed up with Hermes seale, with the tytle of each particular plant, and the propertie thereof, written upon the same. So, as that if a man desired to see a Rose or Mary-gold, or any other flower, as a red or white Poppey, or such like: then would hee take the glass wherein the ashes of such a flower was inclosed, whether it were a Rose, a Marie-golde, a Poppey, a Gilly-flower, or such like, according as the writing

of the glass did demonstrate. And putting the flame of a Candell to the bottome of the glasse, by which it was made hote, you might see that most thinne and impalpable ashes, or salt, send forth from the bottome of the glasse, the manifest form of a Rose, vegetating and growing up by little and little, and putting on so fully the form of stalkes, leaves and flowers, in such perfect and naturall wise in apparant shew, that a man would have beleevd verily, the same to be naturally corporeat, whereas in truth it was the spirituall Idea, indued with a spiritual essence: which served for no other purpose, but to be matched with his fitting earth, that so it might take unto it a soly[d] body. This shadowed Figure, so soone as the vessell was taken from the fire, turned to his ashes again, and vanishing away, became a Chaos and confused matter.

When I had seene this secret, endeavouring with al my might to attain to the same, I spent much time about it, but yet lost my labour.

Triumphal Chariot of Basil Valentine

Transcribed by Ben Fairweather.

This was first published as Triumph-Wagen Antimonii... An Tag geben durch Johann Thölden. Mit einer Vorrede, Doctoris Joachimi Tanckii., Leipzig, 1604. There were further editions in German issued in 1611, 1624, 1676 and 1757. A Latin edition was published in 1646. An English version was first issued in 1660, and there were further editions in 1667 and 1678. This work was much commented upon in 17th and 18th century alchemical works. <

BASIL VALENTINE HIS TRIUMPHANT CHARIOT OF ANTIMONY with Annotations of Theodore Kirkringus (1678)

Since, *Basil Valentine*, by Religious Vows am bound according to the Order of St. Benedict, and that requires another manner of Spirit of Holiness, then the common State of Mortals exercised in the prophane business of this World; I thought it my duty before all things, in the beginning of this little Book, to declare what is necessary to be known to the pious *Spagyrist*, inflamed with an ardent desire of this *Art*; as, what he ought to do, and whereunto to direct his aim, that he may lay such Foundations of the whole matter, as may be stable; lest his Building shaken with Winds, happen to fail, and the whole Edifice to be involved in shameful Ruine, which otherwise, being founded on more firm and solid Principles, might have continued for a long series of time. Which Admonition I judged was, is, and always will be a necessary part of my Religious Office; especially, since we must all die, and no one of us, which now are, whether high or low, shall long be seen among the number of Men. For it concerns me to commend these Meditations of Mortality and Posterity, leaving them behind me, not only that honour may be given to the

Divine Majesty, but also that Men may obey him sincerely in all things.

In this Meditation I found that there were five principal Heads, chiefly to be considered by the wise and prudent Spectators of our Wisdom and Art. This first of which is, *Invocation* of GOD. the second, *Contemplation of Nature*. The third, *True Preparation*. The fourth, The Way of *Using*. The fifth, *Utility* and *Fruit*. For he, who regards not these, shall never obtain place among true *Chymists*, or fill up the number of perfect *Spagyrists*. Therefore touching these five Heads we shall here following treat, and so far declare them, as that the general Work may be brought to light and perfected by an intent and studious Operation.

1. [GOD TO BE FIRST INVOKED]

Invocation of GOD must be made with a certain Heavenly Intention, drawn from the bottom of a pure and sincere Heart, and Conscience, free from all Ambition, Hypocrisy, and all other Vices, which have any affinity with these, as Arrogance, Boldness, Pride, Luxury, Mundane Petulancy, Oppression of the Poor, and other dependent evils, all which are to be eradicated out of the Heart; that when a Man desires to prostrate himself before the Throne of Grace, for obtaining bodily health, he may do that with a Conscience free from all unprofitable Weeds, that his Body may

be transmuted into an Holy Temple of GOD, and be purged from every uncleanness. For GOD will not be mocked (which I earnestly admonish) as Worldly Men, pleasing and flattering themselves with their own Wisdom, think: GOD, I say, will not be mocked, but the Creator of all things will be invoked with reverential fear, and acknowledged with due Obedience. And for this there is great Reason. For what hath Man, that he must not own to be recieved from this his Omnipotent Creator, whether you have respect to the Body, or to the Soul, which operates the Body? Hath no he, for sustentation of this, out of his meer Mercy communicated to us his Eternal WORD, and also promised Eternal *Salvation*? Hath not he also provided food and cloathing for the Body, and all those things without which the Body cannot subsist? All these, by humble Prayer a Man obtains of that most excellent Father, who created Heaven and Earth, together with things Visible and Invisible, as the Firmament, Elements, Vegetables, and Animals. Which is so very true, that I am certainly assured, no Impious Man shall ever be partaker of true Medicine, much less of the Eternal Heavenly Bread. Therefore place your whole Intention and Trust in GOD, call upon him and pray, that he may impart his blessing to you: let this be the beginning of your work, that by the same you may obtain your desired end, and at length effect what you intended.

For the Fear of the Lord is the Beginning of Wisdom.

Whosoever purposeth in himself to seek after that, which is the greatest of Terrene things, especially the knowledge of every good thing, that is in the Creatures, and GOD hath liberally imparted to Men, and implanted (as to their effective power) in *Stones, Herbs, Roots, Seeds, Animals, Plants, Minerals, Metals*, yea and indeed in all things; let him cast away all Earthly thoughts, reject all that depends on them, and hope for freeness of Heart, and pray unto GOD with great lowliness of mind: So doing, his hope of freeness may at length be turned into freedom. Which no Man will doubt, who knows, that he alone is GOD, who delivered *Israel* from all his Enemies; which deliverance he did in very deed effect, not only for *Israel*, but also for all Men making humble supplications to him, and praying with brokenness of Heart. Therefore let Prayer be the first point of our Admonition, which also is, and by us is called *Invocation of GOD*, which if made, not with Hypocrisy and a feigned Heart, but with such Faith and Trust, as that, with which the *Centurion* in *Capernaum* prayed; with such lowliness of mind, and confession of Sins, as the *Woman of Canaan* was endued with; with such Charity as the *Samaritan* shewed to the Man wounded in the way to *Jericho*, pouring Wine and Oyl into his wounds, paying his Charges in the Inn, and giving order he should be very carefully looked to; Lastly, if a Man's Christian Charity extends itself so far, as if he obtain what he prays for, he would willingly communicate of the same to his Neighbour, then he shall unobtainably obtain Riches and Health, the of his *Prayer*.*

**What the Author hath premised here at large, and elsewhere often inserted touching Piety, the worship of GOD, and Invocation of his Name, I purpose neither to praise nor dispraise; Let them be judged by signs of his own earnest Piety, Arguments of his sincerity and signate Impresses of his fervent zeal (by so many Tautologies and Reiterations) often boiling up. Every Man, according to the Opinion of his mind, and the persuasion, in which he was educated from his Childhood, will more or less esteem of this. It was my business to translate the Authors writings into Latin, in such a Method and Order, as I thought would in no wise give any distaste to the delicate Palat of the Reader; also to indicate that, which seems pertinent to the business of every Chymist and true Spagyrist, and not to neglect the other. For since Piety is available for all things, as divine Oracles teach, and the principal exercise of Piety is Prayer; by which Celestial Gifts are obtained of GOD the giver of all good things; our Author wills, that unto him the mind be lifted up, even in the midst of the Operations of Chymistry full of labour and toil. If prayer effected no other thing, it certainly collects the mind (called away from all other things) into it self and renders it apt for that which is in hand; whence it comes to pass, that it reflects upon many things, and considers them, which otherwise would not enter the mind, if it set about its Work perfunctorily, and distracted with vaious Conceptions: And so by the help of Prayer we receive many things, which we (if not ungrateful) must needs acknowledge we have obtained from GOD. How often this is found to be of use in Spagyric Works every Man knows, that hath any time entirely devoted himself to this business; viz. how often those things which he long sought and could not find, have been imparted to him in a moment, and as it were infused from above, or dictated by soem good Genius. That also is of use in dissolving all Riddles, or Enigmatical Writings: For if you burn with a great desire of knowing them, that is Prayer; and when you incline your mind to this or that, variously discussing and meditating many things, this is Cooperation; that your Prayer may not be idle, or tempting GOD: yet this your endeavour is in vain, until you find the Solution. Nevertheless if you despair not, but instantly persist in desir, and cease not from labour, at length in a moment the Solution will fall in; this is Revelation, which you cannot receive unless you pray with great desire and labour, using your utmost endeavour; and yet you cannot perceive, how from all those things (of which you thought) which were not the Solution of the Enigma, the Solution it self arose. This unfolding of the Riddle opens to you the mystery of all great things, and shews how available Prayer is for the obtainment of things Spiritual and Eternal, as well as Corporal and perishing goods: and when Prayer is made with a Heart not feigned, but sincere; you will see that there is nothing more fit for the acquiring of what you desire. Let these suffice to be*

spoken of Prayer, which Basilius and all Philosophers with him do not vainly require, as an Introduction to Chymistry. For Piety is profitable for all Works, especially for Great Undertakings.

2. Next in order after *Prayer* is *Contemplation*, by which I understand an accurate attention to the business it self, under which fall these considerations first to be noted. As, what are the *Circumstances* of any thing, what the *Matter*, what the *Form*, whence its operations proceed, whence it is infused and implanted, how generated by the *Stars*, conformed by the *Elements*, produced and perfected by the three *Principles*. Also how the body of every thing may be dissolved, that is, resolved into the first *Matter*, or first *Essence* (of which I have already made mention in other of my writings) viz. how the last *Matter* may be changed into the first, and the first into the last.*

**What are here set down, touching the true Theory of Philosophy, are compendiums of those things, which Philosophers have in os many Books (writ about the same business) revealed, shall I say, or concealed. Attend to the words of the Author, and you will see, that he perfectly knew that Spirit penetrating all things, which presides or bears rule in all things, yet is involved and absconded matter and defilements on every side; from which if once freed, it returns to the purity of its own substance, in which it produceth all things, and is all in all. To comment upon this, would be a work no less than the producing of all Books of Philosophers, compiled with such accurate study, and contending with so great contention about the Theory.*

This *Contemplation*, which absolvs the second part of our Admonition, is Celestial, and to be understood with Spiritual Reason; for the circumstances and depth of every thing cannot be perceived any other way, then by the Spiritual Cogitation of Man: and this *Contemplation* is twofold. One is called possible, the other impossible. The later consists of copious cogitations, which never proceed to effects, nor exhibit any form of a matter, which falls under the Touch. As if any one should endeavour to comprehend the Eternity of the Most High, which is vain and impossible, yea a Sin against the Holy Spirit, so arrogantly to pry into the *Divinity* itself, which is Immense, Infinite, and Eternal; and to subject the incomprehensiv Counsel of the Secrets of GOD, to humane Inquisition. The other part of *Contemplation*, which is possible, is called the *Theory*. This contemplates that, which is perceived by Touch and Sight, and hath a formed *Nature* in time: this considers, how that nature may be helped and perfected by Resolution of it self; how every body may give forth from it self, the good or evil, Venome or Medicine latent in it; how Destruction and Confracton are to be handled, whereby under a just Title, without Sophistical deceits, the pure may be severed and seperated from the impure. This *Seperation* is instituted and made by divers manual operations, and various ways; Some of which are vulgarly known by experience, others remote from vulgar experience. These are, *Calcination, Sublimation, Reverberation, Circulation, Putrefaction, Digestion, Distillation, Cohobation, Fixation*, and the like of these; all degrees of which are found in operating, learned, perceived and manifest by the same. Whence clearly appears what is moveable, what is fixed, what is white, red, black, blew, or green, viz. when the operation is rightly Instituted by the Artificer, for possibly the Operator may err, and turn aside from the right way; but that *Nature* should err, when rightly handled, is not possible. Therefore if you shall err, so that *Nature* cannot be altogether free, and released from the Body, in which it is help Captive, return again into your way, learn the *Theory* more perfectly, and enquire more accurately in the method of operating, that you may find the foundation and certainty in Seperation of all things. Which is a matter of great concern. And this is the second foundation of Philosophy, which follows the *Prayer*: for in that the sum of the matter lies, and is contained in these words. Seek first the *Kingdom of GOD*, and his *Justice* by *Prayer*, and all other things, which Man seeks in these Temporals, and he hath need of, either for the sustentation or health of his body, shall be added to you.

3. Next to the *Theory*, which researcheth out the inmost properties of things, follows *Preparation*, which is performed by Operations of the hands, that some real work may be produced. From *Preparation* ariseth Knowledge, viz. Such, as opens all the fundamentals of Medicine. Operation of the Hands requires a diligent application of it self, but the praise of Science consists in experience, but the difference of these *Anatomy* distinguisheth, *Operation shews how all things may be brought to light, and exposed to sight visibly: but knowledge shews the practice; and that, whence the true Practitioner is, and is no other then confirmation: because the operation of the hands manifests something that is good, and draws the latent and hidden nature outwards, and brings it to light for good. For, as in Spiritualls, the way of the Lord is to be prepared; so also in these things, the way is to be opened and prepared; so also in these things, the way is to be opened and prepared, that no errour be from the right path, and the Process may be made, without devious errors, in the direct way to health.

**Manual Operation is chiefly required in this third Part, without which, every Operation, like a Ship wanting Ballast, floats and is uncertain. It is difficult to express this with a Pen; for more is learned by once seeing the work done, then can be taught by the writing of many Pages; yet if it be no offence to you, to peruse these Commentaries together with Basilius (in this so necessary part) will not a little help.*

4. After *Preparation*, and especially after separation of the good from the evil, we are to proceed to the *Use of the weight or dose, that neither more, nor less then is fit, may be given. For above all things, the Physician ought well to

know, whether his Medicament will be weak or strong, also whether it will do good, or hurt, unless he resolve to fatten the church yard, and with the loss of his fame, and hazard of his own soul.

**By Use, the Authour understands what others call Dose; for what will a good Medicine profit you, if you know not in what quantity to administer it; that the same may rather heal, then hurt or kill. By experience only to learn this, is a work full of perilous casualty, yet the Discipline or knowledge of Doses was found out this way first, and afterward easily taught by Words. Where a living Voice is wanting, it is safer to be too timerous, then in any wise bold or adventurous, although of Antimony I can affirm, that being duly prepared it is as harmless a medicine as Cassia or Manna. The whole caution is chiefly about its use, after the first preparations; because it may still retain much of its own crude Venom.*

5. After the Medicament is taken into the body, and hath diffused it self through all the Members, that it may search out those defects against which it was administered, the *Utility* comes to be considered; for it is possible that a Medicament diligently prepared, and exhibited in due weight, may do more hurt then good in some Diseases, and seem to be Venom rather then Medicine. Hence an accurate reflexion is to be made to those things, which profit or help; and they are diligently to be noted, that we may be mindful to observe the same in other cases.

Yet both in the **Use* and *Utility*, this one thing is necessary to be considered, *viz.* whether the Disease be an external and open wound, or only an internal and latent evil: for as the difference of these is great, so the way of curation is not the same. Therefore the bottom of every Disease is to be known, that it may be understood, whether the same may be cured by external remedies only, or must from within be driven outwards.

**That Indication is to be taken from things helping and hurting, is known even to Tyro's. But what the Author subjoyns touching internal and external curation, are not so rude, as not to deserve good Attention: And also those things which he permixeth with his own Satyirical Reprehension, if the Reader be so wise as to believe that Basilius intermixed them to deter the unworthy deriders of Chymistry from approaching to his sacred Arcanums, he will be wise for himself. For whilst others rail and swell with indignation, he gathers the fruit of the Authors Axioms, which as another Agent he scattered among these Thorns. Whilst you, O lover of Chymistry, peruse these, so long will I keep silence.*

For if the Center of the Disease be within, such a Medicine must be given, as can search out, apprehend and restore that Center; otherwise the Physicians labour will be fruitless and in vain.

Moreover, if there be an internal Disease, which ariseth, and is fed from an internal Original, it must never be driven inward by external remedies; for great discommodity will thence ensue, and at length Death itself. Which may be understood by the similitude of a Tree; for if any one, whilst it germinates or flowers, repels the Humours to the Interiours, whence they proceeded to the nutriment of the earth; that Tree will be so far from bringing forth the desired Fruit by the flower, that a suffocation of the same ariseth from the violent conjunction of humours not finding any out-let. Therefore there is great difference between fresh wounds inflicted by Prick, Cut, or any other way, and the old which derive their Original from within. For the fresh wounds may be perfectly cured by external remedies only; but in those, which are nourished from within, an external application of Oyls, Balsoms, Unguents, and Plaisters profits little, unless the Internal Fountain be stopped, whence the humours flow to the external parts. When the Fountain shall be stopped, the Flux will cease, and the evil may easily be cured with Diet only. It is no great point of Art to heal any fresh wound; for this every Country-man can easily effect with crude Lard: but to remove all Symptoms which happen in wounds, and to dry up the Fountain of the evil, this is the work, and this the labour of the Artist.

[DOCTORS REPREHENDED]

Now come hither, you physicians, how many so ever there be of you, that arrogate to your selves the Title of Doctor of either Medicine, *viz.* of internal and external Diseases; understand ye the Title of your honour, and consult your own Conscience, and see, whether you recieved that from *GOD*, that is, possess it in verity, or whether you usurp it as a form, for honour sake. For, as much as Heaven is distant from the Earth, so vastly different is the Art of healing internal Diseases, from the Sanation of external wounds. If the Title be given to you by *GOD*, the same *GOD* will give a Blessing, Felicity, Health and happy events; but if your Title be vain, and only devised and assumed for ambition, all things will evilly succeed to you: your honour will fail, and you will prepare for your self Hell-fire, which can no more be extinguished, then it can be expressed by words. For Christ said to his Disciples; *You call me Lord and Master, and ye do well*, Therefore whosoever assumes a Title of Honour, let him see, whether he do well, and whether he ascribes not more to himself, than he knows and hath learned, which is the real abuse of this Title. For he, who will write himself Doctor of either Medicine, ought to understand, know, and be well skilled in both, *viz.* the Internal and External Medicine. Nor should he be ignorant of Anatomy, that he may be able to shew the Constitution of the Body, and discover from what Member every Disease proceeds, together with its Fountain and cause. Also remedies, with which he may cure the Disease, and circumstances of external Wounds, are to be

understood by him. Good *GOD!* where will the Title be found, what will become of the Master, when an exact Trial shall be made, for discovering the ignorance of these *Doctors* of either *Medicine*?

In times past, long before my days, the Doctors of Medicine did themselves cure External wounds, and judged that a part of their Office; but in these times, they take Servants, whom they employ in these things, and this way the noblest of Arts is become a Mechanick Operation; and some of those who exercise it, are indeed so very rude, as they know not Letters, and scarcely know how (according to the Proverb) to drive an Ass out of the Corn. These, I say, profess, themselves Masters in curing wounds, and Doctors of Doctors; and to speak the truth as it is, they may by a better right glory in this Title, they thou magnificent Doctor, umbratical Chyrugion, and most ignorant Boaster of Titles, why do you style yourself Doctor of either medicine? What more now Master Doctor, what say you, most expert Chyrurgion? I pray be not offended at this, or take it amiss; for you your self will quickly confess, if you do but seriously consider wounds made by Prick or Cut, that you have as much knowledge in the cure of them, as is in the Brain of a dunghill Cock, which Children learning their A.B.C. are wont to set in the Frontispiece of their Primer.

[TRUE DOCTRINE, WHEREIN IT CONSISTS]

Therefore I persuade all Men, of what state or condition soever, who are desirous of Learning, from your Masters to search out the true Doctrine, which consists in *Preparation*, and afterward in the *Use*;

[OPERATIONS AND UTILITY GIVE EXPERIENCE] so they, or you, shall possess the Title assumed with honour, and Men will undoubtedly have confidence in you, and you will in very deed do them good, then will you to the Eternal Creator give thanks cordially without feigning. But let every Man seriously think with himself, what it is he ought to do, and what he is to omit, and whether he doth justly or unjustly use the Title assumed. For he, who assumes any Title, ought especially to understand the condition of that Title, and why he assumed it, or what the true foundation is. It is not sufficient, if anyone iwth the vulgar say (saving your reverence, let the more delicate Men pardon us, if we intending to speak to the purpose, make mention of putrefaction) this is egregious dung, it hath a strong and grievous ill savour, and know not how it comes to pass, that a Man, who perhaps eats food of a most grateful taste and odour, and well accommodated to his natural Appetite, thence makes excrement endued with qualities so contrary, and yielding an odour so very ungrateful, and repugnant to Nature: of which there is no other reason, then natural putrefaction and corruption. The same happens in all Aromatical well smelling things. It is the Philosophers part to enquire, what odour is, and whence it receives its virtues, and in what the virtue of it may be made manifest to true profit. For the Earth is nourished and fattened by stinking dung, and noble Fruit is produced of it. Of this matter there is not one cause only, but our Book would swell to an huge Volume, if we should but briefly hint at all natural Generations and mutations; yet *Digestion* and *Putrefaction* are the principal keys of them. For the *Fire* and *Air* make a certain *Maturation*, by which a Transmutation of the *Earth* and *Water* may follow; and this is also a certain mutation, by which of evil smelling Dung a most fragrant Balsam may be produced; and on the contrary, of most grateful Balsam ill favoured Dung. But perhaps you will say, why do I produce examples of so very rude and absurd? I do confess the example is taken from a Cottage, rather than a Royal Court; yet a prudent considerer of things, more accurately diving into the matter, will easily understand, what such examples intimate to him, *viz.* that of the highest things the lowest are made, and the lowest the highest, so that, of a Medicament is produced of Venome, and of Venome Medicine; of the sweet, bitter, acid, and corrosive; and on the contrary of the corrosive, another thing more profitable.

[NATURE ABSCONDED FROM MEN]

O good *GOD*, how much is Nature absconded from Men, so that she seems to disdain to be wholly seen by us? But since thou hast ordained so very short a time of our Life, and thou the Judge of all, reservest many things to thy self in the Creatures, which thou hast left to be admired, not known, by us, and of which thou alone wilt be the beholder and Judge, grant unto me, that unto my Life's end I may keep thee and my Saviour in my Heart, that besides health and necessaries of the body, which though hast liberally bestowed, I may also acquire the health of my Soul and Spiritual Riches; of which inestimable good I am freed from all doubt by that thy mercy, in which, for my soul, for me a miserable sinner, thou didst (on the Tree of the Cross) shed Sulphur and Balsom; which is indeed a mortiferous Venom to the Devil, but to us Sinners, a most present remedy. I do certainly heal my Brethren, as far as concerns the Soul, by Prayer, and in relation to the body, with apt Remedies; therefore I hope they will on their parts use their endeavour, that they with me, and I with them, may at length inhabit the Tabernacle of the Most High, and in him our *GOD* enjoy Eternity.

[SPIRIT VIVIFICATIVE, AND OPERATIVE] But to return to my Philosophy of *Antimony*, I would have the Reader, before all other things, to understand, that all things contain in themselves operative and vivificative Spirits; which inhabiting in the Body feed and nourish themselves, and are sustained by the Body. Elements themselves want not these Spirits, which (the living *GOD* permitting that) whether they be good or evil, have their Habitation in tehm. Men and Animals have in them a living operating Spirit, which receding from them, nothing but a Carkass

remains. In Herbs, and all things bearing Fruit, a Spirit of Sanity exists; otherwise they could not, by any Preparation, be reduced to Medicinal use. Metals and all Minerals, are endued and possessed with their own incomprehensible Spirit, in which, the power and virtue of all their possible effects, consists. For whatsoever is without Spirit, wants Life, and contains in itself no vivifying Virtue. Therefore, you are to know, that in *Antimony* also there is a Spirit, which effects whatsoever in it, or can proceed from it, in an invisible way and manner, no otherwise, than as in the *Magnet* is absconded a certain invisible power, as we shall more largely treat in its own place, where we speak of the *Magnet*.

[SPIRITS OF VARIOUS KINDS]

But there are various kinds of Spirits;* visible to the Intellect, and endued with Spiritual knowledge, which notwithstanding cannot (when they will) be touched or apprehended, as Natural Men are touched; [SPIRITS OF THE ELEMENTS] especially they, who have their fixed Residence in Elements, as are the Spirits of Fire, Lights and other Objects formally darting out Light from themselves: such are *Airy* Spirits, who inhabit the Air; *Aqueous* Spirits living in Waters; and *Terrene* Spirits living in the Earth, which we Men call *Earthly* Men, which are chiefly found in wealthy mines of the Earth, where they shew and discover themselves to us.

**What follow, seem somewhat confused, according to the Sentiments of certain Theologicians, who have held various opinions of Spirits residing in the Fire, Air, and other Elements; adjudging them to the Eternal Fire of Hell. All which with Basilus, we leave as unknown, to the Judgement of the Divine Knowledge. But what he himself subjoyns, touching the wonderful virtue and power of Antimonial and all other Chymical Spirits, which we our selves with so great admiration have often seen, we understand only of material Spirits; which certainly are endued with as great virtues, and effect things no less wonderful then those Spirits, which Phantastick persons (oppressed with Melancholy) affirm they see and talk with; yea I cannot remember that I ever found written or declared (by such, as taking a liberty of lying, endeavour to please or terrify others) any greater or more wonderful virtues then these Spirits have.*

[SPIRITS WANTING SPEECH]

These Spirits are endued with Senses and Understanding, know Arts, and can change themselves into divers Forms, until the time of their Judgement; but whether a definitory sentence ought to be pronounced against them as yet, or no, that I leave to the Providence of the Divine Majesty, from whom nothing is hid. There are other Spirits, wanting speech, which cannot shew themselves visibly in the very act; and they are those which live in Animals, as in Men and the like, in Plants also and in Minerals; nevertheless they have in themselves an occult and operative Life, and manifest and discover themselves by their efficacious power of operating, which they contain in and bear about themselves, and most apparently give testimony of their virtue of healing, whensoever that (by help of the Art) is extracted from them, being accurately seperated from their body. After the same manner, the efficacious Spirit, and operative power of *Antimony*, manifests its gifts, and distributes them among Men, being first loosed from its own body, and freed from all its bonds, so, that it is able to penetrate, and render fit to be applied to those Uses, which the Artificer proposed to himself in Preparation.

[ARTIST AND VULCAN OUGHT TO AGREE]

But the Artist and *Vulcan* ought to agree: [FIRE MAKES SEPERATION] the Fire gives seperation for an operative power, and the Artificer forms the matter. [EXAMPLE, OF A BLACKSMITH] As a Black-smith useth one sort of Fire, also Iron only is his matter, which he intends for forming divers Instruments. For some times of it he makes a Spit, at another time Horse-shoes, another time a Saw, and at length innumerable other things, every of which serves for that Use, unto which the Smith intended it, although the matter is but one, which he prepares for so many divers uses. So of *Antimony* various works may be made for different uses: in which the Artist is the Smith that forms; [VULCAN, THE KEY] *Vulcan* is as it were the key which opens; and Operations and Utility give experience, and knowledge of the Use. O! if foolish and vain Men had but Ears to hear, and true eyes with understanding, not only for hearing what I write, but for understanding the *Arcanum* and knowledge of the use; assuredly they would not suck in those insalubrious and turbid Potions, but hasten to these limped Fountains, and drink of the Well of Life.

[DOCTORS REPREHENDED]

Therefore let the World know, that I shall prove those pretended Doctors, who seem to be wise, to be mere Fools and Idiots, and cause many unlearned Men (but such as are studious Disciples of my Doctrine) to become true Doctors in very deed. Wherefore I here solemnly cite and invite all Men, who earnestly aspire to knowledge, with a chearful mind, good Conscience, and certain hope, to embrace and become Spectators of our Doctrine, and accurately to peruse my Writings and Informations; for so, at length, they (being possessors of what they sought) will extol and commend me after death, rendering my mortal name immortal, with their perpetual remembrance of my praises, as long as the World endures. But if when I am dead, any one be pleased to institute a disputation in the Schools against me, my writings will fully answer all his Objections, and I am assured my Disciples will never

forget the benefit received from me, by which they will obtain the Empire of Truth, which ever was to me, and always will be to them, sufficient to suppress a Lie to the Worlds end.

[ANTIMONY OF 2 KINDS]

Also let the well meaning and sincere observer of Art know, that there are two kinds of Antimony very different from each other: one is fair, pure, and of a golden property, and that contains very much *Mercury*, but the other which hath much *Sulphur* is not so friendly to gold as the first, and is distinguished by fair long and white shining streaks. Therefore one is more fit for Medicine and *Alchemy*, then the other: as when the Flesh of Fishes is compared with the Flesh of other Animals, although both these are, and are called Flesh, yet each of these very much differs from the Flesh of the other; even so of *Antimony* the difference is the same. Many do indeed write of the Interior virtue of *Antimony*, but few of them ever taught the true Foundation of the virtues with which it is endued, or found out which way, or in what manner it receives them; So that their Doctrine is founded upon words only, exists without any true foundation, and they themselves lose the fruit they hopes to receive by such Writings. For to write truly of *Antimony* is a work that requires profound Meditations, a mind largely unfolding itself, and knowledge of its manifold *Preparation*, and of the true *Soul* of it, in which all the Utility is cited, and which being known you may be able to give an indubitate Judgement, of what evil or good, Venom or Medicine is latent therein. It is not a matter of small moment by a true *Examen* to search into *Antimony*, and thereby to penetrate fundamentally into its Essence, and through earnest study to attain the final knowledge thereof, that the Venenosity of the same (against which unskilful Men ignorantly exclaim) may be taken away, and it be changed and prepared into a better State, becoming a Medicine fit for use and void of Venom.

[ARTISTS VEX, WREST AND TORMENT ANTIMONY]

Many Artists intending to Anatomize *Antimony*, have divers ways vexed, wrested and tormented the same, in such wise as it cannot be well described in Words, much less believed; yet, the matter being truly examined, they effected nothing. For they sought not its true Soul, and therefore could not find the feigned Soul of it, which themselves sought. By the black Colours a mist was cast before their Eyes, so that they could neither observe the true Soul itself, nor know it. [ANTIMONY COMPARED TO A CIRCLE] For *Antimony* like unto *Mercury*, may fitly be compared to a round Circle, of which there is no end; in which the more diligently any Man seeks, the more he finds, if Process be made by him in a right way and due order. Yet the Life of no one Man is sufficient for him to learn all the mysteries thereof. It is Venom and a most swift poison, also it is void of Venom and a most excellent Medicine; whether it be used outwardly or inwardly. Which is a thing hid from most Men by reason of their own blindness; and they judge it an incredible, foolish and vain work, because (through their ignorance) it is unknown to them, who can no otherwise be excused, then that they deserve the name of Stupidity: yet that is not to be suffered in them, because they desire not to learn or be better informed, either here, or elsewhere.

[ANTIMONY ENDUED WITH THE 4 FIRST QUALITIES]

Antimony is endued with all the four first qualities; it is cold and humid, and against it is hot and dry, and accommodates it self to the four Seasons of the year, also it is volatile and fixed. The volatile part of it is not void of Venom, but the fixed is free from all venenosity; which is so very strange, as it may be reputed one of the seven Wonders of the World, of which so many Writers have discoursed, not knowing themselves what they writ.

[ANTIMONY'S VIRTUES INEXHAUSTIBLE] There hath been no *Man before me, and at this day there is none found, who hath so thoroughly learned the power, virtue, strength, operations, and efficacy of *Antimony*, or so profoundly penetrated into all the *Energy* thereof, as nothing more is latent in it unfound out, or which cannot be brought to light by experience. If such a Man could be found he would be worthy to be carried about in a *Triumphal Chariot*, as in times past was granted to Monarchs and potent Heroes, after they had happily fought Battles, and were returned with Victory. But I fear, that many of our Doctors will be constrained to provide a Chariot for themselves.

**Here the Author speaks largely in commendation of Antimony. Read, read (I say) O Lover of Chymistry, and you will find nothing Hyperbolic, nor anything Thrasnick. Basilius in speaking as he doth, hath not exhausted the Praises of Antimony; because no Man unto this day could ever experience all its Virtues. We have seen many of its Effects, and many new Effects are daily found by curious Searchers, yet many more remain unknown. So that, as in Fire is an inexhaustible Fountain; (for the more you take from it, the more it gives) so in Antimony is an inestimable Treasure of new Virtues. For if from it you extract its Acetum a thousand times, it will a thousand times, yield new Acetum. Nature seems to have made choice of this Mineral, therein to hide all her Treasures. Therefore not without reason hath Basilius made for it a Triumphant Chariot, which is daily enriched with Spoils taken from the Camps of Ignorance.*

For the Masters of this terrene World are so intangled with their own Thoughts, that they seek nothing from Antimony but Riches, and forget to search its utility for medicine, and the Health of the Body, which notwithstanding ought above all things to be sought, that (being brought to Light) the wonderful Works of our *GOD*

may be made manifest, and the Glory given to him, with great thankfulness. It is not to be denied, but that more of Riches and Health may be found in it than either you all, or I myself, can believe: for I profess my self no other than a Disciple in the Knowledge of Antimony, although in it I have seen, experienced and learned more than you, and all such as you are (who arrogate to yourselves great skill therein) either have learned, or ever can learn. Yet no Man should therefore be troubled, or despair of Benefits; but because the World, indulging their own Ingratitude, have neither esteemed, nor with due Reverence acknowledged the Munificence of the Most High, but have preferred Riches before Health, *GOD* hath spread as it were a Spider's Webb before their Eyes, that being blind they might not know the Secrets of Nature absconded in the Form of this Mineral.

[RICHES REQUIRED BY ALL]

All men cry out Rich, Rich we would be. I confess you all aspire to Riches, and with the Epicure say, *The Body must first be provided for, the Soul may at length also find somewhat*; and with *Midas* (as in the Fable) you desire that all things whatsoever you touch may be turned into Gold. Hence it is, that so many seek their desired Riches in *Anatomy*: But because they accept not that Gift of the Creator with a grateful Heart, which before all Things should be procured, and cast the Love of their Neighbour behind their back, therefore they in vain look the Horse in the Mouth; for they know his Age and Strength no more than the Guests at the Marriage-Feast in *Cana of Galilee* knew the wonderful Work, which *Christ* there wrought, when he turned Water into Wine. They knew, that Wine was Water, and that the Water was turned into Wine, they perceived by the Taste; but how that Transmutation happened was hid from them. For the Lord JESUS, our Saviour, reserved the Supernatural Work to himself, as a Testimony of his Omnipotency. Wherefore I say, it is every Man's duty, to search out the Mysteries and *Arcanums*, which the Creator hath insited in all Creatures; for although (as we said) it is not Credible, that we Men can thoroughly learn and penetrate all Things; yet we are not forbid to inquire into them, since by Study and Diligence so much may be effected, as although through some defect a Man may be hindred in such wise, as he cannot attain to the desired Riches and perfect Sanity, yet he may acquire enough to occasion him not to repent of his Labour, but rather to minister unto him matter of Joy and Rejoycing, that he sees himself so far an *Adeptist*, as he stands always obliged to render thanks to his *Creator*.

[SOLUTION WHEN NECESSARY]

Therefore, whosoever desires to become a perfect Anatomist of *Antimony*, the first thing to be considered by him is Solution of the Body; and in order to this, he must take it in a convenient place, and propose to himself the right way, that he be not seduced into devious Paths. Secondly he must observe the Governance of the Fire, taking Care that it be neither too much, nor too little, or too hot, or too cold. For the summ of all is sited in an exact Governance of the Fire; by which the vivifying *Spirits* of *Antimony* are extracted, and loosed from their bonds, and so rendered capable to manifest their Effects operatively. Also he must take great Care, that this Operative Virtue be not mortified and persih Adustion. [DOSE, OBSERVABLE] Thirdly the Use or Dose is to be observed by him, that he may administer it in due manner, knowing the Measure, as I above mentioned, when I spake of the five principal Heads requisite in the Exercise and Practise of Chymistry; but here I only hint at it cursorily by way of a parable. By *Resolution* the sum of the Matter is proposed, but by Fire it is prepared to profit. For a Butcher cuts out an Ox, and divides it into parts, but no Man can profitably enjoy this Flesh, unless he first boyl it by Fire, by which Operation the Red substance of the Flesh is changed and prepared into white Aliment. If a Man constrained by hunger, should eat that Raw and Red flesh, it would be Venom to him rather than Medicine; because the natural Heat of the Stomach is too weak to concoct and digest that crude Body. Hence, my dear Friend, you may conclude, that since *Antimony* hath greater Venom, and a more gross Mineral Body than Animal Flesh (as by the above recited common Example I have already shewed) it will also prove more perillous, if used Crude, without remain Venom, which will suddenly kill the Sick. [VINEGAR, NOT TRANSMUTABLE INTO WINE] Therefore the Venosity of *Antimony* is so to be taken away, as it may never against be converted into Venom, after the same manner, as Wine, which being once, by putrefaction and corruption turned into Vinegar, never afterward yields any Spirit of Wine, but always is and remains Vinegar. but on the Contrary, if the Spirit only of the Wine be seperated, and the Aquosity left by itself, and the same Spirit afterward exalted, it will never in any wise be changed into Vinegar, although it should be kept an hundred Years; but will always remain Spirit of Wine, no otherwise, then as Vinegar remains Vinegar.

[WINE, TRANSMUTABLE INTO VINEGAR, HOW]

This Transmutation of Wine into Vinegar is a wonderful Thing; because somewhat is produced from Wine, which was not before in its vegetable Essence. In which it is also to be noted, that in distillation of Wine the Spirit first comes forth; but (on the contrary) in distilling Vinegar the Phlegm first comes, afterward the Spirit, as I have shewed above in its own place, where I also made mention of this Example. [SPIRIT OF WINE, VOLATILZE] Therefore Spirit of Wine makes Bodies volatile, because itself is volatile; [SPIRIT OF VINEGAR, FIX] but Spirit of

Vinegar fixeth all Medicaments, as well of Minerals as Vegetables, and renders them solid, so that they apprehend things fixed, and expel fixed Diseases.

[ANTIMONY CONTAINS ITS OWN VINEGAR]

*Consider and observe these things diligently; for this principal Key is of great concern. Therefore *Antimony*, which contains in itself its own Vinegar, ought to be so prepared, as all its Venenosity may be taken away, and he, who useth it, conceives no Venom thereby, but rather drives away and casts out all Poison from himself, by the use thereof.

**Beleive not only Basilius, but me also, with the same Faith and sincerity affirming to you; this is the first Key, this is the principla part of the whole Art, this opens to you the first Gate, this will also unlock the last, which leads to the Palace of the King. But as I said, not only beleive, but also consider and observe. Here you stand in the Entrance, if you miss the Door, all your Course will be Error, all your Hast Ruine, and all your Wisdom Foolishness. He who obtains this Key, and knows the Method (which is called Manual Operation) by which to use it, and has strength to turn the same, will acquire Riches, and an open Passage unto the Mysteries of Chymistry.*

Therefore Preparation of Antimony consists in the Key of Alchimy, by which it is dissolved, opened, divided and separated; as in *Calcination, Reverberation, Sublimation, etc.* as we declared above it. Also in extracting its Essence, and in vivifying its Mercury; which Mercury must afterward be precipited into a fixed powder. Likewise by Arts and due Method, of it may be made an Oyl, which is effectual wholly to consume that new and unknown Disease, which the *French*, in their Warlike Expeditions, brought into our Regions. The same is visible in other Preparations, derived from the *Spagyrick Arts and Alchimy*; as for Example: [EXAMPLE, OF BEER] If anyone would make Beer of Barley, Wheat, or other Corn, all these degress must be most perfectly known to him, before he can from those Grains extract their most subtil Essence and virtue, and reduce the same into a most efficacious Drink. First, the Grains must be so long steeped in Water, as until they be able sufficiently, to open and resolve themselves (as I, when I was a Young Man, travelling into *England and Holland*, diligently observed to be done in those places) this is called *Putrefaction and Corruption*. This Key being used, the Water is drawn off from the Grain, and the macerated Corn is laid on Heaps close together, and left so for a due time, until it spontaneously conceive heat, and by the same heat, germinating, the Grains adhere each to other: this is *Digestion*. This being finished, the Grains which adhered in their Germination, are separated, and dried, either in the Air, or by Heat of Fire, and so hardened. This is *Reverberation, and Coagulation*. [CALCINATION, VEGETABLE, WHAT] When the Corn is thus prepared, it is carried to the Mill, that it may be broak and ground small; this is *Vegetable Calcination*. Afterward, by heat of Fire cocting these Grains, the more noble Spirit of them is extracted, and the Water is imbibed with the same; which without the aforesaid Preparation could not have been. This way the crude Water is converted into Beer, and this Operation (though I speak but rudely) is and is called *Distillation*. [HOPS, THE VEGETABLE SALT OF BEER] The *Hops*, when added to the Beer, is the *Vegetable Salt* thereof, which conserves and preserves from all Contraries, endeavouring to corrupt the same. This way of boyling Water into Drink, by extraction of the Spirits from the Grains, the *Spaniards and Italians* know not, and in my native soil of *Germany* about the *Rhine*, few are found skilled in this Art.

After all these works are performed, a new *Seperation* is made by *Clarification*, viz. of the Drink, in this manner: a little *Yeast or Ferment* is added, which excites an internal motion and Heat in the Beer, so that it is elevated in it self, and (by the help of time) *Separation* of the dense from the rare, and of the pure from the impure is made; and by this means the Beer acquires a constant virtue in Operating, so that it penetrates and effects all those *Ends*, for which it was made and brought into use: which before could not have been; because the Spirit, the Operator was hindered, by its own Impurity, from effecting its proper Work.

In Wine also doth not Experience teach the same? That cannot, before the time come, in which the Impuritys may be separated from it, so very perfectly and efficaciously perform its own Work, as after Separation of the pure from the impure: which by Drunkenness is manifest; for Beer or Wine unsettled, and not purified, give not forth from themselves so much Spirit for inebriating, as after Clarification. But of this no more. After all the aforesaid, a new Operation may be instituted, by *Vegetable sublimation*, for separation of the spirit of the Wine or Beer, and for preparing it by *Distillation* into another Drink of *Burning Wine*, which may also be made of the Lees or Dregs of Wine and Beer. When this is done, the Operative Virtue is separated from its own Body, and the Spirit being extracted by Fire, forsakes its own unprofitable dead Habitation, in which it was commodiously hospited before. Now, if this *Burning Wine*, or Spirit of Wine, be rectified, an Exaltation is made by often distilling it, and by a certain method of Operating, the pure part (free from all Phlegm and Aquosity) may be so concentrated, and as it were condensed, as one Measure of it may effect more, then twenty or more could have done before. For it sooner inebriates, and is swift, volatile and subtil for penetrating and operating.

*Here I admonish you, whosoever you are, who desire to be taught by my Writings, and hope to obtain Riches and a true Medicine from *Antimony*, that you would not carelessly peruse my Intention, in which is no letter writ in vain, and which hath not a certain singular signification for your Instruction.

**Come hither you Traveller, stay your Journey here. Contemn not or flighty pass over this tautological, but not impertinent, Admonition; often in your mind have recourse to this Description of Beer, search, contemplate, and weigh all Things, perhaps in this turbid and famous Gulf, you will find the Fish you look not for. If in this Light you yet be blind, I know not any Collyrium will profit you: if with so certain a manuduction you cannot pass on to the work itself, I know not who will lend you a Staff, or what Demonstration can direct the Journey of a Stupid Man. Believe, read, meditate, labour, and spare the use of so many Chymical Books, which distract you with the Error of various ways, this one tells you all things.*

Yea, I here solemnly affirm, that there are many words dispersed here and there in my Writings, to which if the Reader give heed as he ought, and know in what Fundamentals the principal Heads of the matter are sited, and as it were buried, he will have no Cause to repent his often turning over the same Leaves, but will esteem every word as much, as a piece of Gold coin. For you know, that although the Examples by me proposed, sound harsh, as delivered in a rude manner, yet they contain in them somewhat that is excellent and of great Moment. Yet I am not here ambitious to procure Authority or praise to my Writings, which is not my Business, nor would it become me: for when the Operation of them shall be brought to Light, they will acquire praise enough to themselves.

[EXAMPLES OF BEER, WHY PRODUCED] I purposely and willingly produce Examples so rude and common, because the power of *Antimony* and the true Virtue thereof, deeply and profoundly absconded in its inmost parts, is to be searched out. I was willing, by these gross Examples to lead you by the hand, and shew you the way, that by them you might attain to the Thing itself, and not at the very first err from the Gate; for so doing you would long wander, and never bring your Operation to the desired End. [ANTIMONY COMPARED TO A BIRD IN THE AIR] For *Antimony* is like a Bird, which is carried through the *Air* and as the Wind drives it, so it turns itself which way that wills: here, in this Case, Man acts the Part of the *Air* or Wind and can drive and move *Antimony*, at his pleasure, and repose it in such a place, as himself chooseth: he can imbibe it, with a yellow, red, white or black Colour, according as he desires it should be, and as he rules and governs the Fire; because in *Antimony* (as in *Mercury*) all Colours are found, which no Man should wonder at, considering how many Things *Nature* bears absconded in her Bosom, which neither you nor I are able to comprehend in many days.

[ANTIMONY COMPARED TO A BOOK] If a book happen to be given to a Man, that is unlearned, he knows not what is signified by that Writing, or what that Scripture intends; for it is hid from his Eyes, and he stands amazed, as a Cow at the sight of a new Door. But if unto that unlearned Man, anyone suggest the Explication of the Book, and teach him not only the matter contained therein, but also the use of the same, the Man no more admires it, as an Art; but by this means it becomes to him a Common Thing, the Reason and Operation of which he understands, and by his own Study can learn, conceive, and comprehend the Utility so perfectly, as now none of those Things, which were contained in the Book, are hid from him; because he hath learned both to read and understand what is written therein. Such a Book is *Antimony* to those, who know not of the Art of Reading; therefore I faithfully admonish all, who desire to be partakers of its Utilities, to bend their mind to know and pronounce the letters thereof, that so they may acquire the Art of Reading that Book; and in such a manner, that (as in a School) they may be removed from Form to Form, when he who hath rightly gained Experience, shall preside as *Rector*, and judge of that, which in Trial is most worthy: for One is worthy to be preferred before another, in the Possession of that.

[DOCTORS REPREHENDED] But here, what comes into my mind, and ought in no wise to be passed over in Silence, I think good to mention; viz: that at this Day many are found who exclaim, and rashly pronounce *Crucifige*, *Crucifige*, against all those, who prepare Venoms into Medicaments, by which (as they say) many Mortals perish, or, if they escape with Life, live miserably; such are *Mercury*, *Arsenick*, *Antimony*, etc. and this Clamour is chiefly made by those, who (if it please the GODS) are called *Doctors** of Medicine, yet indeed understand not what the difference is, between Venom, and Medicine, but are wholly ignorant how Venom may be prepared, so as to pass into a salutary Medicament; and instead of its malignity, put on a better Nature.

**Basilius somewhat indulgeth his own Genius, inveighing against False-Physicians, whose ignorance (in his time) was so very greate, as they contemned every sublime Preparation of Medicine, which he himself, and Chymists with him did profess; proscribing the same as unprofitable, perillous, and hurtful: against whome, it is not strange, if the Chymists (on the other hand) rose up with some small vehemency, and endeavour courageously, by assistance of their Knowledge, and Conscience, to break through that rout of unskilful Men; but the best Things are not allways the most prosperous. Chymists overcame by the Justice of their Cause, but were overcome by Number: yet, having verity and goodness on their side, thy fought with so great Confidence, as they were certainly assured they should bear away the Victory; which our Author here shews, and Paracelsus (prophesying of the Coming of Elias the Artist) did presage would be. And certainly unto me (seriously considering how greatly chymists have in these times*

improved their Knowledge) the Dawning of that Day hath opened itself, since I behold so many Rays of the approaching Sun.

[VENOM PREPARED RESISTS POISON] Against these I do in a special manner exclaim and protest, against these, I say, who (ignorance of *Preparation*) exhibit *Poison* to Men: for *Mercury, Auripigment, Antimony*, and such like, are venoms in their Substance, and unless rightly prepared remain Venoms. Yet after a Legitimate Preparation, all their Venosity is broke, extinguished and expelled, so that no part of them remains, but what is *Medicine*, which resists all internal Venoms, although most deeply rooted, and radically destroys the same. For *Venom*, being in such a manner prepared, as it can no longer hurt, resists all *Poison*, which is not as yet prepared, and so very well prepares and subjugates it, as it is compelled with the same to put off its own venomous Nature.

[DOCTORS REPREHENDED]

Here I shall raise a great Contention among the Learned; for I know they will doubt what these my Words should signify, as whether what I affirm and write be possible to be done or no; and they will be divided into several Opinions there-about. Some will judge it is in no wise possible, that from those Things, of which we treat, the venosity should be wholly taken away; nor do I wonder, that they persist in that Opinion, since the Doctrine of like Preparations is absolutely unknown to them, who have not the least thought of that, which leads to the Knowledge of these more profound Mysteries. Yet a small part of these Men will with me be constrained to acknowledge, it is possible a vile Thing may be changed into a Better. For you (you *Doctors* I mean) must confess to me, that your purpose is to reduce that Evil, from which the Disease had its Original, into a better State. Go to then; will you not also grant, that if any Evil be in those Things, of which *Medicine* is to be made, the same Evil must be converted into a better State, that it may so much the better perform its operation, and more powerfully and profitably act, without any notable peril? But since unto very few as yet is known, or by Experience found, the Way, by which a Man ought to proceed in these Preparations, a very small part of these will assume and contend for the Opinion I here affirm, and publicly profess: for very many will be carried away with the greater Rout, crying, *Venom, Venom!* which Voices, whilst I hear them, put me in mind of those wild Clamours, by which the *Jews* required the *Saviour* and *Redeemer* of the World, that he might suffer the Punishment of the *Cross*, often crying out *Crucify him, Crucify him*, whom they proclaimed to be the highest, most present, most pernicious, and cursed *Venom*, when as indeed he was the noblest, supreme, most glorious and most profitable *Medicine* of our *Souls*, which was to deliver us from the Death of *Sinners*, from the *Devil, Hell*, and all *Misfortunes*. Although those proud *Pharisees* and *Lawyers* neither could nor would understand this, nevertheless he both then was, and will be to the end of the *World*, and after it to all *Eternity*, the same superexcellent *Medicine*: and neither the *Devil*, nor Death, nor the very Gates of *Hell*, nor any *Creature*, how powerful, or perverse soever, can effect anything at all, whereby to overthrow this Truth.

[KINGS, AND PRINCES, MISINFORMED BY DOCTORS]

So I hope, yea doubt not (although all vagabond and circumforaneous *Medicasters*, all *Physicians* resident in *Cities*, and how many soever there be, that profess themselves *Masters* of any part of *Medicine*, do all together contrive what they can, and exclaim against *Antimony*) but that the same *Antimony* will triumph over the ingratitude of all those unskilful Men (for true *Physicians* and such as are always ready to learn, I touch not here) and by its own power and virtue acquired after due preparation, will overcome and tread under foot all its Enemies. But, on the contrary, those ignorant false Judges, and pertinacious contemnors of *Antimony*, because they know not the Truth, together with the proud and blood-thirsty *Jews*, shall perish, and be cast into the Abyss of Hell. How ridiculous those magnificent, and to themselves only wise *Doctors*, seem to me, who deterr *Emperors, Kings, Princes* and all other *Great Men*, and seriously admonish them not so much as to touch such *Medicines* with their Lips, because they are noxious, venomous, and every way perillous, I will not here declare, since I see them only to judge according to their own Opinion, without entertaining any Observations of other things, the Knowledge of which they have not before acquired by their own Contemplation, and therefore cannot judge of any thing else, or otherwise than they have learned. Therefore to these I say, if there be any Man, that hath taken so strong a *Poison*, as present Death is necessarily expected to follow, I will (provided the Man be left wholly to my Care) give him an *Antidote* by me prepared which shall continually resist that *Venom*, and quickly expel it out of the Body. But I little care, whether you Mr. *Doctor*, who do neither know this Thing, nor ever would apply your mind to know it, do slight the same, and repute it as a ridiculous, and altogether false tale; it is sufficient for me, that I am able (but if praise worthy, let praise be given to *GOD*) to prove and defend the Truth thereof. For I myself have experienced it, I have made, I have prepared, I have prescribed this *Medicine*, and there wants not a sufficient number of Witnesses to confirm it under Hand and Seal.

[DOCTORS REPREHENDED]

And whensoever I shall have occasion to contend in the School with such a Doctor, who knows not how himself to prepare his own Medicines, but commits that Business to another, I am sure I shall obtain the Palm from him: for

indeed that good Man knows not what Medicines he prescribes to the Sick; whether the Colour of them be white, black, grey or blue, he cannot tell; nor doth this wretched man know, he only knows, that he found it so written in his Books, and thence pretends Possession (or as it were Possession) by Prescription of a very long time: yet he desires no further Information. Here again let it be lawful to exclaim, good *GOD*, to what a state is the matter brought! what goodness of mind is in these men! what care do they take of the Sick! Wo, wo to them! in the day of Judgement they will find the fruit of their ignorance and rashness; they they will see him whom they pierced, when they neglected their Neighbour, sough after Money and nothing else; whereas were tehy cordial in their Profession, they would spend Nights and Days in Labour, that they might become more learned in their Art, whence more certain health would accrew to the Sick Labour is tedious to them, they commit the matter to Chance, and being secure of their Honour and content with their Fame, they (like Brawlers) defend themselves with a certain Garrulity, without any respect had to Conscience or Truth; Coals seem wonderful strange, and as out-landish Wares to them, therefore they spare the Money, that should be bestowed in them, as if they intended to lay it out to a better use. *Vulcan* himself, viz. the Preparer of Medicaments, is not found among them; for their Fornaces stand in the Apothecaries Shop, to which tehy seldom or never come. A Paper Scrol in which their usual *Recipe* is written, serves their purpose to the full, which Bill being by some Apothecaries Boy or Servant recieved, he with great noise thumps out of his Mortar every Medicine, and all the Health of the Sick.

[AUTHORS PRAYER]

My *GOD*, change, change these times, and put an end to this arrogant Pride, overturn those Trees, lest they swell up to Heaven, throw down those Giants lest tehy accumulate all Mountains; and defend those, who seriously managing their Business, faithfully serve thee, that they may be able to stand against these their Persecutors. I seriously admonish all those in our Monastery, bound by the same Vows with me, that they would with my self Night and Day pray unto *GOD*, that he would so illuminate these Enemies of true Medicine, as tehy may execrate their own Error, and acknowledge the Glory of *GOD*, and his Power insited in the Creatures, and perceive the Clearness latent in them, by Preparation and Anatomy (as it were speaking in their Ears) which otherwise surrounded and covered over with external Impurities, would deeply be concealed, and never brought to Light. But I trust the *Creator* of all Things, (both of those which fall under our Sense, and of those that are remote from our Senses) will benignly hear our Prayers; that, if not whilst I and my Brethren live, yet after our Death, such a Conversion of Things and Men (*GOD* answer these desires) may follow, as that thick and obscure Veil may be taken away from the Eyes of our Enemies, and they by true and infallible Illumination, obtain a clear sight, that tehy may find their lost Groat: which *GOD*, the eternal Governour of Time and Things of his Grace and Mercy grant.

But it is fit, that I, who intended to publish a certain Discourse of Antimony, in all its Numbers Absolute, should begin with the *Name itself.

**Poets do often posit in the midst of their Poems, Histories or Fables of Princes, that by a continued Series of Things, they may the more easily attain their End, which is to delight their Readers: Chymists for another end use the same Medium. For since their purpose is to teach the Readers so, as they may only be understood by those, who wholly devote themselves with a fervent desire to the Study of that Science, they keep not that Order, which proceeds from the beginning to the End by Mediums. Therefore our Author, at length coming to treat of the name of Antimony, whence it took beginning, acts as anohter Man addicted to some Scholastic Order: but by and by turning from this Discourse, he answers an Objection, before it is made by Interrogation; viz. whether from Antimony all its Venom may be taken away, the possibility of which he proves by very profitable and significant Examples.*

The *Arabians*, to whom in times past this Mineral was known, did in their Language call it *Astinat*; but the *Chaldeans* called it *Stibium*; among the *Latines* at this day the name of *Antimony* is used, by which name they first of all signified it. We *Germans* in our Language have given it a Name, which seems to express a certain property of its Nature, for since it is seen to consist of a certain streiked Matter, and of it may easily be made Glass endued with various Colours, which proceed therefrom, we have called it *Spies-glass*, as if we should say streiked Glass. From which Variety of the Name, by a prudent Judgment a singular Collection may be made, viz. that *Antimony* was knwon, and greatly esteemed, and its virtue and Utility observed and brought into use by the *Arabians*, *Chaldeans*, *Latins*, and our *Germans*: but afterward, the Heresies of various Opinions arising, the use was vitiated, and its Virtue and Glory first obscured, and afterward wholly extinguished. Of which there is no Reason to Doubt; for nothing is more probable, than that Truth should suffer Dammage and Shipwreck by the Oppression of Enemies. For who knows not the Malice of the Devil, which by Reason of our Sins and Blindness is very often permitted by *GOD*. The Devil is the perpetual Enemy of Mankind, who imployes all his Strength, and all his Deceits, and omits nothing, which in himself is, to prevent the Knowledge of the profit of true Medicine, and to exterminate its use; knowing well enough, that by that means the power and glory of *GOD* is obscured, and those Sacrifices of the praises of men are impeded, by which they gave thanks to *GOD*, because he hath insited as it were the Rays of his Goodness in the Creatures, whence they may obtain Health by a natural auxiliary.

But since to discourse of the name of *Antimony*, is not to our purpose, we will desist from this Matter. For all the Praise of *Antimony* consists in the Preparation thereof, which is made for perfecting the Virtues infused in it from Nature by the *Author of Nature*. Therefore my discourse shall be of this, handling it and its known Virtue, and I will endeavour to make my Name immortal. Yet before I come to declare the Virtue of *Antimony*, since I above confessed, that it is meer Venom, I would have you know and diligently note, that Venom is able to draw Venom to itself, because like itself, much sooner and much more than any other Thing of another Nature.

[VIRTUE OF UNICORNS-HORN PROVED]

Now let any Reader consider, and observe it as a Thing worthy of Note, that the true *Unicorns-horn*, sophisticated by no fallacy, repels all Venom from itself, nor can it assume or draw to itself anything of Venom, as is manifest by Experience. Let a living Spider be put in a Circle made of *Unicorns-horn*, and out of this Circle it cannot go, or pass over the *Unicorns-horn*, for it shuns whatsoever is adverse to Venom. But if the Circle be made of venomous Matter, it is not to be doubted, but that the Spider will go out of it, and pass over that Venom like it self. Note this Experiment, make a piece of Silver hollow, and put it in Water, that it may float like a Boat, and put Venom into it, then hold a piece of true Unicorns-Horn, as nigh to it as you can, but so as you may not touch it, that Unicorns-Horn by its spiritual Virtue will drive the Silver from it, so that it will flie away like a Duck, which swimming on the Water flies, when it perceives the Snares of the Fowler ready to entangle it. But on the contrary, Nature in a wonderful manner loves and follows its own like, as appears by this Example. Put a piece of pure and fine Bread in a dish full of Water, so as the Bread may swim upon the Water, hold a piece of true Unicorns-Horn close to it, yet so as it touch it not; and if you leisurely move the Unicorns-Horn the little piece of Bread will follow it. Nature so much loves its own like, and so much hates what is unlike itself, as this flies and that follows. Therefore let our *Doctors* consider, that Venom by a certain Magnetick Power Attracts Venom, and those things which are void of Venom, do in like manner draw to themselves things pure, and wanting a Venomous quality.

[VENOM TAKEN AWAY TWO WAYS]

Therefore Venom may be taken away two ways; first, by its Contrary, which resists Venom, as already is related of the Unicorns-Horn. Secondly, by Like, when Venom by a certain Magnetick power draws Venom to itself. But the Venom which must heal Venom like itself, ought first to be so prepared, as its Venom may pass into Medicine, and by its own attractive virtue, assume the other to and expel it with itself. [EXAMPLE OF SOAP] Of which thing you have a most clear Example of *Soap*: That is compounded of Oil and other fat ingredient Matters, which seem to be, and in very deed are, more apt to foul, than cleanse Linen; but because in the Boiling of Soap, especially by the help of Salt, a certain Separation and Preparation is made, the Soap is rendered most apt to draw to itself and wash out all foulness and filths from Linen and other things: so indeed may Venom in a certain manner, by Antecedent Preparation be accommodated so, as to be no more Venom, but a Medicament, it draws to itself all other Poison, casts it out, and restores the man to his pristine Purity and Health.

Now since our Discourse hath led us so far, and we have begun to open Nature so much; that the truly Studious of Medicine (though hitherto ignorant of this) may clearly know, what Good or Evil is latent in Nature, what is Venom and what is harmless; which is a thing hath not as yet been found out by Doctors, by reason of their own supine negligence; and that the Truth thereof may be demonstrated and also confirmed, it will not be amiss to produce certain Experimental Examples, which may discover the Truth, and refute the false Opinions of others. [EXAMPLE OF AN EGG] Put an Egg, which in the Winter is congealed with Cold, into very cold Water, there let it lie for a due space of time, and the Ice will externally adhere to the Egg-shell, but the Cold be extracted from the Egg itself, and restored to its pristine vigour and intireness. [EXAMPLE OF A MEMBER BENUMMED] Again, if any Member be benumbed with Cold, let not the Patient neglect himself, but apply cold Snowwater round about, so one Cold attracts the other, and the Member is restored. [EXAMPLE OF A MEMBER INFLAMED] On the contrary, if any one have a Member inflamed, let him apply to that Inflammation an hot Matter; as for example, Spirit of Wine, which is mere Fire, or the Quintessence of Sulphur, and he will in very deed find, that Heat is attracted by Heat, in a certain Magnetick manner, and like to rejoice in like, and not only to assuage the pain and heat of the inflamed Member, but absolutely to restore the same to its pristine strength.

[EXAMPLE OF FROGSPAWN] Yet lest this our purpose should not be fully enough confirmed by Examples, I will also add another, by way of Supplement. Take Frog-Spawn in the Month of March, and laying it on a Board dry it in the Sun, when dry reduce it to Powder, and strew of this Powder, upon wounds made by Venomous Vipers or Serpents; by this means such Wounds will be so prepared, as they may be perfectly healed by other Medicaments applied thereunto. Or otherwise, if Linen cloths be often moistened in Frog-Spawn, and as often dried, and that Linen cut into small pieces and applied to Wounds, they effect the same, as the aforesaid Powder would have done.

[EXAMPLE OF A TOAD] But that the very foundation of this Truth may more clearly be declared; take a venomous Toad, dry him in the Sun, shut him up in an Earth closed Pot, and by burning reduce him to Ashes; then having taken out the Ashes, and reduced the same to Powder apply of that Powder to a Wound made by Venom, and

this Poison attracts the other Poison, and joins it with itself. Why so, I pray? Because by this Burning, which is the Calcination of the Toad, its interior Virtue is made manifest, and efficacious for operating; so, that Like can attract like, and especially Venom, to itself. Therefore firmly persuade yourself, that this Truth is infallible and immutable, which I have here proposed to you and others by Example. If anyone afflicted with the Pest, do diligently observe this, he will find the Truth of those things I have here above mentioned: the *Astrum* of *Sol*, from which (as from an operative and all vivifying Sun) all things in their kinds universally arise; therefore I determine that in the potency of Gold, more than in all other Things, is an Operating Nature; that is, in its own *Astrum*, whence both itself, and all Metals and Minerals, in the Beginning, received their first Nativity and Propagation of Generation. Touching which more may be said, when I shall manifest to you the *Astrum* of *Sol*, and commend the same most religiously to your Conscience.

[ANTIMONY, ITS ASTRUM]

After the same manner process is to be made with *Antimony*, which hath the same Operations with corporal Gold; yet of the *Astrum* thereof I now speak not. [ANTIMONY SPEAKS OF ITSELF] For I know (saith *Antimony*) it behoves me, before that, to fear and tremble; although in many principal *Arcanums* of Medicine, I far excel it; yet universally I am able to effect none of those Things, which the *Astrum* of *Sol* (confirmed by the Testimony of Celestial Verity) is able to produce. The *Astrum* of *Mercury* I omit, because I my self have my descent from the same Original with it: but as to a Celestial penetrating power of Operating, I give the first place of Dominion to the *Astrum* of *Sol*.

[VULCAN, A MASTER IN HIS OWN ELEMENTS]

My Writings and Books, composed by Experience, properly follow and answer each to other; as one metal (as to its virtue) is observed and esteemed by another, and must by Fire be proved of what value it is. So these my Sayings, or Writings, or Medicaments, ought to be brought into the Schools, as tending to one Scope and End. Into the Schools, I say, where Riches obtain to themselves (as it were) an Hereditary place, and instead of that take away all the Honour, which is due to *Vulcan* only, who can boast himself to be a Master in his own Element of Fire. Which may be shewed by Example, and a true and manifest *Proof*. [EXAMPLE OF STEEL AND A FLINT] When most hard Steel is struck with an hard and solid Flint, Fire excites Fire by vehement Commotion, and accension, drawing forth the occult Sulphur, or the occult Fire is manifested by that vehement Commotion, and enkindled by the Air so, as it truly and efficaciously burns; but the *Salt* remains in the Ashes, and the *Mercury* thence takes its flight together with the burning Sulphur.*

**You, who read this most simple Comparison of Steel and a Flint, slack the Reins of your Admiration, and seriously ask yourself, whether there can be found out anyway or Method, by which from this Stone and Cold Iron may be extracted, a Substance, of which one only Grain (but why do I speak of a Grain?) of which the hundred part of a Grain can in a very short time Convert a great Mass of some rude Matter, into the most splendid and most pretious of all Things; yea, into fire most profitable for Mankind? This is possible, and is dayly done, when the fixed is made Volatile, and the Volatile again fixed. He that hath understanding, let him understand, and cease to defame the admirable virtues of Chymical Works.*

[MEDICINE, INEFFECTUAL IF NOT SEPARATED FROM ITS IMPURITY]

So here also understand, that *Antimony* ought in a certain Method so to be handled, as its *Mercury* may be separated from the Sulphur thereof, in a Natural Manner. Now as Fire, which lies absconded in Matter, unless it be made manifest, and can be demonstrated, is profitable for nothing, is not (as I may say) tangible by the Hands, nor can it effect any thing to purpose; so Medicine can effect nothing that is excellent, unless it be first separated from its Grossness, rectified and so discharged of Impurities, clarified and brought to Light by due Preparation, as is manifest in all Things: for when Separation of the pure from the impure is made, and all that is mountainour or terrestrial is segregated from the pure Metal, then the desired Harvest is to be expected. Hence it is manifest, that Fire can effect nothing, before it is in a certain manner opened and set at Liberty, that before it is in a certain manner opened and set at Liberty, that it may operate. Therefore, to comprehend much in few Words, I say, this is the Condition of *Antimony*. Whatsoever is occult and absconded from the Knowledge of the Vulgar, that enjoys the Name and Honour of Art, *viz.* as long as it lies hid; but so soon as it is discovered and made manifest, Art hath end, and it becomes a Mechanick Work; as I have than once declared in other of my Books.

[EXAMPLE OF BEES]

A Bee sucks Honey from Flowers, with such Art as the Almighty hath insited in it, in which Honey is latent a Virtue, Juice, and Corroborative Power, of which a Medicine is made, as is obvious to the Eyes of all Men.

[EXAMPLE OF A CORROSIVE VENOM OF HONEY] Now, from that *Honey*, of a sweet and most pleasant Taste, a violent Corrosive and present Venom may be prepared; which perhaps no man, unless he who hath learned it, will believe; no man certainly considers this, unless he be a diligent Observer. Yet for this Cause Honey is not to be condemned, nor is it to be said, that although it hath a most grateful Sweetness, yet it is a Corrupt Medicine;

because a Corrosive may be made of it: but it should rather be said, that Corruption proceeds from the Physicians ignorance, who knew not how duely to prepare it. Here I am willing to teach the ignorant Physician, to free him from the last Judgement. [HONEY, HOW PREPARED] For Honey is prepared of the Superfluities of Brute Animals, by which the Grounds and Fields are fattened; in those Grounds arise Flowers, Herbs, Fruit-trees of various kinds, from which the Bees suck a most noble Quintessence: by this is made the Alteration and Generation of one Thing into another, viz. into Aliment of another Form and Taste, which in no wise agrees with the former, and that is called Honey. Of such Honey is prepared a Food most grateful, pleasant and fit for man, and for many Things most profitable. Of the same may be prepared a Poison most hurtful to Man and Beast.

[NATURE TO BE FOLLOWED]

Therefore, do you Searcher of Nature, of what Age, Sex, Fortune, or Condition soever, follow me and Nature. I will shew you the Truth, without any Mixture of falsity, drawn from the very Foundation. I will make you understand, who proceeds rightly, and who unadvisedly. I will teach you to separate the Good from the Evil, the Highest from the Lowest. For of *Antimony*, if its Venom be first changed into Remedy, is made a Medicine, which eradicates, and like Fire penetrates, prepares and by cocting consumes all Diseases. [QUINTESSENCE OF ANTIMONY, WHAT] Wherefore *Antimony* is first to be prepared into a true *Stone*, which is the Quintessence thereof; and because, in its Operation it is altogether like unto Fire, (when reduced to its Coagulation) it shall by me be named the *Stone of Fire*. when this *Stone of Fire* is rightly prepared, as in the End of this Treatise I will further show, its Medicinal Virtue consumes all noxious Humours, purifies the blood in the highest Degree, and performs all that may be effected by *Aurum Potabile*.

[DOCTORS REPREHENDED]

Therefore, I pray you, my unexperienced Doctor, who have neither learned my Preparation, nor conceived the Use, not to judge from a false suspicion, and your own ignorant Thoughts; but set about the Work itself, and learn how the Preparation of *Antimony* ought to be made, how you should further proceed with it, how its Venom is expelled and separated, and Salutory Medicine posited in the place of it, and exalted. When I say* you shall have performed This, then at length will you be able to judge of the difference, and understand those things, which before were very far remote from your Knowledge.

*Here again the Author waxeth hot against false Physicians; but do you read on, and after this Heat he will give you a profitable Doctrine, which you may soon find in *Aqua Fortis* and *Spirit of Wine*.

[DOCTORS REPREHENDED]

O you wretched and to be pitied *Medicasters*, who painted with a *Fucus*, breath out I know not what *Thrasonick* Brags, and pass over Mountains wanting Foundation, walking through Clouds in your own Thoughts, and know not where at length you shall rest your Foot: you, I say, I admonish to consider what you will answer, in the Extreme Judgement of the Son of *GOD*. *Seek*, and when you have found, convert what you find to use, and so performing your Office commit the Rest to *GOD*, who will give success, and never leave you destitute of help. But you infamous men, more mad than *Bacchanalian* Fools, who will neither learn, nor foul your Hands with Coals, judge not lest you procure Judgement to be pronounced against you, which your Childrens Children may write down to your shame in an undeleble Character.

Every Physician ought above all Things to take Care, that he do neither less nor more, than procure the Restitution of Health lost, not instituting his Curation contrary to Nature, or deviating from her direct Intention. [EXAMPLE OF SPIRIT OF WINE AND AQUA FORTIS] When Spirit of Wine is poured upon *Aqua Fortis* a vehement Ebullition is made, and these two Natures will not easily permit themselves to be together; but he, that knows how by Distillation to conjoin them and unite them, according to the true Intention of the Philosophers, he may use them in many things for good. [EXAMPLE OF OIL OF TARTAR AND VINEGAR] After the same maner, Oil or Liqueur of Tartar, and Vinegar made of Rich Wine, act each upon other, for they hate and fly from each other, as Fire and Water, although they proceeded from one and the same Matter. Therefore the Physician ought in a special manner to be mindful, to understand all Circumstances from the Sick very exactly, and consider the same being understood that in Curing he may use such Means, as are fit to remove the Disease, lest the Patient be injured by the Medicine. As for Example, when Iron is dissolved in *Aqua Fortis*, if you suddenly pour Oil of Tartar upon that Solution, you shall difficultly preserve Glass from breaking; for the contrary Natures, like unto Gun-powder, take Fire, and break the Glass. Of all these Things, our Gown Doctors know nothing at all; therefore they have no other Defence for their Ignorance, than Silence only.

[DOCTORS AND APOTHECARIES REPREHENDED]

You titular Doctors, you I speak to, who write long Scroles of Receipts: you Apothecaries, who with your Decoctions fill Pots, no less than Those (in Prince Court) in which Meat is boiled for the sustentation of some hundreds of men: you, I say, who hitherto have been blind, suffer a *Collyrium* to be poured into your Eyes, and permit them to be anointed with Balsom, that the most thick skin of Blindness may fall from your Sight, and you

behold the Truth, as in a most clear Glass. [AUTHORS PRAYER] *GOD* grant you Grace, that you may know his wonderful Works, and the Love of your Neighbour be rooted in you, that you may search out true Medicine, which the Ruler of the Heavens hath, by his own omnipotent hand, and his ineffable and eternal Wisdom, from above infused in, impressed on, and communicated to his Noble Creatures, for the Good of Mankind; whence man may find help in his greatest Necessity, and Counsel for Health in his Diseases. Why do you, miserable Worm of the Earth, and food of Worms, look so intently on the Rind or Shell, and neglect the Kernel, being unmindful of your *Creator*, who formed you according to his Image; when as you ought to give thanks to him, and with diligent Study to search out his Works, exceeding Nature herself? Return and look into your self, there behold the Image of your own ingratitude, that you may be ashamed of yourself, especially because you have not search out those things, which the most wise *GOD*, for the good of Mortals; hath infused in his Creatures; by knowing which, you might have offered unto him the most acceptable Sacrifice of Praise and Gratitude.

But I will put an end to this Discourse, lest my Tears (which I can scarcely keep in, from continually falling from mine Eyes) should blot this my Writing, and whilst I deplore the Blindness of the World, I blemish this Lamentation, which I would have known to all men. I am a man Religious, incorporated in a most holy Order, in which I will persevere, as long as it shall please the Omnipotent *GOD*, to animate this miserable Body with Vital Spirit: therefore I must not write other things, or otherwise, than is agreeable to this State. But had I the Office of a Secular Judge, I would lift up my Voice, and sound a Trumpet in their Ears, that those deaf men may hear, who hitherto would not acknowledge the Truth, but out of Ignorance, without Cause, falsely and slanderously persecute, calumniate, condemn, disparage, and meditate how they may totally suppress the same.

But thou, O Lord *GOD*, who dwellest in the Highest, who art called and truly art the *GOD* of Rest, who sitting in the Supreme Throne of Majesty, governest Heaven and Earth, which thou hast created, who conservest the Stars, and ordainest the Course of the Firmament in its Motion according to thy Command, before whom all Creatures tremble, which are found in the Earth, or in Heaven, and the Infernal Spirits are astonished with unexpressable dread, be pleased, I pray to look down upon the Transactions of this most ungrateful World, and teach them inwardly to know those Things, which thou hast outwardly and visibly proposed to the Sons of Men, that thou mayest be praised in thy Throne, known in thy Verity, and adored in thy immense Majesty. As for myself, I am unworthy and miserable man, give thanks unto thee, for thy great and infinite Gifts and Benefits of Riches and health bestowed on me, and laud thy Majesty for ever for the same. More, O my Father and Lord, I neither can, nor am able to desire in this perishing World.

[ANTIMONY, ITS ORIGINAL AND ROOT]

Now, that we may write of *Antimony*, and begin our Discourse from the very Foundation, whence *Antimony* acquires its Empire, Triumph and Glory, by which it is exalted to perfect Operation, we must before all Things discover the certain Original of its Root: how it is generated in the Earth, to the Dominion of what Stars it is subjected, and what Elements have throughly digested it, and which they be, that have brought it to Maturity. *Antimony* is no other than a Fume, or (as I may otherwise call it) a Mineral Vapour, which is genited from above by the Stars, and afterward by the Elements deduced and digested to formal Coagulation and Maturity. Here it is to be noted, that *Antimony* hath acquired its Essence, Virtue, Power, Operation and Quality, from the same Principle, Root and Essence, whence Vulgar Mercury is produced; yet with more firm Coagulation, so that it is brought to an harder Essence, than the living or running Mercury of the Vulgar hath. The Reason of this is, because it hath assumed from the three Principles, a little more of the Substance of Salt, than Common Mercury. For although of all the three Principles, it hath the least part of Salt, yet it hath assumed more of the Essence of Salt, than common Mercury, whence unto it hath happened such a Coagulation. Hardness in everything is from Salt, which vulgar Mercury hath not. For it hath a very small part of Salt, but in it, in a spiritual manner, is insited a certain more hot *Spirit of Sulphur*; therefore it always flows, and cannot be brought to Coagulation, unless by the help of other Metallick Spirits, which endued with a very great Virtues, are chiefly found in the *Matrix* of *Saturn*, without which it cannot be fixed, unless by him, who possesseth the *Stone of Philosophers*, by which its three Principles may be brought to a concordant Equality, and then it acquires such a Body, as will melt, flow, and abide the Hammer, like all other Metals: other wise Mercury is and will be fluid Mercury, until its volatility be this way taken away. [MERCURY, NOT FIXED BY ANIMALS AND VEGETABLES] Hence it is known, that all Animals and all Vegetables are too weak to fix Mercury into a malleable Substance (as many have in vain endeavoured) because all these have not a Metallick Nature.

[MERCURY, WITHIN AND WITHOUT MERE FIRE] *Mercury*, within and without, is no other than meer Fire; therefore it is not combustible by any Fire, no Fire can apprehend it so, as to alter its Essence, but it suddenly flies and resolves itself into a incombustible Oil Spiritually; [MERCURY UNVARIABLE AFTER FIXATION] or after its fixation it remains so invariable, as no strength or power of men is sufficient again to alter it. And whatsoever can now be made of Gold may then also be made of it by Art; because after Coagulation it is altogether like Gold: for it with Gold hath one and the same Root, Stock, or Production originally.

But since I purpose not in this place to discourse more largely of *Mercury*, and intend only simply (yet truly) to describe the very Foundation of *Antimony*, from true and certain Principles, I will cease to speak of *Mercury*, and proceed to a further Declaration of *Antimony*. Yet, whatsoever I have proposed by way of Similitude touching *Mercury**, for an Introduction and further Consideration, is not written in vain, or to no purpose; but to the end, that the very Beginning of *Antimony* may be more clearly understood, which (as I before shewed) received its original, as it were Mercurially, with it.

**Which so miserably perplexeth all the Students of this Art: what our Mercury is, which is the Matter of the Stone, which is found every where and in all Things, is here briefly and clearly manifested. Therefore our Author Basilus doth not in Vain invite your Attention. All the Light I am able to add to this Clearness, would rather obscure, than illustrate the same: therefore, with him, I admonish you to attend.*

[MATTER, OF ALL METALS AND MINERALS, ONE]

Wherefore most diligently think on this; often bear in mind, observe and understand, that all Minerals and Metals together, in the same Time, and after the same manner, and of one and the same principal Matter, are produced and genited. That Matter is no other, than a meer Vapour, which is extracted from the Elementary Earth by the Superior Stars, as by a Sidereal Distillation of the Macrocosm: which Sidereal hot infusion, with any Airy-Sulphureous Property descending upon Inferiors, so acts and operates, as in those Metals and Minerals is implanted spiritually and invisibly a certain Power and Virtue, which Fume afterward resolves itself in the Earth, into a certain Water, from which Mineral Water all Metals are thenceforth generated and ripened to their Perfection; and thence proceeds this or that Metal or Mineral, according as one of the three Principles acquires Dominion, and they have much or little of Sulphur and Salt, or an unequal Mixture of the weight of them, whence some Metals are fixed; that is, some constant and stable, some volatile and easily mutable, as is seen in *Gold, Silver, Copper, Iron, Tin* and *Lead*. Besides these Metals, other Minerals also are generated of the three Principles, according to the Communication and Participation of the unequal weight of them: as are *Vitriol, Antimony*, and many other Marchasites, or other Electrums, and Minerals, which for brevity sake we here omit.

But Gold, in its *Astrum* and Beginning was imbibed with a much more perfect *Sulphur*, and a much more perfect *Mercury*, than all other Metals and Minerals, and therefore its operative Virtue is much more potent and more efficacious, than the *Astrums* of other Metals: Yea, all Virtues whatsoever are dispersed in other Metals, and many more than them, are found in the *Astrum* of Gold only. Moreover I say, when that one thing is brought to further Maturity by Fire, it contains more Perfection, than all Metals and Minerals together. There is one only Mineral, of which I have often made mention already, in which is found a Sulphur of *Sol*, equally as strong and powerful, yea more potent and more strong, than in Gold itself: so also, there are two kinds of Metals found, in which this Predominancy powerfully Triumphs, of which at this time I have neither will nor disposition to write; but I am willing to keep within the Bounds I have set myself in treating of the Essence of *Antimony*, touching which I purpose now to speak.

[ANTIMONY, ITS 3 FUNDAMENTAL PRINCIPLES]

Therefore *Antimony* is a Mineral made of the Vapour of the Earth changed into Water, which Spiritual Sidereal Transmutation is the true *Astrum* of *Antimony*; which Water, by the Stars first, afterward by the Element of Fire, which resides in the Element of Air, is extracted from the Elementary Earth, and by Coagulation formally changed into a tangible Essence, in which tangible Essence, (*viz.* whence *Antimony* is formally made) is found very much of *Sulphur* predominant, of *Mercury* not so much, and of *Salt* the least of all three; yet it assumes so much *Salt*, as it thence acquires an hard and immalleable Mass. [ANTIMONY, ITS PRINCIPLE QUALITIES] The principal Quality of it is dry and hot, or rather burning, of Cold and Humidity it hath very little in it, as there is in Common Mercury; in Corporal Gold also is more Heat than Cold. These may suffice to be spoken of the Matter, and three Fundamental Principles of *Antimony*, how by the *Archeus* in the Element of Earth it is brought to perfection.

Yet the Lovers of *Chymistry* should not think this Philosophick Reason by me alleged of absolute necessity to them, nor need they be solicitous to know, in what center the *Astrum* of *Antimony* rests, or from what root it flows; but should rather desire to learn the Utility and use thereof; *viz.* which way it ought to be prepared and reduced to its State, that they may know its Virtue, Power, and Operation, touching which in times past so many Things have been written, and to this Day are mentioned, and spoken of by all men of all States and Conditions. For the Learned, as well as the Unlearned hope to have their ardent and insatiable Desire satisfied by This; therefore I will not detain the Reader with ambiguous Discourses, or tedious Delays, but simply teach every Thing, which I by great Study and Diligence (which I have often employed about *Antimony*) could find out touching the Essence of *Antimony*. For no man, by reason of the shortness of Life, can know or search out all its *Arcanum*'s: because in Preparation of *Antimony*, one new Wonder follows another perpetually; one Degree succeeds a former Degree, Colour follows Colour, and one Virtue, Power or Operation always manifests it self greater than another.

And, to begin here I say, *Antimony* is meer Venom, not of the kind of the least Venoms, but such, as by which you may destroy Men and Beasts, so venomous a power is diffused through the whole Substance of this Mineral. Hence ariseth the common Exclamation of all men. [KINGS, AND PRINCES, MISINFORMED BY DOCTORS] For the People, unskilful Doctors, and all Those, to whom the ground of true Medicine is unknown, do with one mouth proclaim it *Venom, Venom!* Poison, say they (as I myself above confessed) lies in *Antimony*. For this Cause let us dissuade all men from its use; for it endangers the Health and Life. Therefore *Doctors* resident in Princes Courts, admonish Monarchs, Princes, and other Potentates not to use *Antimony*. Other Scholasticks cry out, Beware, you in no wise admit *Antimony* into Medicinal Use; for it's meer Poison: these the Inhabitants of Cities and Villages follow. And this far spread Clamour so moves the greatest part of Mortals, as *Antimony* in these our Days is very ill spoken of, and no man dares put confidence in the Medicine thereof, which in it is found so various and unexpressible. [MEDICINE, NONE GREATER THAN IN ANTIMONY] For truly and holily I affirm (as truly as *GOD* is the Creator of all things visible, which are contained in Heaven or Earth, which either have come, or in time to come shall come unto our knowledge) that under Heaven, or by the Rays of the Sun, with the Guidance of Experience, can be found or demonstrated no greater Medicine, than is in this Mineral; yea, there is no Subject, in which so fluently and abundantly can be found such most certain Remedies for Health, as shall be declared (by sure and undeniable Experiments) to be in *Antimony*.

Son, attend to this my Discourse, and do thou Reader give heed to my Writings, and do you wise men of the World diligently observe my Declaration of *Antimony* founded on Experience. For my *Theory* ariseth from Nature, and my *Practice* proceeds from certain Experience, which shews its manifold Utility, and infinite Ways produceth the same, not without the incredible Admiration of all men. But I assent to you, and confess (as I have before acknowledged in my Writings) that *Antimony* at first is meer Venom, and before Preparation hath nothing in or with itself, but Poison; and that I affirm to be true. [DOCTORS REPREHENDED] But you, whosoever you are, insignized or not insignized with the Degree of *Doctor, Master, or Bachelor*, whether skilful in Art, or by some other privelage promoted; you, I say, who so inconsiderately and so arrogantly without Truth exclaim, and prate against me, pause a while, and forget not your own Argument, hear what I have to say. *Antimony* is Venom, therefore every One must beware he use it not. No, that doth not follow Mr. *Doctor, Bachelor, or, Master*; it doth not follow, I say, Mr *Doctor*, although you be proud of your Red Hat. *Treacle* is made of the most perillous Venom of a *Viper*, which is called 'animal', whence also it had its Name; therefore no man must use it, for there is poison in it. Doth this Consequence please you? How doth this my Doctrine like you? [NO GOOD IN ANTIMONY FOR THE HUMAN BODY, WITHOUT PREPARATION] You hear, that after Preparation, no Venosity is found in *Antimony*; for by the Spagyric Art *Antimony* is converted from Venom into Medicine, no otherwise than as of the Venom of a *Viper* is said, which is converted into *Treacle*; but without Preparation you shall find no Good in it, nor anything of Medicinal Help, but much loss and detriment.

[VULCAN, MASTER AND REVEALER OF ALL SECRETS]

Now, whosoever desires to become a Disciple of *Antimony*, he must, after Prayer, and an earnest Invocation of *GOD*, betake himself to the School of *Vulcan*; for he is the Master and Revealer of all Secrets. [VULCAN, CONDEMNED BY WHOM] This Master is condemned by the Wise Men of the World, set very light by and derided; because they, by reason of their own Negligence and Malignity, have learned nothing of him; and all Revelation, through their own Sloath, is impeded: [MEDICINE, NOT PREPARED WITHOUT VULCAN] for no Medicine was ever prepared without *Vulcan*, whatsoever those senseless mad men shall babble and affirm to the Contrary.

[ANTIMONY, ITS WONDERFUL VIRTUES]

But I will proceed to the Proceed and Preparation of *Antimony*; for I little value the Clamours of arrogant and self applauding men: let them make and bring to light any Work that can excel *Antimony*. It is well known to me, that of *Antimony* may be made Medicines equal to Those, which are in gold and vulgar Mercury (I except the *Astrum of Sol*) for of this may be prepared *Aurum Potabile* against the Leprosie, of this may be made Spirit of Mercury, the highest Remedy against the French *POX*, of this other infinite Remedies may be prepared. If those Condemners cannot perceive and understand this, what wonder is it? None, because they have not learned it. No man can give a sound Judgement of that, which he never learned. [DESPISERS OF ANTIMONY COMPARED TO AN ASS] Let the Ass, an *Animal* like them in stupidity be their Example, who cannot teach a Shepherd how to handle his Pipe, so as to play an Harmonious Tune; because he hath not learned. So, right Judgement, with a solid Foundation cannot be given by a man, who before hath not bent his Studies that way, that from Writings he may be able to discern what, in such a Business, is just or unjust. [DOCTORS REPREHENDED] After the same manner in this Faculty, what can be attributed to any of the *Doctors*, before he hath from Writings, and by his own proper labour acquired Knowledge?

[VENOM, WHENCE IT ARISETH] Yet before I pass to the Process itself, some One may perhaps interrupt and ask me, which way both Minerals and other Things receive their Venenosity? What Venom is? Whence the Poison of every Thing hath its Original? How it may be taken away, also how such a Mineral may without peril securely be used for Health after evacuation of that Venom? To these Questions I will briefly and clearly answer. The Infusion of Venom falls under a twofold Consideration, *viz.* Natural and Supernatural.

[GODS END IN PROPOSING VENOMS]

The First Reason, why *GOD* the Supreme Lord of the Stars, and the maker of Heaven and Earth, hath proposed to us open Venom, especially in Minerals, is, that by this his Ordination he might show to us his Wonders and powerful Works, for distinction of Good and Evil, as in the Law he prescribed to us the Knowledge of That, which lies as a Duty on us to do, *viz.* to Choose the Good and Eschew the Evil. So also the Tree of Life in Paradise was proposed; its right use tended to Good, but its abuse brought the Fall to Evil; for by that *GOD*'s Command was broke, whence proceeded Destruction and all Evil. This is the first Reason.

A Second Reason is, that by this we might comprehend and understand the Distinction between Evil and Good, and at length learn to exterminate Malice and reposit Goodness in its place. For *GOD* wills not, that man should perish and be destroyed, but that he should depart from Evil, and come to amendment of Life, that Destruction may be driven far away from his Soul. So, to Us his Creatures, with wonderful Conveniency hath he proposed Good and Evil, which is found both in the Precept of the Word, and in the Work of the Creature, that we may choose what is profitable and good for Health, and shun what is evil and pernicious.

Thirdly, Venom is also made by the Stars, when contrary Oppositions and Conjunctions of them happen, by which the Elements are Infected so, as they become the Cause of Pestilences, and other Venomous Diseases in this World: which also is to be understood of *Comets*.

Fourthly, Venom is made from Things repugnant each to other, as when any One inkindles a deadly Poison in himself, by Anger or Sadness; also when a man drinks being above measure hot.

Fifthly, among Venoms may be numbered Weapons, with which any One is slain; then the Abuse of Arms is Venom to that man. But when any One useth Arms, for the just and unblamable defence of his Body, to which end they were invented, then they may be accounted a certain kind of Medicine.

Lastly, the Cause of Venom may be demonstrated by Nature, in this manner: whatsoever Nature resists is Venom, and that because it fights against Nature. As when any one eats such Food, as his *Stomach* cannot bear, then that Food is Venom to him; for it is repugnant to Nature; on the contrary, if any One eat such Food, as is Friendly to his *Stomach*, to him that Food is Medicine.

But Venom is principally attracted to Bodies in the Earth, whilst they are a certain Mercurial Essence (now I speak of the Venom of Minerals) which yet is in an immature, crude, and not well digested Form, which is repugnant to Nature, and difficultly digested; because such a Mercurial Essence is not yet perfect, well digested to Maturity, therefore it passeth through the whole Body, as a crude, immature, undigestible Mineral. As if crude corn should be eaten by men, that would be so difficult to be digested by the *Stomach*, as a notable debility of the Body would follow. For the natural Heat is too weak to deduce that to a due Concoction and Perfection. Corn, which receives its Maturity from the Fire of the Great World, must afterward be thoroughly cocted by the Minor Fire, that it may be digested by the Microcosm. [CATHARTICKS, ALL VENOMOUS] As before we said, touching the boiling of Flesh to Maturity; so here the same is to be understood of *Antimony*, which being yet crude, and not thoroughly cocted in the Earth to fixedness, the stomach of Man (as I may so speak) is too weak to bear it, or retain the same, as by certain Experience is manifested, *viz.* that all *Catharticks*, whether Minerals, Animals or Vegetables, are venomous, because of a certain Mercurial volatile Matter still predominant in them; which volatile Spirit is the Cause why other things, which are in man, are expelled: [REMEDIES FIXED PURGE NOT] not that by this Means the Root itself of Diseases is laid hold on, which only is effected by the fixedness of every medicine. [ROOT OF DISEASES, HOW EXPELLED] For every Medicine thoroughly fixed, searcheth out fixed Diseases, and eradicates them; which Purgers not fixed cannot do, but they do only as it were carry away some Spoil of Diseases; or they may be compared to Water, which driven by force through a Street Penetrates not the Earth itself. [PURGING BY THE INFERIOR PARTS, NOT THE WAY TO EXPEL FIXED DISEASES] Fixed Remedies purge not by the Inferior Parts, because that is not the familiar way of Expelling fixed Venoms, and that way they would not touch the Kernel (as I may call it) or Center of the Disease; but by expelling Sweat, and otherways they strike at the very inmost Root of the Diseases, not contented with a certain superficial Expulsion of Filths. Therefore we often admonish all and every One, that all venomous Impurity is totally to be taken away from *Antimony*, before it can either be, or be called such a Medicine, as may safely be given. For this Cause, the Good must be separated from the Evil, the Fixed from the not fixed, and the Medicine from the Venom with accurate diligence, if we hope by the Use of *Antimony* to obtain true Honour, and true Utility; but Fire only can effect that. For *Vulcan* is the sole and only Master of all These. Whatsoever the *Vulcan* in the Greater Orbe leaves crude and perfects not, that in the Lesser

World must be amended by a certain other *Vulcan*, ripening the Immature, and cocting the Crude by Heat, and separating the Pure from the Impure. That this is possible no man doubts; for dayly Experience teacheth the same, and it is very apparent in the Corporal Aspect of Colours, which proceed from the Fire. [FIRE, THE SEPARATOR OF VENOMS] For by Separation and Fire, which perfect Fixation, Venenosity is taken away, and a Change is made of the Evil into Good, as we have already said. Therefore Fire is the Separator of Venom from Medicine, and of Good from Evil; which is a thing, that None of the *Physicians* either dares or can truly and fundamentally own, or demonstrate to me, unless he who hath firmly contracted Friendship with *Vulcan*, and instituted the fiery Bath full of Love, by which the Spouse, being throughly purged from all Defilement, may legitimately lie down iwth her Bridegroom in the Marriage Bed.

Fie upon the Acuteness of the Worldly Wit of those, who neither understand, nor are willing to endeavour to understand these my Writings. if you did know, what is called fixed, and what not fixed, and what it signifies to separate the Pure from the Impure, assuredly you would purposely forget many Things, and omitting other vain Works, would follow me only. [ANTIMONY, SPEAKS OF ITSELF] For in me (*Antimony* speaks of himself) you will find *Mercury*, *Sulphur* and *Salt*, then which Nothing is more Conducibile for the Health of men. [MERCURY, SULPHUR, AND SALT IN ANTIMONY] *Mercury* is in the *Regulus*, *Sulphur* in the Red Colour, and *Salt* in the remaining black Earth. He that can separate these, and again unite them in a due manner, according to Art, so as Fixation may bear Rule, without Venom, he may rejoice with Honour and Truth; because he hath obtained the *Stone of Fire*, which may be prepared of *Antimony* for the Health of Mortals, and for Temporal Sustentation with particular profit. [ANTIMONY, CONTAINS ALL COLOURS] For in *Antimony* you may find all Colours, Black, White, Red, Green, Blue, Yellow, and more other mixt Colours, than can be believed, all which may be separated apart, and known particularly, and singularly applied to use; according as the Artist intends, such an Ordination is to be instituted.

[ANTIMONY, ITS WONDERFUL VIRTUES] Therefore now will I distinctly declare, how Medicine is to be prepared, Venom to be expelled, Fixation to be set about, and a true Separation to be made, by which the Evil may be subdued and depressed, and the Good triumph and be taken into use. In the meanwhile, let the Lover of Art consider, that every of the other Metals may be compared to every of the Precious Stones; but this only contains universally the Virtue of all Stones; which those Colours, which it gives forth and exhibits to the Sight from itself in the Fire, do sufficiently demonstrate. Its Transparent Redness is assigned to the Carbuncle, Ruby and Coral; its Whiteness, to the Diamond and Crystal; its Blue Colour, to the Sapphire; Green, to the Emerald; Yellow, to the Jacinth; its Black, to the Granate, which Stone contains in itself a certain Blackness occultly absconded. But as to Metals, the Black is assigned to Saturn, the Red to Iron, the Yellow to Gold, the Green to Copper, the Blue to Silver, the White to Mercury, and its mixture of various Colours is attributed to Jupiter. [ANTIMONY, CONTAINS ALL COLOURS] But as all the colours of all Metals and Precious Stones are clearly found in *Antimony*; so also all the powers and Virtues of Medicine are no less showed in it, than the Colours aforesaid: but to educe from it all these Colours is not the Labour of one man. For our Life is circumscribed with Limits more straight, than will permit one man by his Labour throughly to learn whatsoever Nature keeps concealed and absconded in her bosom, in one certain way of Preparation, from *Antimony* by distillations is drawn forth an Humour acid and sharp, like true perfect Vinegar. Another way is prepared a shining Red Colour, sweet and savoury, as purified Honey or Sugar. Another way, a Wormwood like Bitterness proceeds therefrom; otherwise, a certain Acrimony, like some Salt-Oil: thus always one Nature follows another. Against, but Sublimation it is driven to the Olympic Mountains, like a flying Eagle, red, yellow and white. Also forced down by Descent, it yields diverse Colours and Preparations: also by Reverberation, of it is made a Metal, like common Lead. Likewise a transparent Glass, red, yellow, white, black, and endewed with other Colours: all which notwithstanding, are not safe to be used in Medicine, unless they be first proved by another *Examen*. Also it is reslved into rare and wonderful Oils, which are various and manifold, some of which are made perfect with Addition, others without mixtion of any other things; some likewise are taken inwardly, others only outwardly applied to common Ulcers, and Wounds. It supplies us with so many several Extractions, varied with so many Colours, as it would tire a *Delphian Apollo* to describe them all; but indeed, all the Mutations of its Nature, which are discovered through the Gate of Fire, it by its own Oracles will best unfold. [MERCURY, MADE OF ANTIMONY] Of it is made living Mercury, and Sulphur which burns like common Sulphur, so that of that Gunpowder might be made. Of it is made a true and natural *Salt*; and many other things are prepared of the same.

Therefore we begin to speak of the Preparations thereof, as of its *Essence*, *Magistery*, *Arcanum*, *Elixir*, and particular *Tincture*, in which you must imploy all diligence and Care; especially when I shall in my Writings declare to you the Stone of Fire, and its Preparation, together with other various Secrets and Arcanums, which indeed are scarcely at all known to the World; and which have been little regarded, since the *Egyptians*, *Arabians* and

Chaldeans died, who professed these Arts: of which notwithstanding the use is very great, for searching out the very Fountain of true Medicine, and all other Works pertinent thereunto.

Now diligently mind, and with profound Meditation consider all the following Preparations, one succeeding another, as I shall reveal them. For there is no One inserted, which hath not its singular Utility, but every of them is useful, according as ordained as its State. A fixed Medicine of *Antimony*, expels fixed Diseases and eradicates them; but *Antimony* is not fixed, as when it is crude and not prepared, opens and purgeth the Stomach only, but toucheth not the Root of the Disease. Therefore I will set about the Preparation of all, that appertains to *Antimony*, and discover all the Keys of its Preparation, which now (as by a New Nativity) are brought to Light, and revealed by Fire, in the same state to which they were ordained by *GOD* their *Creator*. This unlocking and preparing of Mineral *Antimony* is performed by diverse Methods and Ways, by the disposure and governance of the Fire, with manifold labour of the Hands, whence proceeds the Operation, Virtue, Power and Colour of the Medicine itself. And since *Antimony* to the Aspect presents a crude black Colour, mixed with a little whiteness, I will first speak of its destructive alteration, which consists in *Calcination* and *Incineration*, and that is thus made.

[CALCINATION OF ANTIMONY]

Take Hungarian or other *Antimony*, the best you can get, grind it, if possible, to an Impalpable Powder; this Powder spread Thin all over the bottom of a Calcining Pan, round or square, which hath a Rim round about, the height of two Fingers thickness; set this Pan into a Calcining Furnace, and administer to it at first a very moderate Fire of Coals, which afterward increase gradually: when you see a Fume beginning to arise from the *Antimony*, stir it continually with an Iron *Spatula*, without ceasing, as long as it will give forth from itself any Fume. If in *Calcining*, the *Antimony* melt, or concrete into Clots, then remove it from the Fire, and when cold again reduce it to a subtle Powder, and as before calcine it, continually stirring as we said, until no more Fume will ascend. If need be repeat this Operation so often and so long, as until that *Antimony* put into the Fire, will neither fume, nor concrete into Clots, but in Colour resemble White and pure Ashes: Then is the calcination of *Antimony* rightly made.

[GLASS OF ANTIMONY, SIMPLE]

Put this *Antimony* thus calcined into a Goldsmiths Crucible set in a Furnace, and urge the Fire with Bellows, or put it into a Wine-Furnace, administering such Fire, as the *Antimony* may flow, like clear and pure Water. Then, that you may certainly and infallibly prove, whether the Glass made thereof be sufficiently cocted, and hath acquired a transparent Colour, put a long rod of Iron cold into the Crucible, and part of the glass will stick to the Iron, which with a hammer strike off, and hold up against the Light, to see whether it be clear, clean and transparent; if so, it is well, and perfectly mature.

Here let my Reader, unlearned and but a Beginner in Art, know (for I write not to men skilled in this Art, who have often experienced the powers of the fire, but to Candidates, *Tyro's**, and the studious Disciples of the *Spagyrick* Science; because to make Glass of *Antimony* is a thing common, and well known to many) know, I say, that every Glass, whether made of Metals, Minerals, or any other Matter, must be thoroughly cocted in Fire to due Maturity, that it may have a clear and transparent Colour, and be apt for further Preparation to Medicinal use: which translucid and pure Maturity *Vulcan* only effects in his secret and hidden Nature. Therefore, let every man know, consider and retain this.

**Rightly doth Basilius say, he writes to the Tyro's of this Art, because he begins with the Glass of Antimony, that is, from the very Rudiments of Chymistry, and so accurately teacheth to make that, as no man how ignorant soever can be deceived therein: yet the Ancients have not seldom experienced, how often they have erred in the Praxis, for such I have written these Commentaries. For me, let every One please himself in his own Writings: surely I think I have offered somewhat, which Posterity will always thankfully accept. For although I did for several years most diligently read Basilius and other Masters of the Art of Arts, and in Labouring following them, as exactly as possibly I could, yet I committed so many Errors (the remembrance of which fills me with Horror) lost so much Money, and was so often constrained to amend those Errors with labour, as I have compassion of all Those, who would enter into this way, incited thereunto by their earnest desire to help their Neighbours: for I have no respect to Others, who aim at nothing but Riches, and would make so noble an Art subservient to Avarice, the worst of all Vices; let them sustain the damage they deserve to suffer. But do you, who are endued with a more noble Spirit, First seek the Kingdom of GOD, which is either constituted or propagated by Charity to your Neighbour, and all other Things, which other men so impiously seek, shall spontaneously (which is the bounty of GOD) be added to you. I need to use no great Arguments to persuade any man to read those Commentaries; for every One's own Business will sufficiently admonish him, when he shall see me often with one word, and a most simple Animadversion to save him so great Charges, which he hath too frequently bestowed in labouring without success. I do here candidly profess to thee, studious Reader, had the Manual Operations been as sincerely showed to me, as I here open them, I should have saved a great Sum of Money; for I very often erred, when I would over eagerly prosecute certain Processes of others, and by that vain endeavour, lost some Thousands of Florens. Yet I seldom twice repeated any of those*

Operations, which our Author (most sincerely and openly, of all that I know) hath in this Book inserted. I shall not here institute a Tyrocinium of Chymistry, as other Authors, well known to young Beginners, have already done; but I am willing, by Admonition to help those, who long since could loose this Subject from its Bonds, and with most fervent desire design to arrive to the Goal exposed to their Eyes and Mind, least either slippery Blood in the Way, or Entellus now lying prostrate, should hinder them from gaining the proposed Reward, which is Riches and Health.

When in the Method we have taught, your Antimony is converted into Glass, take a Platter or Dish made of Copper, which is smooth and broad, heat it hot at the Fire, otherwise your Matter will flie out; then pour in the fluid Matter as thin as you can, and you will have pure, yellow, transparent Glass of Antimony. This is the best way of preparing Glass of Antimony *per se*, without addition; and this Glass, above all others, is endewed with the greatest Virtue and Power, which it manifests after its further Preparation. This is by me called *Pure Glass of Antimony*.*

**This is now the Common, and well known way of making Glass of Antimony, which is profitable in many Operations: but to administer it so to the Sick without Distinction, is a Work full of danger and peril. It indeed succeeds happily, but this casual or accidental health of some, is not of so great moment, as therefore to expose the Life of one man to Peril. For I have seen a Sick man, who after he had taken but half an ounce of the Infusion, vomited and purged above measure, and soon after died. [DOCTORS REPREHENDED] hence are those Tears, hence those Clamours arise against Chymists, as if the impious rashness of some false Chymists were to be imputed to the Art, which PseudoChymists care not how many Houses they fill with Funerals, provided one or two that are healed will blaze their Fame, and they can hear themselves called Doctors, and rob the simple of their money. The reason of this great danger is, because all the Emetick force of Antimony contained in the fixed Salt thereof, in which resides all its Venosity, which weak Natures cannot overcome, and therefore receive not so much good from the Salutiferous virtue thereof, as hurt from its Venom. But this thing should not deter sound men from the use of Antimony, since they see it, even then when mixed with Venom, often to produce salutary Effects. They should rather thus reason; if that salutiferous Virtue be freed from the Noxious faculty, what Good would it not do, or what Diseases would it not heal? Therefore, behold I here offer to you such Glass of Antimony, as I myself use often, and may be used by every man, without any danger of a mortal Catastrophe.*

Take pure Glass of Antimony, made as Basilus here teacheth, melt it in a Crucible, and keep it in flux so long, as until a third part be consumed. Then let it cool, and grind the same to an Impalpable Powder, upon which pour Spirit of Wine highly rectified, until it stand three fingers above the Powder; close the Vessel firmly, and circulate the Matter for three Months; then by Distillation abstract the Spirit of Wine, or if it be tinged with Redness, (which always will be, if you have rightly operated) only pour it off, and keep it apart; for it is an excellent Medicine. The remaining Body put into a Crucible, permit it to flow, and then cast it into what Forms you will. For it can assume whatsoever Shapes you will have it, which may be set in Rings, and worn on the Hand. But its Medicinal use is thus. Put this Glass for one Night in two ounces of Cold Wine, and in the Morning let the Sick drink that Wine, and you will find very good success, for it purgeth kindly, and if Nature incline to bring the Matter upward, it performs that action moderately, causing gentle Vomits. Only Note this: the prescribed Dose must be diminished, according to the Strength, Age and Constitution of the Sick. Here, Reader, candidly accept of this my first Admonition offer to thy self, and expect to find more, if you willingly and intently peruse the after following.

[GLASS OF ANTIMONY WITH BORAX]

For there are other Glasses prepared of Antimony, by Addition of Borax and other things, in this manner.

Take of Crude Antimony one part, of Venetian Borax two parts; put these together into a Crucible, which setting the Vessel in a Wind-Furnace, or urging the Fire with Bellows, cause to flow, that they may be well and perfectly mixed together, afterward pour out the Mixture into a Pan, or Dish of Copper made hot, as thin as is possible, as before was said in the Superior Preparation, and you will find your Antimony fair and transparently clear, *like a Pyropus or Ruby, provided you observe the due and accurate Method, Operating as you ought, in the Governing Fire.

**The Caution, to which our Author here ascribes the Success, is that you use a most strong Fire, such as is required for melting Gold: for without this you cannot acquire the Redness of a Pyropus.*

The Redness may be abstracted from this Red Glass, with Spirit of Wine*, and by long continued Circulation in Fire, be perfected, and rendered a most excellent, profitable and efficacious Medicine.

**Not with common Spirit of Wine, but with Philosophic Spirit, which for extracting this Tincture, I thus prepare. Take of Sal-Armoniac thrice sublimed four ounces Spirit of Wine, distilled upon Salt of Tartar so, as it may be perfectly dephlegmated: put them together in a Phial, which place in heat of Digestion the Spirit may fully imbibe Sulphur or Fire of the Sal- Armoniac; then distil the mixture by Alembic thrice, and you will have a true Menstruum, wherewith to Extract that Redness from the Glass of Antimony. Also the Tincture of this Glass is extracted with its proper Vinegar, and by a further Operation is perfected, and becomes a most excellent Medicament.*

But a transparent white Glass of Antimony, after commixtion thereof, is prepared in this manner.

[ANOTHER GLASS OF ANTIMONY WITH BORAX] Take *Antimony* beat or ground small one part, *Venetian Borax* very pure four parts: put these, well mixed together, into a Crucible, and cause the Mixture to flow well. At first indeed it will be yellow, but if it stand longer in Fire, the yellowness vanisheth, the Matter receives a white Colour, and thenceforth becomes a fair and white Glass. Whether this colour be brought to perfect Maturity, you may prove with a cold Iron, as above is said. Many other ways, of *Antimony* may be formed Glasses* consisting almost of infinite Forms.

**Let him who desires to prepare more Glasses of Antimony, consult Beguinus, Hartman, Crollius, and other Authors; we here acquiesce in these proposed by Basilius.*

But since my purpose here was not to describe other Glasses, then I myself had experienced, and which manifest happy success in Healing, I judged it unnecessary to waste Paper in describing them, or by a tedious discourse to weary the Reader; especially since, unto you is already in part proposed the principal Colour (*viz.* the Red) which is found in Glass made of *Antimony*. The black Colour, which *Antimony* had before Preparation, is now in a Spiritual manner flown up the Chimney; because in such a Spiritual manner, very much of the Venomous Substance had left it before, through the Expulsive force of the Fire, as by Calcination. Yet because in this Preparation all the whole Venom is not taken away from the Glass of *Antimony*, but it still retains very much thereof; I am willing (now I have begun) further to reveal to you, which way the Venom may wholly be removed from this Glass, and another Separation of the Pure from the Impure, of the Venom from the Medicine, be instituted; by which the Tongue of the *Orator* will be loosed, and occasion given to him of largely expressing my Praises, and publishing the same, as with a great Sound, through all Parts of this Inferiour Orb: which will be a necessary Consequence of the Gratitude of my Disciples, when they shall see with their Eyes, touch with their Hands, and with their Understanding comprehend, that I do their great profit, have declared to them the very Truth, without Deceit, and made them the Heirs of a memorable Testament.

Therefore the first Separation of the Sulphur from its Body, and the Extraction of the Tincture from its Salt, is performed in this manner. Take pure Glass of *Antimony*, as I taught you to make it, without the adjunction of any other Thing, Grind it to subtle Powder* impalpable as Flower;

**What I here shall advise is short, but very profitable, without which what the Author appoints cannot be done, nor by beating or by grinding in a Mortar can you ever bring the Body to a requisite fineness, much less upon a Porphyry Stone can you grind the same. Therefore first beat it in a Mortar, afterward mix it with distilled Vinegar, that it may have the Consistency of a soft Paplike matter, and so grind it upon a Porphyry Stone, as Painters grind their Colours, and undoubtedly you will obtain your desire.*

Which powder put into a Glass with a Plain flat bottom, called a Cucurbit, and there pour upon it strong Vinegar well rectified: then set the Vessel in a Digestive fire, or if it be Summer, expose it to the Sun, stirring it twice or thrice* a Day, and so long digest it in that temperate heat, as until the vinegar contract a Yellow Colour inclining to Redness, like the colour of most clean and well purified Gold.

**Thou art happy, if thou canst be wise by my Dammage, O Love of Art. I exactly followed this short Admonition, stirring the Cucurbit twice or thrice a Day, but the Matter was always coagulated like a Stone, and stuck so firmly to the bottom, as it could by no force be removed thence; but afterward, being more wary, from the first I began to stir the Matter with a Wooden Spatula five or six times a Day, or oftner; you may imitate the same, if you be wise, not only here, but also in the Superior Preparation of Antimony, and in every Extraction of Tincture from Antimony.* Then pour off this clear and pure Extraction, and pour on fresh Vinegar, and repeat the Operation, as long as the Vinegar is tinged, and until no more Tincture can be extracted. Filter all these Extractions mix'd together, and put them into a Glass Body, with its Head annexed, and by *B.M.* distil off the Vinegar; until in the Bottom remain a Yellow Powder, inclining to Redness. Upon this Powder pour distill Rain-water often times, and as often distill it off again, still pouring on fresh distilled Rain-water. Repeat this labour so long, as until the Powder remain Sweet and *grateful.

**Our most sincere Author here deceives you not, but conceals a certain manual Operation, which if you attend to me clearly discovering the same, the Work itself will never fail to Answer your desire. If you have much Tincture, you must have a great Cucurbit; if Little, a less will serve. For if you take a greater Vessel, than your Tincture requires, the vinegar must necessarily have a great fire to cause it to ascend, by reason of the height it must unavoidably rise, or it cannot be distilled; and in sustaining so forcible a Fire, there is great danger of Corrupting the Tincture itself. Here also is required another Caution; viz. this, after two thirds are distilled off, you must change your Vessel and put the remaining Matter into a less Glass body, and thence distill off the Vinegar, until the Remanency acquire the just thickness of a Poultis. Also take heed, as Basilius seems to intimate, that you distil not off the Vinegar unto dryness, lest the Tincture by Adustion be wholly corrupted.*

Notwithstanding all This my own Precaution now given, I could not choose, but labour a whole year to little purpose, often repeating this Tincture with a vain endeavour, whence I was almost as often weary of Chymistry

through desperation; for my Tincture was of no efficacy in Medicine; because a meer Caput-Mortuum only, unsavoury and of no value. Hence consider how little any Process profits, whether set down in Writing, or received from a Friend by word of mouth, unless you set to your hand, and practically learn every particular of the Work fit to be observed in operating. Also see, how liberally I deal with you, in revealing that, the ignorance of which hath put me into great trouble and charge. The manual Operation, which is requisite for edulcorating this Pap-like Matter remaining in the bottom, is this. Upon this Matter pour distilled Water, and gently abstract the same by Balneo. When you have repeated this a third time, you will find the Water to come off sweet; which time must be observed and with very great diligence. For if you be deceived in that, your work is at an end, all your labour lost, and you shall get nothing, but a Caput Mortuum. For as soon as twenty, or at most thirty drops of sweet water come forth, an Acidity appears again and distils forth, which the unwary judging to be an Acidity of the Vinegar formerly added, proceed in distilling, expecting the Water to come forth sweet; but this being the Acidity of Antimony, which (the Vinegar being extracted) immediately follows the Sweet Water, that persisting to distil destroys the whole Virtue of the Antimony, and leaves nothing remaining but an unsavoury Caput-Mortuum. Therefoer be thou more wary, and as soon as this Sweet Water comes forth, cease to distil, and take out the Pap-like Matter residing in the Bottom, and putting that into another Glass, permit it to dry at the Solar-Heat; or else evaporate all its Moisture with most gentle Fire, that it may remain a dry Powder: and when you have avoided this danger, then go on.

[TINCTURE OF ANTIMONY, FROM ITS GLASS]

This Powder grind upon a Marble or Glass, first made hot; then put it in a Glass Body, and pour upon it of the best rectified Spirit of Wine, so much as will stand above it three Fingers thickness: then set it in a Digestive heat, as above, for extracting the Tincture of Antimony, which will be high coloured and pleasantly red to amazement; and it will deposit a certain Earth, or feculency in the bottom.

This Extraction is sweet, grateful, and so very efficacious in Medicine, as no man, that hath not experienced the same, will give credit thereunto. The Feces in the bottom retain the Venenosity, but the Extraction Medicine only, which Experience hath taught to be profitable Remedy for men and Beasts. For if three or four Granes of this Medicine be taken, it expels the Leprosie and Gallick Lues, purifies the Blood, drives away Melancholy, and resists all Venom: and whosoever labours with Shortness of Breath, Difficulty of Breathing, or Pricking of the Sides, he may be cured by the Use of this Medicine: *which effects many wonderful Things, if rightly administered, and in due time.

**These Medicaments, which perform their Operations, not by sensible force, as Catharticks, Emeticks, Diaphoreticks, and the like are wont to operate, but insensibly uniting their own more pure Universal Spirit unto our Spirits, amend Nature and restore it to health, are not to be used, unless where the Body hath first been cleansed from the impurities of pecant Humours, otherwise you cast these Peals into a Dunghill, where (overwhelmed with Filths) they cannot shine and manifest their Virtues. For although, by reason of their manifold Virtues, they may be called Universals, yet they are to be numbered with Topicks, before which Generals are to be used, according to the opinion of Galen, and all Physicians.*

The Tincture here spoken of, performs all those Cures, which Basilius mentions, if the use of it be continued for some time. For where that Saying is of force, Medicines used help, continued heal, it must certainly be applied to those especially, which insensibly operate.

That Yellow Powder, of which mention is made above before it is extracted with Spirit of Wine, may be ground upon a hot Stone, and then put into Eggs* boiled hard, in place of the Yolk, which is to be taken out: set these Eggs in a moist Place, or Cellar, and the Powder will resolve into a yellow Liquor.

**Indeed soft Eggs, according to the Saying; are always warily and softly to be handled; but in these hard Eggs also, I have somewhat to advise you of; for if after you have taken out the Yolk, you be not mindful to break that Pellicle, which divides it from the wHite, you will wonder to see how your Balsom will intrude itself within the White, and deprive you of a great part thereof.*

This admirable Liquor heals all green Wounds, if soon after a Wound is made, it be put therein with a soft Feather, and the Wound well covered with a Styptick, or other Preservative Playster. All fresh Wounds inflicted either by Prick or Cut, are healed by this Liquor, without Putrefaction, Inflammation, or any superfluity of Filth, so perfectly; as unto him, who created Heaven and Earth, and in them insited such a Medicine, due Thanks and Praise deservedly ought to be given. In all old, malignant, and corrosive Wounds, use this Extraction or Balsom of Antimony, and it will never fail Thee in thy necessity. And thou thy self, after me wilt write an Encomium of its Praises and publish the Virtues thereof, by which extrenally applied miserable Mortals may be made happy: for the Wolf and *Cancer yeild to it; Rottenness in the Bones, malignant Ulcers corroded and perforate with Worms fly from it, and it restores to pristine Health, and provides Entertainment for that with itself, when its fixedness shall be duly used inwardly, and other Convenient Means duly applied outwardly.

**If Chirurgions would here give credit to our Author, with how great Care would they prepare this Balsom for themselves, and with how great Fruit, and how frequently might they use the same? For I interposing my Judgement must say, that Basilius here comes far short, in expressing its due Praises; for it performs more, than he declares of it. [HISTORY OF THE VIRTUES OF BALSOM OF ANTIMONY] One short History, drawn from the Centuries of my Medicinal Observations, will confirm the truth of what I have said. A certain Woman, about forty Years of Age, for seven years together suffered great dolours in her left Breast, which were accompanied with a Tumor and Hardness. Those Chirurgions and Physicians, who she advised with, did all with one Consent judge her Disease to be a Cancer; and she was also judged to labour with a Cancer, by the Censure of that famous Practitioner, who at Orscotus (a Village about the Dukes-Wood) very laudably and happily practised Chirurgery, and drew to himself a vast number of People: for after he had, for three Month together, in vain endeavoured to heal this Disease, he severely pronounced her Breast was to be cut off, or the Disease could not be extirpated. The woman, resolving rather to suffer all Dolours of the Disease, then to sustain so cruel and inhumane a Remedie, came to me. I, beholding her Breast, found it wholly inflamed, and twice as big as the other, and an abundance of thin Humours flowing to the Wound. I purposed to try all I could do, rather than suffer this miserable Woman to perish; and thinking of this Balsom resolved to try, whether That, which in other Diseases had fulfilled the promises of its Author, would fail me here. Therefore, to the Diseased Woman waiting my Answer, I said; in eight days time I would resolve her, whether, there was an hopes of Cure or not, without Cutting off; and thereupon gave her this Remedy to anoint her Breast therewith: and which is very strange, in the Space of two Days the Matter came to Ripeness, and a just Consistency. Therefore, I then filled with good hope, adjoined inward and outward Remedies, which seemed convenient for the purpose, and in two Months Space the Womans Breast was perfectly healed. Upon this I, not without a perculiar Joy, blessed and praised the Lord, that had conferred so great virtue on this Balsom.*

[OIL OF ANTIMONY, FROM ITS GLASS BY DISTILLATION]

Also Glass of *Antimony* is by me two ways reduced to an Oil, in distillation (as they call it) by Alembeck. Take Glass of *Antimony*; as it is made of the *Minera* of *Antimony*, subtilly pulverized, and extract its Tincture with distilled Vinegar; afterward abstract the Vinegar thence and edulcorate the remaining Powder. Then pour on Spirit of Wine, with which extract the Tincture, and circulate it in a Pelican well closed, for an entire Month. Afterward, distil it per se, without any Addition, with a certain singular **Dexterity*; and you will thence receive a wonderful grateful and sweet Medicine, in the form of a Red Oil, of which after may be formed the Stone of Fire.

**This is the Work, this is the Labour, very few true Sons of Art (whom Apollo loves) could extract this Tincture by Alembeck. There is need (as Basilius saith) of a certain peculiar manual Operation. This Tincture I sought many years, and at length (GOD favouring me) found the same. [OIL OF ANTIMONY, ITS PREPARATION ENIGMATICALLY DESCRIBED] Wilt thou have me discover it to Thee by an Enigma? I see thou desirest I should, therefore take this Mystery, thus. Alciatus, painting a Dolphin wreathed about an Anchor, write these words: Make not too much hast. Esteem of this Admonition, not only in all your Life, but also in this very matter, as very profitable to you: for the hasty Bitch (as the Saying is) brings forth blind Whelps. Therefore I again and again admonish you, to cause Wings to be prepared for your Matter, by Juno, Bacchus and Vulcan; but as you love your Life, permit it not suddenly to flie, rather deliver it to Mercury to be instructed by him gradually to accustom itself to flying: yea, bind it with a Cord, lest (as a Bird got out of a Cage, and past your Reach) it through Ignorance approach too near the Sun, and with Icarus, having its Feathers burnt fall headlong into the Sea. But after you have detained it for its due time, loose its bonds, that it may fly, and come to those fortunate Islands, unto which all Sons of Arts direct their Sight, and where unto all Adeptists aim to arrive, as unto their desired and long sought Harbour. Here, O Lover of Art, you should not be offended, or angry with me, as if I deluded you (desirous of the Knowledge of this Secret) by a Tantalick Apple shown. What should I do? I in this Case give you advice. Would you have me cast Pearls before Swine? and unto all men expose the Mystery, which the Ancient kept so holily, and might not reveal it, unless to the worthy Sons of Art only? Thou thy self wouldest bewail nothing more, and wouldest even execrate me, for doing so. They, who understand me, understand Art: and unto such as are Chymists, have I opened the way, which if they diligently travel in, they may arrive, where they desire to be. No man did ever so clearly reveal this to me; but by reading the Writings of Authors, strenuously labouring, and trusting in GOD without fainting or desperation (which is a most efficacious kind of Prayer) I at length attained to what I have. Do thou study, and be diligent, that thou mayest comprehend: for he, who, knows how to render Tinctures volatile, is already admitted into the very Penetrable, and Conclave of the Chymical Art; because of all other Mysteries the Method is the same. Peruse the Fables, search into the Riddles, and consider the Parables of all wise men; they all tend hither, and all say the same. Compare the Parables of others, with this my Enigma, and this with them, that you may understand how much Light I have added in all, and how Easy I have made the way to those serene Temples of Wisdom.*

[QUINTESSANCE OF ANTIMONY, WHAT]

This Oil is the *Quintessence*, and the highest, that can be written of *Antimony*; as you may find in my former Writings, wherein I have made a short Declaration of *Antimony*, and in which I showed also, that there are four *Instruments* required for its *Preparation*, and the fifth is that, in which *Vulcan* hath fixed his Residence. Understand thus: four *Preparations* must be made before it can be perfected; and the fifth is the Utility, and effect of the Work in the Body of man. The first Labour is *Calcination* and *Liquefaction* into Glass. The second is *Digestion*, by which *Extraction* is performed. The third is *Coagulation*. The fourth is *Distillation* into Oil, and after that Separation follows *Fixation*, by the ultimate *Coagulation*, through which the Matter is deduced to a perlucid *Fiery Stone*; which that it may operate upon Metals, must be fermented, for acquiring its penetrative Property; but not so much, as that Ancient Stone of the Philosophers, because it is not Universal; but only tingeth particularly. Touching which, about the End of this Book, more shall be spoken when we treat of the Stone of Fire.

This distilled Oil* of which we have now spoken, effects all things, that are necessary to be known by a *Physician*, and which he hath need of, in his *Cures*.

**Had I not known Basilius, I should have thought him, in this place to have dealt like a Deceiver, or Vagabond Medicaster with you: but the Matter itself unto me, so often speaks for him, as I religiously scruple even in the least to doubt his Promises. For whatsoever I have experienced (but there are very few Processes contained in this Book, which I have not tried: for He, from the very first, was my Teacher, Friend and Patron) I have found so very efficacious beyond the Authors Promises, that it seems to me, he hath been sparing in declaring the virtues of his Medicaments, least in praising them, he should be thought too much to commend himself. Yet I shall not here in his stead, undertake comment much on their laudable Virtues. Let him who believes not, make trial, that he may know. Whosoever shall by his own incredulity be deterred from experiencing the Truth hereof, he will suffer punishment enough for his Offence, by the Want of the fruit of the same. For this Oil, if rightly used in its time, is a Medicine truly Universal. Consider, I pray, what I say, if rightly used in its time, that is, the Body being firsted purged from gross and crude Humours, and general Medicines used (as you may remember I did before admonish) this Oil is an Universal Medicine, for healing all Diseases Curable. For Chymists are not so mad, or conceited, by reason of the Goodness and Virtue of their Medicaments, as not to judge some Diseases to be Unsanable. Who can restore any of the Principal Members absumed by putridness? yet I would not have all Diseases judged unsanable, by these our Chymical Remedies, which are everywhere vulgarly condemned as such. As for Example, how often have I restored the Crystalline Humour taken away; which who judgeth not impossible to be reduced? But, of these and the like, another place will be more fit to write. Only of this Medicament I say, that it heals Feavers of every kind; yea, even the Quartan itself (that ancient Reproach of Physicians) and in Chronical Distempers manifests wonderful Effects. Here among many of my Observations I will give you one only Experiment. [HISTORY OF DROPSY CURED] In the Year 1665. A young Maid, aged twenty one Years, swollen to an enormous grossness with the Dropsie, came to me for help. I took this only for her Medicine. For I gave her no other thing, then this very Medicament twice a Day, to which I dayly added a Clister: and in twenty days she had sweat so much, as her Body was lessened half. Within that space of twenty Days, as I said, she also voided of Urine (provoked by the same Medicament) not a little, but her Sweat was wonderful.*

Note: me Friend, and Lover of Art, that this Oil, whether you prepare it yourself, or receive it from another prepared by him, doth not imitate other Diaphoreticks in operating, which being used, will in their first Dose provoke Sweats. For if this be given to a Patient whose Body is obstructed with Humours, the first Dose acts nothing, but gently opens the Passages, that Sweats may be procured; the next day it causeth a gentle and kindly breathing of Sweats only; the third Day it Sweats moderately; but the fourth Day, and thence forward, it causeth such an abundance of Sweat, as the Waters proceeding thence run through the Bed upon the Floor. here is need of a true Physician; Hercules Club will profit little, if not in the Hand of Hercules himself.

[THE QUINTESSENCE OF ANTIMONY, ITS WONDERFUL VIRTUES]

The Dose of it before Coagulation is eight Grains taken in Wine. It makes a man very young again, delivers him from all Melancholy, and whatsoever in the Body of man grows and increaseth, as the Hairs and Nails, fall off, and the whole man is renewed as a *Phoenix* (if such a feigned Bird, which is only here for Example sake named by me, can anywhere be found upon Earth) is renewed by Fire. And this Medicine can no more be burned by the Fire, than the Feathers of that unknown *Salamander*: for it consumes all Symptoms in the Body, like consuming Fire, to which it is deservedly likened; it drives away every Evil, and expels all That, which *Aurum-Potabile* is capable to expel. The **Astrum* of *Sol* only exceeds every Medicine of the World when rightly prepared to perfect Fixation: for the *Astrum* of *Sol*, and the *Astrum* of *Mercury* arise almost from the very same Blood of their Mother, and from one original of vivifick Sanity.

**Let no man here prodigally or rashly wast his own Gold, now he hears of the Astrum of Sol, nor expose himself to so great Hazard, as to enter a perillous Combat with vulgar Mercury. In the Chymical World another Sol shines, and another Mercury attends on Jupiter. Yet the Chymical Sol, or Mercury here, is not Gold, but more excellent*

than all Gold; yea, more potent than every Mercury, although fabulous, and feigned to be capable to restore the Dead to Life: it is the Gold, and Argent-Vive of Philosophers, which Basilus here hints at. But we have treated, and must treat of Antimony only.

Now, no man hath cause to fear, that this Oil of *Antimony* Extracted first with distilled Vinegar, and afterward with most pure and subtle Spirit of Wine, and then further exalted (as highly as possible) by *Vulcan*, will in any wise purge, or excite frequent Stools, or make any Alterations: for it effects nothing of all this, but by Sweat, Urine, and Spittle, expels the very Root of the Disease to amazement, and restores whatsoever is corrupted by any Symptom. But Common Glass of *Antimony*, being ground to Powder, put into a little Wine (*viz.* six Grains or more of the Glass, according to the strength of Nature) and that mixture set in heat for one Night, and in the Morning the Wine* poured off clear from the remaining Powder, and so drunk by the Patient, purgeth downward exciting several Stools, and oftentimes also provokes Vomiting, by reason of the Mercurial immature Property, which is yet inherent in the Glass, as every intelligent Physician will easily judge, and indeed he ought to further to Examine how this Glass, when he would purge with it, ought to be provoked, and administered in a due Dose.

**This is a Common Vomitory, or Emetick Wine, well known, which all wandering Empiricks now use in all Places, sometimes with a prosperous, sometimes with Contrary, always ambiguous Success; which proceeds partly from the Physician and partly from the Medicine. [HISTORY OF GEORGE CASTRIOT] This is a Thing to be bewayled; for as histories relate, that George Castriot King of the Epirots, when the Emperour of the Turks had often asked him, how his Sword, which he had sent, when Peace was made, according to his agreement with the Turk, could perpetrate such wonders as he spake of, saying he saw not anything singular in it, made this Answer: I did indeed send the Sword of Scanderbeg, but not Scanderbeg's Arm, with which that Sword was managed, so as to perform so great Miracles: so, very many Chymical Medicines, are either dead, or (which is more to be deplored) oftentimes the Causes of Death, when not managed by the hand of a skilful Doctor. Which unhappy Success of this Medicine is caused from the Mercurial Properties, with which it is too much impregnated (as Basilus well notes in this Place) and which I am wont to correct in this manner.*

Take Glass of Antimony, more pure, four ounces. Venetian Borax one-half ounce. Melt them together. This being artificially done, you will have a Green Glass transparent as Emerald. Grind this to a subtle Powder, upon which pour French wine, and permit the mixture to stand for several days in Moderate Heat.

Of this Wine give to the Sick, from one drachma to two ounces, according to the Age, Habit of Body, Strength, and other Things either Natural, or not Natural, which the Prudence of the Physician (when he sits as Judge, whether the Life of any One is likely to be continued or not) ought always well to consider. That is Emetick Wine may be given to the Sick without peril, Experience the most certain Mistress of Physicians hath taught me, and yet more than this: for when the Wine poured in the Powder shall be all exhausted, if you pour on more French Wine, that will also be imbibed with the same Virtues. For here Antimony discovers in itself to be somewhat, that is of all wonderful Things the most admirable: because it contains in itself inexhaustable Treasures, and although you take from it, yet you diminish not the Virtues thereof. A like stupendous Miracle also is in extracting the Vinegar of the same, and in other Works fit to be kept under the seal of Harpocrates.

Many men are required for the Searching out the Powers and Virtues of this Subject. For I alone, by reason of the shortness of my Time, could not dive into and search out all things, do you thy self set about the Work, and after me, yea with me, thou wilt praise me and I thee: if you find out anymore; I praise you by these my Writings, and shall commend you out of the Sepulcher to which I am destined, although in Body thou art to me unknown, nor ever had I any discourse with thee, because perhaps not yet born.

[OIL OF ANTIMONY MADE ANOTHER WAY]

Common Glass of *Antimony* is also by Addition distilled into a laudable and salutary oil, which may be used without peril, with very great profit in the *Epilepsie*; as here following I shall teach.

Grind the Glass of *Antimony* to as subtle a Powder as possibly you can, then put it into a Glass-Vessel with a flat Bottom, and pour upon the Powder the *Juice of unripe Grapes*, then having well luted the Vessel digest it for certain Days. This being done abstract all the Juice; afterward, grind it well moistened with Spirit of Vinegar, and a double Weight of clarified Sugar. Then, having put it into a Retort, in the Name of the Most High begin to distil, and at last administer a vehement Fire, and you will acquire a most Red Oil; which must be clarified unto Transparency with *Spirit of Wine.

**When the Author saith, it must be clarified with Spirit of Wine unto Transparency; the Admonition is short indeed, but of great weight. For he wills, that this Oil should be driven over by Alembeck, the signification and manual Operation of which, I have already above taught.*

The Use of this, given in a small Quantity, is found to be most profitable. With this Oil Spirit of Salt may be joined, and the Mixture poured upon a subtle prepared Calx of Gold, (which how it should be made I have already taught in

other of my writings) which hath before, together with its Water, passed by Alembeck. If this be done, this *Menstruum* take to itself the Tincture* of Gold only, and leaves the Body untouched.

**Do you think, O Lover of Chymistry, you understand what you read? You cannot understand, unless either divinely Philip, or humanely Oedipus, appear to you, and clearly teach you the way of preparing this Tincture. The difficulty of the Enigma consists in this; viz. that all Menstruums, with which Tinctures are extracted, must necessarily be void of Colour; otherwise how can you know: whether you obtain the Tincture you would extract, or only retract the same you poured on? I will not detain you with a tedious Discourse full of ambiguities, but lead you as it were by the hand, showing you how I instituted this Process in the Year 1665. If you thence, by your attention, and comparing the precedent with the present, and these with those that follow, reap any profit, open the Bosom of your Heart, that no part of this may fall to Earth.*

I took that Red Oil, thus far prepared as is already showed, and rectified it by Retort; and then acquired a White Oil, of an acid but grateful Taste. Upon this I poured half so much Spirit of Salt: the Mixture I digested in a Phial for a full Month, that these two Spirits might be well conjoined; afterward, for the better conjunction of them, I distilled them thrice by Retort. Then I poured them upon the Calx of Gold (the Method of preparing which you will find in other Writings of Basilius) and set them together in Digestion for a Month; which being elapsed, the Menstruum was tinged with a deep Yellow Colour inclining to redness. I leisurely poured off the Tincture, and having put it into a Retort, with gentle Fire abstracted the Humidity, that a red Powder might remain in the Bottom. This Powder I edulcorated with distilled Water, and again extracted the Tincture with Spirit of Wine; then I rendered this Dragon volatile, and gave him his own Tail to be devoured for six whole Months, and obtained a Tincture most pleasant and grateful; ten or twelve Grains of which given to the Sick, provoke Sweat, comfort the Natural Powers, and (not to amuse the Intelligent words) in all Diseases both of Humane and other bodies, it is an universal Medicine.

Since it hath happened to me here to make mention of the most excellent of all Tinctures, I will once teach the Chymist what will be of use to him for the future. That is to say, it is of great concern to know, with what Menstruum every Tincture should be extracted, For it is not sufficient (according to the erroneous Opinion of many) that Menstruums be sweet and void of Corrosion; but it also behoofful, that there be in them a peculiar Amity and Conveniency with the Mercury of the Body, on which they are poured, that from the same they may extract its true and sincere Sulphur. By Example, I shall teach you somewhat more clearly. Distilled Water extracts the Tincture from Sulphur, made of the Glass of Antimony by distilled Vinegar. But if in this Operation you persuade yourself you have separated the Pure from the Impure, you will be deceived: for this Water imbibes a certain Salt, which infects the Tincture; but Spirit of Wine rectified is its proper Menstruum: because That only assumes the volatile Sulphur thereof, and hath no Commerce with the Salt.

The same happens in Tincture of Corals, which is extracted with Spirit of Wine distilled upon Orange Pills: for here you obtain not the sincere Tincture of Corals; because, by this Menstruum, the pure Sulphur is not separated from the Body of the Corals. The like Error to be committed in many other Things, I have observed by Experience, which should be esteemed the best Mistress, unless we take it for granted that chargeable and fruitless Processes are necessarily required in this Art. But that I may conclude with the Tincture, whence all this Discourse hath proceeded; I would have no man to think this to be the Aurum Potabile of Philosophers: for this would be a very great Error in Philosophy, and give occasion to Sophisters (as their manner is) to prefer their Sophisms before the Truth itself. Though this Tincture is most precious, and a Tincture of Gold, yet it hath only assumed the Colour of Gold: but the weight thereof, which is proper to Aurum Potabile, adheres not thereunto.

Touching the potable Medicine here is not place of speaking, unless I would transgress the limits, which I have at this time prescribed myself, of Commenting upon the Triumphant Chariot of Antimony, which our Basil Valentine hath made for it is so truly magnificent. Otherwise, I should declare, how sol might be prepared by Venus and Vulcan, so as in the space of two hours to resolve itself into Mercury united with Bacchus, leaving very few feces; which Mercurial Menstruum may again be separated from the resolved Gold; and so you might acquire a most grateful Liquor very ponderous, which can never afterward be reduced to its former Consistence. This very Operation I have showed to some Curious Lovers of Chymistry. But of these elsewhere another Occasion of Writing will be given.

[LABOUR, NECESSARILY REQUIRED]

When the Fermentation is made, I shall have need of a vast Quantity of Paper to declare all the *Arcanum's* of Nature, which by this Medicine are effected beyond the Opinion of all men. I urge this so much the more earnestly to the Physician, that he may consider those things which I propose Philosophically, betake himself to labour, perform this Preparation of *Antimony*, and deduce it to Use; then, he himself will dayly find more Praise, and learn from it more Operations than any of the other Physicians could have prescribed him.

When you shall have brought *Antimony* so far, and duely perfected your Work, in which you are to act prudently, and the matter is to be largely and profoundly weighed, that by Labour you may acquire Experience; then may you

boast that you have obtained the Magistry, which is known or communicated to few. This Magistry mix'd with a solution or Tincture of Corals, and exhibited with Cordial Water effects Wonders in Diseases, that are to be cured by purifying the Blood. And whatsoever Distemper is offered to you, in which the Blood is corrupted by any Accident, this Magistry heals it, exhilarates the Heart, promotes Chastity and Honesty, and renders man apt and fit for everything he takes in hand.

For all these Benefits to the *Creator* and *Conserver* of all Things, thanks is always to be given from the bottom of our Heart; because he hath with so great Compassion respected his *Creatures*, Infirm both in body and Mind, and supplied us with Means, by which the Diseases of either may be healed, and we in every necessity obtain solace, assistance and perfect Help.

Now my Intention is to proceed, and speak somewhat of the *Arcanum* of *Antimony*, but with very great Brevity. Take of *Antimony* most subtly pulverized One Part, of *Sal Armoniack**, so called, which is brought from *Armenia*, **Of Antimony and Sal-Armoniack equal parts are to be taken, which Basilus seems to intend, but I know not how he forgot to mention it.*

also pulverized; mix these, and putting them into a Retort distill them together,*

**That with one and the same labour, the Sal-Armoniack together with the Antimony, may be distilled and sublimed, such an instrument, as this I here show you, describing all its Parts, may be made.*

A. is the Furnace. B. the Retort. C. the Recipient. D. the Aperture with a Pipe of a Moderate bigness, on which may be set the Alembeck E. The other Furnace is F, which containing a Moderate Fire, sublimes what falls into the receiving Vessel up into the Alembeck E. And so the Matter which is distilled from Retort B, by the Fire of the Furnace F, is presently sublimed; Which may not only be useful in this Case, but also in every Sublimation of other Matters.

and upon that which comes forth in the Distillation pour common distilled Rain-water, but let it first be made hot, and so byedulcorating remove all the *Salt*, that no *Acrimony* may remain, and the *Antimony* will appear like pure, white shining Feathers. Dry them with subtle Heat, and having put them in a Glass circulatory or Pelican, pour on them good and perfectly rectified *Spirit of Vitriol*, and Circulate the Mixture till both be well conjoined* and united, then distill the whole, and pour on Spirit of Wine, circulate again; then let separated be made, and remove the *Feces* settling to the Bottom, but keep the *Arcanum* which remains mixt with the *Spirit of Wine* and *Vitriol*.

**This Union must be so firm, as in distilling one may not be separated from the other; otherwise you will lose your Labour and Cost. Of how great moment this Union is in Chymistry, they best know, who only by confounding two things together, think they shall effect wonders; but afterwards (their Experience failing them) they learn how great difference there is between Union and Confusion: for Things confounded receive no Virtue, that was not in them before; but by Union, I know not what Spirit is ingested, which performs such things as the Mind of man could never perceive to have their being thence.*

Hence consider in the Generations of Animals (who would believe it!) how from the Union of Elements is generated Sight, Taste, Touching, and so many Powers of Animals, which are insited in none of the Elements, and yet arise from them united. Whensoever it happens, that any Tincture seems to have united itself with its Menstruum, and afterward may be separated therefrom, that therefore is because Matrimony is not legitimately Celebrated, nor the union in a due manner perfect; which you shall more than once see to happen in the Tincture of Sol and Antimony. The Instrument, by which conjoin my Tinctures, and am wont to copulate them in an undissolvable Copulation, you shall find described hereafter in this very Book. That in Spirit of Wine is to be noted, which happens not in other Menstruums; because it is most easily united to Things, and again with a slight artifice separated from the same.

Now when you again rectify this *Arcanum*, one drop of it exhibited with Rose water, is more available than a Pot full of the Decoction of Herbs; for it causeth a good Appetite, corrects the Stomach, and concocts all malignity in it, drives away Sadness and Melancholy, makes good Blood and a good Digestion; in the Suffocation of the Matrix and Cholick Passion (both which it wonderfully appeaseth) it is instead of a Treasure of inestimable Price and deserves Commendation, not easily expressible by Words.

[ELIXIR OF ANTIMONY]

After the *Arcanum* of *Antimony* next in order follows the *Elixir** of the same, which you may prepare in this manner.

**This Process as it is easy to perform, so it may by us be easily passed over, lest we should seem to take Pen in hand, rather from an itching desire of Writing, then for illuminating Things obscure.*

Take, in the name of the Lord, good *Minera* of *Antimony*, grind it subtly, and sublime it with half so much *Sal-Armoniack*. Whatsoever shall be sublimed put into a Glass retort, and thrice distill it, seperating the *Feces* everytime. Afterward remove from it the *Sal-Armoniack* byedulcoration, and reverberate the Matter of *Antimony* in a Vessel well closed, with moderate Fire (not forcing too much) until it become like the Earth of *Cinnabar*. This being done, pour on it strong distilled Wine Vinegar, and extract its Redness; afterward abstract the Vinegar, until a Powder remain. This abstraction must be made in *Balneo*. Then, extract this Powder with Spirit of Wine, that the *Feces* may

be separated, and you will have a pure and clear Extraction. Having finished this Operation, put this Spirit of Wine together with the Extraction into a *Cucurbit*, and add thereto a little of the Tincture of Corals, and of the Quintessence of Rubarb, and then administer the Dose of three or four Grains.

It causeth gentle Stools, and purgeth without Gripings of the Belly; and indeed if you have proceeded well in preparing, it renders the Blood agile, and is a Medicine apt for those who desire Gentle Purgations.

Here perhaps some *Physician* may wonder, how 'tis possible, that this Medicine should cause moderate and easy Purgations, when as *Antimony* is a Matter vehement and forcible, and to it is joined Rubarb, which of itself also hath a Purging Property. But let him cease his admiration, and know that the venomous purging power of *Antimony* is by this Preparation so mortified, as it can apprehend or expel nothing; but as soon as some purging Simple is adjoined to it, it then according to the powers of its own Nature performs the Office of opening and purging. But *Antimony* prepared hath no action upon the *Stomach, thence to expel its impurities; but by the purging Medicine, its adjunct, acquires a more open Field, and therein can operate without Impediment any other way, and discern, yea search out the way of Effecting that better, to which it was ordained and prepared, without hindrance.

**[CARTHARTICKS EXPEL BUT CORRECT NOT] Note here very seriously, that Galenick Catharticks have power of expelling, but not of Correction Humours; but Chymical Purgers are endued with either Faculty; and certainly it should not be minded how much is expelled, but how much is healed, which the occult power of Medicaments prepared Chymically doth much better effect, than that common and publick violence of purging forcibly.*

59. [ELIXIR OF ANTIMONY, ITS VIRTUES]

I would have all men to credit these words, since I have no necessity to write other than the Truth. This *Elixir* in such manner prepared, as I have taught, penetrates and purgeth the Body, as *Antimony* purgeth Gold, and frees it from all Impurity: So that if I would at large commemorate all the powers and virtues thereof, I must put up my Supplications to the *GOD* of Heaven, and intreat him to vouchsafe me a longer Life, that I might laud his wonderful Works, and search out further, and according to Verity communicate to others what I have found, that they with me excited to admiration, may publickly render thanks to their *Creator*, for his so great Blessings.

But to proceed in my purpose, having once begun, I here describe the Virtues of *Antimony*, as far as I have experienced them; yet what is hid from my knowledge, I ought to pass over in silence. For it becomes me not to give my Judgement of things unknown, and which I have not with myself experimented, but I leave them, commending the same to other Judges, who with study and labour in this Subject, have made some good progress. No one man can be so expert in knowing the Virtues of *Antimony*, as nothing shall remain unknown by him, not only by reason of the shortness of his Life (as I before said) but also, and chiefly because some new thing is daily found in it.

[ANTIMONY YET CRUDE IT FATTENS SWINE, HOW]

Therefore, let men know, that *Antimony* not only purgeth Gold, cleanseth and frees it from every peregrine Matter, and from all other Metals, but also (by a power innate in itself) effects the same in Men and Beasts. If a Farmer purpose in himself to keep up and fatten any of his Cattle, as for Example an Hog; two or three days before, let him give to the Swine a convenient Dose of crude *Antimony*, about half a dram mix'd with his Food, that by it he may be purged; through which Purgation he will not only acquire an Appetite to his Meat, but the sooner increase and be fattened. And if any Swine labour with a Disease about his Liver or other Parts, or else be Leprous, *Antimony* causeth the Leprosie to be dried up and expelled.

[WHY AUTHOR INDUCED RUDE EXAMPLES]

This Example seems indeed to sound somewhat gross and rustical, to the Ears of Great men especially; but my purpose in proposing it was only to the end, that private Men and *Laicks*, whose Brains were not by Nature fabricated to the most subtle Philosophy of the Learned, may see the Truth hereof, in the very Operation itself, with their own Eyes; also that by this rude Proposal, they might give greater credit to my other Writings, in which I have spoken a little more subtley of these Things. Yet I would have no man, following me as his Author, to give a Medicine of Crude *Antimony* to men; for mute Animals can in their Stomach concoct much more hard Foods, than the tender Complexion of Men is able to digest. Wherefore, he who would rightly and with profit use *Antimony*, he must learn the Preparation thereof first, and afterward know the Dose, as what is convenient for the Young, and what for the Old; how much may be given to robust Bodies, and how much to the weak, in which no small Mystery of this Art consists, the ignorance of which will do more hurt than an imprudent Physician can do good.

[ANTIMONY DIVERSELY PREPARED HATH DIVERSE EFFECTS]

Should I confirm all things by Examples, that would be the Cause of a very Prolix Writing; therefore I will break off this Discourse, and pass on to another Preparation of *Antimony*, and describe its fixedness; which acts like Wine, from which its Spirit is substracted and separated from its Body. [WINE HEATS, VINEGAR COOLS] This Spirit heals the Body internally, and if externally applied, draws to itself all the Heat of a part inflamed: but, on the contrary, when of the Wine, Vinegar is made, it cools, either inwardly or outwardly applied; although the Wine and Vinegar have their Original from the same Root, and proceed from the same Stock. The Reason of this diversity is,

because Vinegar is made through digestion only, by which Putrefaction of the Wine follows, together with a Vegetable Fixation: but on the contrary, Spirit of Wine is made with Separation by distilling, or vegetable subliming, which renders the Spirit volatile. By like reason *Antimony* is prepared, and according to its diverse Preparations hath diverse Effects, and diversely communicates its Gifts to us, which are scarcely comprehensible by the humane Intellect. But the fixedness thereof, touching which I here treat, is thus prepared.

[POWDER OF ANTIMONY, FIXED]

Take of *Antimony* as much as you will, grind it to a subtle Powder, which put into a *Cucurbit*, and pour on it of *Aqua Fortis* so much as will stand above it the breadth of six Fingers; and having well and firmly closed the Vessel, place it in a subtle heat for ten Days, that the Matter may be extracted. Decant off this Extraction pure and clear, and filter it, that it may be free from all feculencies and Impurities; then put this Extraction into a Glass-Body, and abstract all the *Aqua Fortis* by Distillation in Ashes or Sand, and in the bottom the Powder of *Antimony* will remain yellow and dry. Upon this pour distilled Rain-water, and put it in a like Glass in moderate heat, and you will have a Red Extraction. This again filter, and gently distil off the Rain-water by B.M. and the Powder will remain red in the Bottom. Upon this red Powder pour strong distilled Vinegar: this Vinegar will in some time draw to itself the Colour red as Blood, and put down *Feces*. Afterward distil off the Vinegar, and there will again remain a red Powder. This Powder reverberate continually for three days together without ceasing in an open Fire; This being done, abstract the Tincture from it by Spirit of Wine, and separate the *Feces* remaining from the Tincture. All these Works being with so great labour performed, again separate the Spirit of Wine by distillation in *Balneo*, and a fixed *Red Powder will remain, which operates wonderfully.

**Diaphoretick Antimony is sold in Shops, but what here the Author shews us, by the name of Fixed Powder of Antimony, is not to be bought for Silver or Gold; the Virtues of which so far exceed all that, of which the Common sort are Partakers: In vain with so great attention and study (of which in preparing this Powder, there is very great need) did our Philosopher intend this Work, if these Mysteries of so great Effects must come to the handling of the Vulgar, or be publickly sold for Money. Let him who attains to this fixed Powder use it in Chronical Diseases, especially where Sweats are to be excited, and he will see Effects causing him to rejoice, if he use it in himself; and by which he will be glorified, if he use it in others.*

Half a dram of this being taken thrice a day, viz. Morning, Noon, and Night, or oftner, hurts no man; for it expels all clotted Blood out of the Body, and being long taken securely opens all perillous Imposthums, and expels them; radically cures the *French Disease*, causeth new Hairs to grow, and notably renovates the whole man.

[FLOWERS OF ANTIMONY]

Now, since I have taught to make a fixed Powder of *Antimony*, and the Extraction thereof very commodious for Use, leaving this Discourse, I purpose briefly to treat of the Flowers of *Antimony*, which may be many ways prepared. But the greatest part* of men neither can discourse of, nor answer to these; because they have not learned the Processes of such Operations: but the least part, viz. the Disciples, Apostles, and Followers of the *Spagyrick Art*, will more esteem my Writings, more diligently read them, and more prudently give Judgement of the same.

**How much Chymistry was impeached by Calumnies, in the times of Basilius, is manifest by the very many Reliques of Writers, with which some Theologicians, imprudently judging what they understood not, and Politicians (not much more prudent than them) have defamed their own Books; and in the mean while also given occasion to Others, more throughly searching into the matter, of judging those very Authors, with not greater circumspection to have likewise bespattered other innocent Persons with their Censure. I do not here speak of those Writers, who sharply reprehend certain Vagabond Sophisters, that covering their own Wickedness, under the Pretext of a most noble Art, do by a great Name impose great Frauds upon the People. For this kind of men are not only worthy of severe Reprehension, but also of due Punishment. But, what Evil do they deserve, if under their Denomination the Good be abused? Why is the most certain and so salutary and profitable an Art proscribed? Because there are men found, which use not the Art itself, but the Name and Shadow of this Art. Yet I am unwilling to prolong this Apology, lest Envy, which hath been the greatest cause of Calumny, fall upon me in this manner lamenting, whilst I hear Basilius encouraging his, and have reason to applaud our own Times, in which some part of that most thick Cloud, which cast out so many Thunders, is already vanished. [CHYMICAL MEDICINES SOLD IN SHOPS] In Shops they now sell Medicaments, Chymically prepared (as they say) and those very Persons, who are willing mostly to be esteemed Hippocratick Disciples, scarcely dare to condemn Chymistry, and since they call into use what are made by the Chymical Art, they cannot deny it. Are not those Times at hand, in which Elias the Artist, the Revealer of greater Mysteries is to come? Of whose coming Paracelsus so clearly prophesied in carious places in his Writings? Perhaps it will be worth our while, for the Solace of the oppressed Disciples of Basilius, to quote certain places, in which he predicts the coming of Elias not then born: which is any One commodiously interpret, as all other Sayings of that man are to be taken, he will find nothing of absurdity in them, unless he resolve to discover his own absurd Stupidity, or wicked Envy. In the Book of Minerals, Chap 8. Paracelsus thus writes: what is the most vile, GOD*

suffers to be discovered, but what is of greater moment is yet hid from the Vulgar, until the coming of Elias the Artist; others read, until the Art of Elias, when he comes. And again, in his Book of Minerals, Treatise the first. It is indeed true (saith he) that many things lie hid in the Earth, which I, as well as others am ignorant of. For this I Know, GOD, in time to come will manifest his Wonders, and bring to light many more of them, then unto this Day have been known by us. Also this is true; there is nothing absconded, which shall not be revealed; therefore there cometh One, whose Magnale lives not yet, who shall reveal many Things.

Therefore be comforted, be comforted, O Lover of Chymistry, and prepare the way of that Elias, who brings happy times, and will reveal more Secrets than our Ancestors, by reason of Envy, and the Iniquity of their Days durst discover. Whosoever thou art, conversing in this Art, confer some small matter to this felicity; and let us give the World that Medicine, which by reason of evil Humors predominant, it cannot take all at once, by degrees, that it may gradually recover of its Disease, and the Time of Elias come (for Arts also, as well as is understood of other things, have their Elias, saith Theophrastus) where it will be lawful for us to speak freely of these things, and openly to do good to our Neighbours, without persecution of the Impious. Read, understand, and comfort yourself with these.

But, my Disciple and Follower, if you will imitate me, my advise is, that you take up your Cross, at first, and suffer as I have suffered; learn to bear Persecution, as I have already born it, labour, as all our Predecessors with me have done; with continual Prayers seek unto the Lord GOD, and be thou patient, and laborious without weariness, and then the Most High, who hath mercifully heard me, will not forsake Thee: for this Cause I every hour give thanks to GOD, as my Eyes are filled with Tears can and do witness.

Now, to proceed in my Instruction, touching the Flowers of Antimony, it is to be understood, that the true Flores of Antimony, may be prepared, not one, but various ways, as is known to every Spagyrist. There are some who drive them, mix'd with Sal-Armoniack, over by Retort; then they edulcorate them, by washing away the Sal-Armoniack, and these they greatly esteem; for these Flowers are of a fair and white Colour. Others have peculiar Instruments for this Work, prepared with windy Caverns, through which the Antimony may receive the Air, and be sublimed. Others, setting three Alembicks one upon another sublime them with strong Fire, and with one and the same labour make white, yellow, and Red Flores; all which ways I have tried, and found no Error in them: but the Process, by which I make Flowers of Antimony, most profitable for Medicine, and more efficacious in their Operations is this. I mixed the red Flowers of Antimony with Colcothar of Vitriol, and sublimed them together thrice. So, the Essence of Vitriol ascends with them, and the Flores are more strong: which being done, I extract the same Flowers with Spirit of Wine. The Feces settle to the bottom, and separate themselves from the Spirit. These the Artificer lays aside, and distills off the Spirit of Wine in B.M. until the Powder remains dry.

[FLOWERS OF ANTIMONY, THEIR VIRTUE]

These are my prepared Flowers of Antimony, which I administered to my Brethren, and others, who in there Necessities, required help of me, for their Souls spiritual, in respect of my Ecclesiastical State, and for their Bodies temporal, by reason of the Trust they reposed in my Art. These Flores purge gently, without frequent, or excessive Stools, and have cured many Tertian and Quartan Fevers, also very many other Diseases; so that I purposed, by the help of our Saviour Jesus, and his most Holy Mother Mary, to ordain in my Testament a perpetual Monument upon my Altar, of all the Cures which I have performed by his grace; that I might so doing, not only give thanks to GOD, but also make my Gratitude known to Posterity, that they likewise may acknowledge the wonderful works of the Most High, which I (by my diligence) have extracted from the Bowels of Nature, and which he himself had hid and absconded in her profound and most secret Recesses.

But touching the Sublimations of Antimony, which are afterwar called Flowers; let the Reader further observe, viz. that they are like Waters, which break out in high Mountains. Now, of the difference of waters, which arise in the highest Mountains, yea in higher than they, if such can be found; for even unto them would the waters ascend; since it is known, that in the tops of the highest Mountains, Springs do very often issue it; and of other waters which are found by digging deep in the Earth, and by following their Springs must be searched out: [MATRIX PECULIAR TO EVERY ELEMENT] any man may judge that the Matrix of waters in the Earth, is on one part more abundantly replenish'd with the Riches of waters, then on another; since every Element hath a peculiar Matrix, either strong or weak, according as it is produced by the Sydus, whence Elements derive their Original and have being. Now, when such a Matrix is strong and potent in the Earth, it can drive forth its Seed strongly and efficaciously from itself, by a vehement Pressure, even up to the Snowy Mountains of the Alps, or to the very top of the Babylonish* Tower.

*This Parable is of very great moment, but so very clear to those, from whose Eyes the Cataract is taken away, as to explain it to them, would be to hold a Candle to the Light of the Sun: to others, from whose sight the Cataract is not took off, this place gives no occasion of detracting the same. Therefore, read, peruse, and meditate; Day is an Instructor to the Day; the later Reading explains the former, and the former the later.

If any fatuate man hear this my Discourse, he will say, I am either mad or drunk with Wine; but this will be no other than a Reproach, like to that, which was cast upon the Disciples of our Saviour. Of Sublimation, the Reason is the same; for as Waters, which are many times found in the highest Mountains, are more salubrious, and more cool than those, which by digging deep into the Earth are found in Plains: so, if the Matter by pressure & force of fire be driven upwards to the Mountains of the Ancient Wise Men, who died long before my time, the Earth, which for the most part is unprofitable, remains until its Salt shall be extracted from it for its proper use. Thus is made Separation, by which the Evil may be distinguished from the Good, the Pure from the Impure, the thick from the thin, the subtle from that which is not subtle, and the Venom from the Medicament. We miserable Mortals, by Death which we have deserved for our Sins are put into the Earth, until we putrefie by time, and be reduced to filths; and afterward by the Heavenly Fire and Heat raised, clarified, and exalted to a Celestial Sublimation, where all our *Feces*, all Sins, and every Impurity shall be separated, and we made the Sons of *GOD*, and of Eternal Life, unto which the Lord of his Mercy and Goodness bring me with you. But I hope no man will take amiss this Comparation of the Mundane with the Spiritual, *viz.* the Heavenly Exaltation with the Earthly Sublimation. For no man should suppose what I have done, to be done without Reason, but rather know, that I am not ignorant what is white or black, how much the tenebrous and dismal Air differs from the serene and clear Heaven. Therefore let us break off this Discourse, and produce another Preparation of *Antimony*.

Let the Disciple, Apostle, and faithful Imitator of Art, understand this Instruction, and according to the true Philosophick Doctrine faithfully consider, that every Extraction from *Antimony* (as also from all other Things) hath great difference in Operation, which neither consists in the Matter, nor is known by the Matter, from which it is drawn; but consists and remains in the Preparation, and in the Addition, by which the Virtue is extracted from the Matter, as is known by Experience; as for Example. Whatsoever is Extracted from *Antimony*, or any other thing with Spirit of Wine, hath a far other virtue of Operating, than those, which are extracted with good and sharp Vinegar. The Causes of this I have already hinted in my other Writings; but the principal Cause have is, because all Extractions made with Spirit of Wine, from *Antimony*, or any purging Herbs, Roots, or Seeds (understand of the first Extraction) powerfully expel by Seidge: but on the contrary, whatsoever is extracted with Vinegar, purgeth not downward but rather prevents that, and retains in a certain peculiar manner, by which the Volatile is changed into fixed.

This is a singular Secret, and an *Arcanum* of great price; but there are none, or very few found, who mind such things; because many things are hidden, and lie deeply buried in this *Arcanum*, which no One, either Master or Servant, nor any Wise man of this World hath unto this Day observed or considered.

[EXTRACT OF ANTIMONY] Therefore the Extraction of *Antimony* is made two ways, *viz.* with Vinegar, and with Spirit of Wine. Vinegar obstructs, and Spirit of Wine, of itself powerfully expels and causeth Urine, as also Stools; as elsewhere in another manner is shewed, and especially where I speak of my Twelve Keys, as namely, that the Extraction of Glass of *Antimony* moderately purgeth; but on the contrary the Extraction of the same Glass, which is made with Vinegar purgeth not: which is true and not permixt with any falsity. But this Experience gives occasion of thinking and reflecting, by which way of Reasoning, Nature gives promotion and production to a true Philosopher. But it is a thing much to be admired, that every Subject, which is first of all extracted with Spirit of Wine, should have a Purging Property. Yet when Glass of *Antimony* is from the beginning extracted with distilled Vinegar, and that Vinegar again abstracted, and then the *Antimony* extracted with Spirit of Wine, all its venomous purging virtue passeth away, and no sign thereof remains, nor assumes it to itself any power of provoking Stools; but it performs its Operations by Sweat, and other ways, chiefly by Salivation and Ejection by the Mouth; it searcheth out all hurtful Evils in the Body, purgeth the Blood, heals the Diseases of the Lungs, and profits those who are strait-breasted, and troubled with a frequent Cough. In a word it Cures very many Disease, also asswageth a Malignant Cough, and whatsoever is of that Disposition, and is a Medicine very admirable.

Moreover, there is another Extraction of *Antimony* made in this manner. Grind crude *Antimony* to powder, and pour upon it strong Vinegar, not of Wine, but made of its proper *Minera*, and expose the Mixture in a Vessel well closed to the *Solar* heat; then, after some time the Vinegar will be tinged with a Blood-like Colour, pour off this Extraction clear, filter it, and distil by Alembick in Sant: then again, in distilling, it shews admirable Colours, pleasant to the Sight, and wonderful in Aspect. This Oil* at length becomes Red as Blood and leaves many *Feces* and prevails against many Infirmities: [EXTRACT OF ANTIMONY, ITS VIRTUES AND USE] for its singular Virtue and Use is commanded in the Leprosy; the New Disease lately risen amongst the Soldiers is by it consumed and dried up, and indeed it effects Wonders.

*Here thy Sincerity, Valentine, is suspected. Who can by this thy Prescription make this Quintessence, which Petrus the Spaniard, in his Book of the Quintessence of all Things, deservedly extols, as the greatest Secret of Philosophy? What shall I say? Malice makes thee, not a perverse, but timorous man, fearing, lest if Arcanum's should be communicated openly to the wicked, they would do more hurt with them than good. This Process seems to me to be

purposely described obscurely by this Religious Man (why else should he not have written otherwise!) because he knew the Sons of Art would understand it by his Prescript. But that you, Reader, may understand, you have not in vain spent your Money in buying, or time in reading these Commentaries, I will clearly and nakedly discover to you, how I myself have oftentimes performed this very Work: do you give good heed to all Things, that you may not at all be deficient; for the Operations are so concatenated, or co-linked together, as one being omitted, or negligently performed, all the other are spoiled, and your Labour cannot answer your Desires.

Take the best Minera of Antimony, which is friable (for if you take crude Antimony, as Basilius seems to indicated, you can effect nothing; because it hath already lost its most subtle Sulphur in the first Distillation) grind it to so subtle a Powder, as it may pass through a Tiffany Seive: put it into a Cucurbit, and pour upon it Vinegar, which according to Art is distilled from its proper Minera. Set it in Digestion for forty Days, and (if you have exactly observed all things, which are here unto required) your Vinegar will be tinged with a Colour red as Blood. This red Tincture poured off by Inclination, put into a Retort, and gently abstract the Vinegar. The Powder remaining extract with Spirit of Wine, that it also may contract a blood-like Colour. Put this Extraction into a Circulatory Vessel, like to this, the Figure of which I here expose; because I never found any more apt to render the Spirits volatile: Then place this double vessel in B.M. to be digested so long, as until you see the Tincture raise itself upwards and pass over volatile by Alembeck; seeing this, cool your Vessel, and put all the Matter into a Cucurbit, and distil the Spirit according to Art, which will pass over the Helm as red as Blood. Then again abstract the Spirit, and you will have a most ponderous, thick Oil.

How this Oil should after this be joined with its own Salt, and united, we elsewhere speak; the use of which in amending Metals is very great. Here we have described it, and brought is so far, as it becomes a most excellent Medicine in grievous Diseases, which are in all places accounted incurable. It performs its whole Operation by Sweats. And since there is no Disease, which it helps not; what need is there to name any? It is better to be altogether Silent, then to detract from its praises, by reciting a few. There is no man who hath made any Progress in Chymistry, that knows not what the Quintessence of Antimony is.

The Physician before all Things, should diligently contemplate its use, according to his own Experience and Knowledge; but especially completing its Preparation in a due manner, without being weary of his labour, or forgetting any of those Things which are prescribed to be performed.

[LIVER OF ANTIMONY]

Again, another Extraction of Antimony is thus instituted. Take, in the Name of the Lord, of Antimony and crude Tartar, of each equal parts; put these well mixed together in Powders, into a strong Crucible, which will not suffer the Spirits to penetrate it, and burn this Matter in the Fire, until the Tartar be wholly combust: this work must be done in a Wind-furnace. Grind this burnt Matter to a subtle Powder, and pour on that Common Water first made hot, and so edulcorate the Matter by Lixiviating. And so it becomes a Liver*, so called by many of our Ancestors, who lived long before us.

**The Liver is a Cause of much Discourse in Banquets, and the Liver of Antimony will be to us no small Occasion of the like in Chymical Operations. But in the first place consider, that instead of Crude Tartar, it is better to take Salt of Tartar, not only for accelerating the Operation (for otherwise it must be melted so long, as until the Tartar be changed into Salt) but chiefly, that you may have Glass of a far better Colour. Also Basilius forgot, or for some Reason did omit, to appoint the Glass first to be poured into a Platter made hot, and then beaten to Powder in an hot Mortar: otherwise the Glass, by reason of the Salt of Tartar, as soon as it takes the cold Air is changed into a certain Pulse or Pap. Besides, he omitted to determine the Quantity of Water, in which this Powder should be dissolved, that we may have a more fair and deep Colour; in which Exaltation of Colour very much is sited. Also the Precipitation of the Liver from the Water, which must be made with Vinegar, be involved in Silence; although this, and the above mentioned, are necessary in this Operation.*

Here I am unwilling to forbear to admonish, that not only in this, but in every Melting of Antimony, the Artist ought to observe the Face of Heaven, and begin his Work when the same is clear and serene. If you do otherwise, you will in vain deplore the Obscurity of the Colour in your Liver of Antimony. For if you laugh at me, attributing much Virtue to the Influences of the Stars, I shall deride you, deploring the unluckie Success of many Processes. But I would not digress so far, as to take on me to prove the Virtues of Celestial Influences, against men, either knowing so little, as they cannot understand, or having experienced somewhat do not discern; but in the meanwhile are so obstinate, as they will not believe those things which they see, have tried, and in very deed found to be so. I would not more urge Reasons against these men, then against these, who deny even the Mutation of Metals by the Stone of Philosophers. We judge such men more worthy of Contempt than Refutation, who say that is not possible, which they have beheld with their Eyes, and done with their hands: for it is very rude to say, I deny, I deny, who proves? These perverse men by their thus acting, do sometimes provoke the patience of good ingenious Artists, judging that they, with a certain Zeal of confirming what they assert, will proceed so far, as to discover to them their Experiment

of so excellent an Art. But I do not think that any of them, who have obtained the Mystery will be so imprudent, as unadvisedly to cast Pearls before Swine, and to discover to the unworthy, what GOD hath revealed to him; or give them of the Bread he Eats, which is not to be cast to Dogs.

Therefore, returning to the Matter from whence I digressed, I affirm, that there are some times of the year, in which if Liver of Antimony be made, and precipitated with a due Menstruum, it will be imbibed with altogether another Colour, and be endued with other Virtues than that, which is made at another time; and that, both for Metals, and for healing the Infirmities of men, as I my self have experienced in many grievous Diseases, and Symptoms of Diseases. I will also add this: from the Liver of Antimony may be extracted a Redness with Spirit of Wine, which Redness is made volatile, and passeth over the Helm, which also may be exhibited to all without danger. Nor is there any great need of that Caution of Basilius (even before the Redness is volatilized) that it must be given in a small Quantity. For being given from thirty to forty, or fifty Drops, it sweats moderately, and doth not Purge or Vomit: but it effects wonders in purging the Blood, extirpating the Roots of a Disease, and rendring the Patient vigorous, by insensible Expiration, and its occult Virtues. This Vendible Wine needs not the Bush of Eloquence to commend it to the Sick; who once having experienced its Virtues, know what it can do, and that it as much answers their Desires, as they esteem their Money.

Put this Liver dried into a Cucurbit, pour thereon most pure Spirit of Wine; abstract the Spirit by distilling in *B.M.* so that a third part only may remain. But before Distillation, the Spirit of Wine together with the Extraction must be filtered through Paper. This Extraction may indeed be profitably used; but in a small Dose, and with great Caution. What happens in this Operation is very admirable. For the Spirit of Wine abstracted, can no more be united with the red Extraction, whence it was distilled; but one floats above the other, as Water and Oyl, which cannot be mixed. But if the abstracted Spirit of Wine be poured upon other Liver of *Antimony*, it again attracts the Colour to itself; yet this, although poured upon the former Extraction, cannot be mixed therewith. Which is a Thing so strange, as it may be numbered among Wonders. But who can declare the Wonders of *GOD*? or who will worthily esteem the Gifts of the Creator, which he hath implanted in his Creatures? by us scarcely perscrutable with deep Meditation.

I before made mention of the Extraction of *Antimony*, from its Glass* by Vinegar, and also by Spirit of Wine: but I now say, when such an Extraction is made by Vinegar, and the Vinegar is again abstracted by *B.M.* and the Powder which remains is resolved in a moist place, into Oyl or Liquor of a Yellow Colour; it effects such Wonders in Wounds, new and old, as I neither can, nor dare to commit them all to writing.

**Here our Author acts as a Teacher careful, and full of Affection, who not satisfied once to mention, doth often inculcate the principal Precepts of his Doctrine. But, what it is, that specially moves him to repeat the Virtues of the Sulphur of Antimony, I see not: he saith, he repeats nothing in vain; therefore do thou, Reader, if thou judgest it of Concern, more attently consider, whether you may not here find somewhat that is not mentioned, or the Reason why it is again spoken of. I, who profess myself to write to the Intelligent, reiterate nothing here. He that comprehends, let him comprehend; he that hath not there understood, I fear will not here understand.*

[LIVER OF ANTIMONY, ITS VIRTUES]

For it represseth all Symptoms of what kind so ever, suffereth none to take Root, and admits no Putrefaction in fresh Wounds. Also the Extraction of this Powder, before Solution is made by Spirit of Wine, effects the same, and yields not us inferior to other Medicaments, which are administered against internal Affects.

I have often made mention of this Preparation in other of my Writings, also in this Treatise of *Antimony*, very largely; because I know how great benefits and how great Secrets are latent in it. Therefore I hope, no Disciple will be affected with tediousness, by Reason of Repetitions in my Writings, which I faithfully open and bring to Light. For whatsoever I write is not without Reason; and my words are Short, but require much Consideration, although often repeated. To the Ignorant my Discourses contribute little understanding, to Children and the unexperienced little Profit; but to my Disciples and Apostles, much health and prosperity.

[EXTRACT OF ANTIMONY, BY A CAUSTICK WATER]

There remains another Extraction by a Caustick Water, which Experience hath taught me in this manner.

Take of Vitriol and Common Salt, equal parts; from these by Retort distil a Water*, which being forced out by vehement fire, comes forth a matter like thin Butter, or the Sediment of Oil Olive, which keep apart for use.

**Here I will teach you the Manual Operation, O Lover of Chymistry, which undoubtedly you will greatly esteem of, when you shall find the great commodity thereof in operating. Lest, as it often happens, when you distil the Spirits of Metals, your Vessels should be broken. Of your Earth Retort A. open the upper hole B. into which put your matter by Parts, lest all together senting the heat, should act all to forcibly; and presently Close the Hole with its proper Cover. To the Spirits received in the Vessel C. exit is given by the hole D. into the other opposit Receiver E. to which again is applied the other Receiver F. So, the more subtile Spirits ascending through the Hole D. settle in the Recipient F. But the more gross remain in the bottom G. of the Reciever C. This Instrument will be most apt for your*

use here; not only, as I said, lest a most strong Spirit passing out break the Glasses, but also for other Works, as by an easy Speculation you will hence gather.

Subtly grind the Caput-mortuum, and in a Cellar permit it to resolve into Water, this Water keep and filter it through Paper. Afterward take *Hungarian Antimony*, grind it to a fine Powder, and having put it in a *Cucurbit* with a flat bottom, pour this Water thereon, and set the Vessel in Heat. When it hath stood there for a due time, the Matter will be like an *Amethyst*, with a blackish Violet-Colour. Then augment the Fire much, and you will have a transparent Colour, like unto a blue *Saphire*. From this Colour precipitate a white Powder, by pouring on Common Water.

[EXTRACT OF ANTIMONY, ITS VIRTUES, AND USE] This Powder taken, hath the same Operation, as the red Extraction of Glass of *Antimony*, by Seidge, and it also excites Vomiting. [MARS TRANSMUTES INTO VENUS] In that Solution made from the *Caput-Mortuum*, and kept in a Cellar, if thin Plates of Iron be digested, *Mars* will be truly transmuted into *Venus*, as Experience will teach.

Now further consider. Take that distilled Oil or Water, as is spoken of above in this process and pour it upon *Crocus Martis*, with *Sulphur* reverberated to a Redness; set the Mixture in Heat, and you will have an extracted Tincture of *Mars*, red as Blood. Take of this Extraction one part; of the Red Extraction of *Antimony*, which is prepared with fixed Salt Nitre and Spirit of Wine, three Parts; of the Water of *Mercury** leisurely injected through a long Pipe; one Part;

*[WATER OF MERCURY, HOW MADE] *Chymists, that they may with the Ingenuities of their Readers; and more, lest any but the true Students of Art should penetrate into their Secrets, deliver not all Things in one place, but scatter their Documents, that by the Diligent Collection of them, they may judge of their Aptness, as the Eagle proves her Young, exposing them to the Solar Rays: so you see Basilus here proposeth the use of Water of Mercury, which he taught to be made in his Treatise, which is called a Supplement, or rather gave a rude Draught of that Process. For neither there, nor here doth he make mention of an hole, that must be open, in the superior part of the Retort, and therein a long Pipe fitted through which the Mercury may be put in, in very small Parcels. For if you include a very small part of Mercury in a Retort, first made very hot with a vehement Fire, as this must be, if you would extract the Spirit, that Mercury, with its own vehement and untamable violence, would not only burst the Retort, but overthrow the Furnace also; unless you give it a larger space, and greater liberty of Flying; so that, after it hath visited many Retorts, it may rest, and being as it were tired, settle. But since it is well known to all true Chymists, of how great Virtue this Mercury is, in the Resolution of Metals, I will here make no further mention thereof.*

and of the Calx of Gold dissolved in this Caustick Water, half a part. Mix all these together, and after they are canted off clear, distil the Mixture with a Moderate Fire in Sand. All will not pass over by Distillation, but a fair clear Solution remains fixed * in the Bottom; which we may use in old open Wounds, wherein it laies a Foundation for Healing to Amazement.

**This Solution is not yet fixed, but if you be not already wearied with labour, by a further Operation you may fix it. The principal Use of this is, in the Emendation of Metals, which Basilus doth not so much as mention. Now the Genius of all Chymists will understand me, here candidly discovering this Secret to all. Do thou, Lover of Chymistry, in mind and though swiftly follow me expounding the Oracle; but the Operation cannot be so swiftly performed.*

This Powder must first be Extracted with strong Vinegar, which afterward abstract, and what remains in the bottom edulcorate with distilled Water: again Extract it with Spirit of Wine, and abstract the Spirit, and in the bottom will remain a Red Powder. Join this with the fixed Salt, which is made of the Feces, which remained after the Vinegar was used for Extraction. And deliver it to Vulcan for three Months space, that it may no more fly from the Fire, but most pleasingly sport with and in the same. If you perform this, you have Two conjoynd in an inseperable Matrimony: and you have separated the pure from the impure, have rendered the Volatile fixed, and fixed the Volatile, and are not far from that Felicity, which will answer all your Desires.

The *Caput-Mortuum* which is left, being resolved in an Humid place, yields a Liquor so sharp, as no *Aqua Fortis* may be compared with it in sharpness. But of these enough at this time. For I must now speak of a White Powder, which may also be prepared of *Antimony* in this manner.

[POWDER OF ANTIMONY, WHITE AND FIXED] Take pure *Antimony*, which is brought from *Hungaria*, or found in like Mountainous Places; grind it to a subtle Powder: take also the same measure of pure Salnitre, which hath been the third time diligently cleansed. This Composition burn in a new glazed Pot (which was never infected with Fatness) in a Circulatory Fire; not all together, but by parts, and at divers time. This way of Operating, Ancient *Spagyrist* called *Detonation*, a Term of Art to be learned by the Disciple of Art, as being not Common to every Rustick, in his Artifice and Experience.

This Operation being performe,d grind the hard Matter, which remained in the Pot, to a fine Powder, and upon it in another Glazed Pot pour common Water warm; which when the Matter is settled again repeat the pouring on of

Water several times, until all the Salnitre be extracted: Lastly, dry the remaining Matter, and with fresh Salnitre* as much as its own weight is, burn it again, and repeat the same Operation the third time.

**[POWDER OF RULAND] Basilius doth not misguide or delude you, O Lover of Chymistry, whilst he so candidly discovers most Secret Mysteries, and so sincerely and faithfull present their wonderful Effects. As by this very Operation you have an Example: For after the first Detonation with Nitre, and so soon as you shall have separated the Salnitre from the Powder with pure Water, you have the Powder of Ruland, with which that man effected so many Medicinal wonders, whereby he got to himself so great a Name, and so much Wealth. Which, if you prepare under a certain Constitution of Heaven (as I advised, in preparing the Liver of Antimony) you will have so much the better, by how much the more Red: for the Colour is the Soul thereof, the Effect of which in Medicine, Ruland proved and commended; but he, neither exhausted its praises, nor did he persuade the Unexperienced, that so great Virtues were latent in this Medicament. This Crocus of Metals (for so it is called) is not that, which is publicly sold in Shops, upon eight Grains of which they pour two ounces of Wine, and although the Sick only drink that wine, without any other Powder, it oftentimes works so forcibly, upwards and downwards, as either way, sometimes both ways, the life itself issues out. But the use of this is thus. Take eight, nine, ten, or eleven Grains of this our Authors preparing the first Time, according to the strength of the Sick, and all other Things co-indicating; pour on them three or four ounces of Wine; for it matter not much, whether you take more or less of the Wine. Set the Mixture in B.M. for the space of four or five hours, and so extract a most Red Tincture from this Crocus of Metals (which in an infusion of the Crocus of the Shops cannot be extracted) this Wine, no impregnated with the Sulphur of the Crocus, together with the more subtle part of the Powder, which in canting off comes out, I give to the Sick, and it purgeth kindly upwards and downwards without molestation. Nor doth this Medicament only expel Humours, but (as is proper to Antimonials rightly prepared) it strikes at the very Root of the Disease, and whatsoever in the Body is corrupted and declined from its due state, that it amends and restores. What wonderful Effects, this only Tincture hath discovered to me, I forbear to mention, lest I should be compelled to bring their Credit in Question, who have experienced them. In this only believe me, whosoever thou art, that woulest use Chymical Medicaments, always be sure to take the true Tinctures of Things, in which their Volatile Sulphur is absconded; if you neglect this, you neglect your own Fame and Gain, and the Health of the Sick.*

What remains after this third Operation grind to a subtle Powder, and on that pour the best Spirit of Wine; circulate the Mixture for one Month, in a Cucurbit or Circulatory diligently nine or ten times, so often pouring on fresh Spirit. This being done, dry the Powder with gentle heat, and for one whole Day keep it red hot in a Crucible, such as Goldsmiths use to melt their Metals in. Afterward resolve this Powder (in a moist Place, upon a Stone or Glass Table, or in Eggs boiled to an hardness) into a Liquor, which set in heat, again dry, and reduce to Powder. This Powder effects many egregious and wonderful Things, which cannot easily be believed by Those, who have not proved the same.*

**If you have believed, or experienced the virtues of this Powder once detonated, you will not be a Thomas in this third Detonation. Set to your hand, touch and use this, and it will perform the same, which true Diaphoretick Antimony can, but with greater Security and Efficacy.*

But it operates not suddenly, it must have time to exercise its Powers, and shew its own Virtue, by the Testimony of Experience, very admirable.

[POWDER OF ANTIMONY, WHITE AND FIXED. ITS VIRTUES]

Whosoever labours with internal Imposthumes, let him take of this white fixed Powder of Antimony in the Spirit of Wine, or any other rich Wine, the fourth part of a Dram, five or six times a Day, and he will find his internal Imposthume opened, and all the Coagulated Blood to be expelled by degrees, without any peril of Life or Health. He, who is afflicted in his Body with the New Disease of Souldiers, if he use this Powder in the aforesaid manner, will also find this Evil consumed throughout the whole Body, and by the same expelled. Moreover, it produceth new Hairs, and renovates a man to the admiration of all men; it gives new, sound, and pure Blood, and is the Effector of so much Good, as ever the least part of it (although Equity seems to require this) cannot by me be described or declared. [NO MAN MADE DOCTOR WITHOUT LABOUR] It is not fit that I should here manifest all things clearly, and in such manner, as any man, without Labour and Toyl, by reading my Writings, may become a perfect Doctor; no more than it is fit, that a Young Country Man* should be fed with the whitest and best baked Bread, which he hath not prepared with his own Labour, or the Corn of which himself thrashed not out.

**Valentine hath so clearly detected all Things, as no man, either before or after him, hath done it more clearly. All that came after him seem to have conspired, and agreed together to spread Clouds over that Light, which he brought into the World. Hence it is, that they do not Publicly extol his Praises, according to the high Esteem every man Privately hath of him; nor have they translated his Books into other Tongues, although He, of all Authors, is the most worthy, Who speaks in the Languages of all Nations, that he may be a comfort to the Lovers of Chymistry, erring in the Labyrinths of others, and always produce a new Off-spring of Philosophers. But no man should think,*

that he could so clearly speak, as every man, handling Chymistry (according to the saying) with unwashed Hands, might presently understand him; that is, as himself saith, not possible to be done, nor is it expedient that the Son of a vile Clown should eat of the finest Flower, in preparing which he took no Pains; yet (as below he confesseth) our Author hath used plain, simple and clear Words.

[AUTHORS APOLOGY]

But I make too large a Progress in this open Field of Doctrine, in which Ancient Hunters take their Larks, and the Young Ones presently follow them with their Nets. For my Style (as all my Writings witness) hath a certain singular purposed Method, like that of all Philosophers before me. If anyone think it strange, that I here propose certain singular Processes, in which my Philosophy differs from other, let him be answered with this, that Philosophic Speech much differs from the Method of other mens Discourses, who nakedly and sincerely declare some Process, without any Ambiguities or Cloudings of Enigmas. Therefore, consider the difference, and accuse not me, as if I had deviated from Order, in my Style of Philosophy, and of Preparations and Processes. For in a Philosophic Discourse, it is not behoofful to learn and judge of what appertains to the Theory, but the Practice teacheth you the Instruction of Processes; therefore in them, true, simple, clear and well grounded Words are to be used.

[BALSOM OF ANTIMONY] Also, of *Antimony* is made a *Balsom*, against grievous Diseases very profitable; yet not Crude *Antimony*, but of the *Regulus* thereof, whence may be made living *Mercury*, in the following manner. Take of the best *Hungarian Antimony*, and crude *Tartar equal parts, and of Salnitre half a part; grind them well together, and afterwards flux them in a Wind-furnace; pour out the flowing Matter into a Cone, and there let it cool; then you will find the *Regulus*, which thrice or oftner purge by Fire, with Tartar and Nitre, and it will be bright and white, shining like Cupellate Silver, which hath fulminated and overcome all its Lead.

**What I advised to in the Preparation of Liver of Antimony is here to be repeated; instead of Crude Tartar take Salt of Tartar, by which the Operation will sooner and better proceed. Salnitre here is unprofitable. Therefore, take Antimony and Salt of Tartar, of each equal parts, melt them and make a Regulus, according to the Rule here given by Basilius. If you cast away the Glass (as all men for the most part do) you will do ill. [TINCTURE OF ANTIMONY, FROM ITS GLASS, ANOTHER] For I, of that prepare a very profitable Medicament in this manner. I grind this Glass in an hot Mortar, taking heed to contract no Humidity from the Air, which may easily be prevented, and having put it in a Phial, pour Alcohol of Wine thereon, and thence extract a most beautiful Tincture, in Colour red like Blood. This Tincture is a most excellent Cordial, if thirty, forty, or fifty Drops of it be taken in convenient Liquor, and that, if you will, twice or thrice a day; for it is taken with safety, and recreates the whole Man.*

Grind this *Regulus* to a subtle Powder, and having put it into a Glass, pour it on Oil of Juniper, or Spirit of Turpentine, which comes forth in the first Distillation, and is pure as Fountain Water; keep the Vessel well closed, in a subtle heat of *B.M.* and the Oil of Juniper, or Spirit of Turpentine, will become red as Blood, which pour off, and rectify with Spirit of Wine. [BALSOM OF ANTIMONY, ITS VIRTUES] This is endued with the same Virtues, as Balsom of Sulphur, as I shall then show, when I write of Sulphur, because they require one and the same Preparation.

Of this Balsom only three or four Drops, taken thrice in a Week with hot Wine, heal the Diseases of the Lungs, cure the frequent Cough, and *Asthma*, also they are conducent in the *Vertigo*, prickings of the Sides and in diuturnal Coughs.

[OIL OF ANTIMONY PER SE] Also many Oils may be prepared of *Antimony*, some *per se* and without Addition, and many others by Addition. Yet they are not endued with the same Virtues, but each enjoys its own, according to the Diversity of its Preparation. Of which I now give you this Similitude. There are many kinds of Animals, which live only in the Earth, as are many Creeping Things, Worms and Serpents; also others, some of which are new kinds, which before were not, and also these proceed from Putrefaction of the Earth. Some inhabit the Waters, as all kinds of Fishes; others fly through the Air, as every Kind of Flying Things, and Birds; some also are nourished in the Fire, as the Salamander. And besides these, in the more hot Regions and Islands, are found many other Animals, which to these Nations are unknown, which prolong their Life by the Solar Heat, and which die so soon as brought into another Air. So *Antimony*, when prepared by the Addition of Water, assumes another nature and Complexion for operating, then when prepared by Fire only. And although every Preparation of it ought to be made by Fire, without which the Virtue of it cannot be manifested: yet consider, that the Addition of Earth gives it wholly another Nature, than the Addition of Water. So also when *Antimony* is sublimed in Fire through the Air, and further prepared, another Virtue, other Powers, and another Operation follow, than in the Preparations already described. Therefore the Oil of *Antimony*, *per se*, without addition, and the true Sulphur thereof are prepared after this Method.

[TRUE SULPHUR OF ANTIMONY]

Take crude *Hungarian Antimony*, put that ground to a subtle Powder, into a Glass *Cucurbit* with a flat bottom: pour thereon the true Vinegar of Philosophers rendred more acid with its own Salt. Then set the *Cucurbit* firmly closed in Horse-dung, or *B.M.* to putrefy the Matter for forty Days, in which time the body resolves itself, and the Vinegar

contracts a Colour red as Blood. Pour off the Vinegar, and pour on fresh, and do this so often, as until the Vinegar can no more be tinged. This being done, filter all the Vinegar through Paper, and again set it, put into a clean Glass firmly closed in Horse-dung, or *B.M.* as before, that it may putrefy for forty Days; in which time the Body again resolves itself, and the Matter in the Glass becomes as black as *Calcanthum*, or Shoemakers Ink. When you have this Sign, then true Solution is made, by which the further Separation of Elements is procured. Put this black matter into another Cucurbit, to which apply an Alembick, and distil off the Vinegar with Moderate Fire; then the Vinegar passeth out clear, and in the bottom a sordid matter remains; grind that to a subtle Powder, and edulcorate it with distilled Rain Water, then dry it with gentle heat, and put it in a Circulatory with a long Neck (the Circulatory must have three Cavities or Bellies, as if three Globes were set one above another, yet distinct or apart each from other, as Sublimatories, with their Aludel [or Head] are wont to be made, and it must have a long Neck like a Phial, (or Bolthead) and pour on it Spirit of Wine highly rectified, til it riseth three Fingers above the Matter, and having well closed the Vessel, set it in a moderate Heat for two Months. Then follows another new Extraction, and the Spirit of Wine becomes transparently red as a Ruby, or as was the first Extraction of the Vinegar, yea more fair. Pour off the Spirit of wine thus tinged, filter it through Paper, and put it into a Cucurbit (the black Matter which remains set aside, and separate from this Work; for it is not profitable therein) to which apply an Head and Receiver, and having firmly closed all Junctures, begin to distil in Ashes with moderate Fire: [GOLDEN COLOUR FROM ANTIMONY] then the Spirit of wine carries over the Tincture of *Antimony* with it self, the Elements separate themselves each from other, and the Alebeck and Recipient seem to resemble the form of pure Gold transparent in Aspect. In the end some few Feces remain, and the Golden Colour in the Glass altogether fails. The red Matter, which in distilling passed over into the Receiver, put into a Circulatory for ten Days, and as many Nights. By that Circulation Separation is made; for the Oil thereby acquires Gravity, and separates itself to the bottom from the Spirit of Wine; and the Spirit of Wine is again Clear, as it was at first, and swims upon the Oil. Which admirable Separation is like a Miracle in Nature: Separate this Oil* from the Spirit of Wine by a Separatory.

Here you have not only whatsoever can be made of Antimony, but also almost all that can be promised by a Chymist. This is that with which all the Books of all Chymists are filled, which is involved in so many fables, complicated in so many Riddles, and explicate with so many obscure Commentaries, that is, which in all the World is desired by Fools, sought by the Sons of Art, and found by the Wise. This Basilius reveals, this he repeats, this he inculcates; this is his Triumphant Chariot, which he as it were carries about, and often shows in the various Parts of his Writings. Before in this Treatise, he presents it under the Name of an Extraction of Crude Antimony, here it is Oil of Antimony, soon after it is converted into a Stone, which is called the Stone of Fire. Thus this Proteus often offers itself, always various, yet always the same in Substance. Compare all these Processes, which are so often diversely propounded, which these my Commentaries made upon the Extraction of Crude Antimony, and you will have the Work complete in all its Numbers; you will have a Treasure, in which, if you know not what you have, I remit you to Aesop's Dunghil-Cock, who found a Gem in the Dunghil, but knew not what he had. Consider diligently, O Lover of Chymistry, and you will find that no man hath dealt more clearly and sincerely with Thee, than Basilius, and me after him, who show thee there the Hare lies, which so many Others have hunted in vain. If now you be not here wise, you will not be healed with three Anticrya's. Therefore I will add nothing, lest I make Fools mad, who now indeed are wise.

This Oil is of a singular and incredible Sweetness, with which no other thing may be compared, it is grateful in the Use, and all Corrosiveness is separated from it. No man can by Cogitation judge, by Understanding comprehend, what incredible Effects, potent Powers, and profitable Virtues are in this Royal Oil. Therefore this this *Sulphur of Antimony*, I have given no other Name, than my Balsom of Life; because it effects very much, by the Grace of *GOD*, in those, in whom was no help to be hoped for, but by the mercy of *GOD*, and nothing remained by a most certain expectation of changing Life with Death; as my Brethren can witness hath been often done. It refresheth a man so, as if he were new born; it purifies the Blood; mixt and exhibited with the Tincture of Corals, it cleanseth Leprosy, and expels every Scab, which through impurity of the Blood takes Root in man. It drives away Melancholy and sadness of Heart, it confirms the Junctures, and above all strengthens the Heart, when given with the Magistry of Pearls. Also it helps the Memory, and in Swouning a more noble Medicine is not found, if six drops of it mixt with equal parts of Oil of Cinnamon be put upon the Tongue, and the Nostrils and Arteries be anointed with a little of the Essence of Saffron.

Ah Good *GOD*, what moves me to speak, write, and invent many Things! For I suppose I shall find few among the *Doctors*, who will give absolute Credit to these my Writings, which I have declared faithfully, instead of a Testament, to my Disciples, Apostles, and Followers; but Others, who before knew these wonderful Effects, and have often in Truth experienced these Virtues, will more accurately attend, and more easily believe, and for this bounty of mine (*viz.* because I have opened, by the permission of *GOD*, the Powers and Virtues which are infused in

the Creatures, and have as it were freed them from Prison, brought them to Light, and unto free Operation) give me thanks, and speak honourably of me, after I am reduced to Dust in the Grave.

[ANOTHER TINCTURE OF ANTIMONY]

Another way to drive *Antimony*, without Addition, over by Alembick is this.

Make a *Regulus* of *Antimony*, by *Tartar* and *Salnitre*, as I have above taught, grind this subtilly, put it in a great round Glass, and place it in a moderate heat of Sand. This way the *Antimony* will be sublimed: whatsoever shall be sublimed, that dayly put down with a Feather, that at length it may remain in the Bottom, and there persist until nothing more of it can be sublimed, but the whole remains fixed in the Bottom. Then is your *Regulus* fixed, and precipitated *per se*. But consider, here is required a sufficient time, and repetition of the Labour often, before you can obtain that. This Red Precipitate take out, grind it to a subtle Powder, which spread upon a flat and clean Stone, set in a cold moist Place and there let it remain for six Months; at length the Precipitate begins to resolve it self into a red and pure Liquor, and the Feces or Earth is separated from it. [TRUE SALT OF ANTIMONY] The Salt of *Antimony*, I say, only resolves itself into Liquor, which filter, and put into a *Cucurbit*, that it may be condensed by extraction of the phlegm; and again set it in moist Place, then will yield you fair Crystals. Separate these from their Phlegm, and they will be pellucid, mixt with a red Colour; but when again purified become white. Then is made the true Salt* of *Antimony*, as I have often prepared it.

**Like with like, is a Proverb among the Greeks, and is here manifest in our Chymical Work. For this Salt acuates all Menstruums, for their more easie extraction of Metals; but those Extractions most, which are made of Antimony, as of a Mineral to it of affinity and like.*

[SALT OF ANTIMONY, AND ITS USE, WHEN REDUCED TO OIL OR SPIRIT]

This Salt dry, and mix with it *Venetian* Earth (which is called Tripel) three Parts, and in strong Fire distil it. First a white Spirit comes off, afterward a red Spirit, which also resolves itself into white. Rectify this Spirit gently and subtilly in a dry or moist *Balneo*, and so you will have another white Oil distilled from the Salt of *Antimony*. This Oil, but why do I call it Oil? this Spirit, I should rather say, since the Salt is distilled in a Spiritual Manner, in Quartans and other feavers often manifests its Virtues, and is very conducent in breaking the Stone of the Bladder; it provokes Urine, and is profitable in the Gout. Outwardly applied to old corrosive Wounds, which have their Operation from *Mars*, it purifies them. Also this Spirit of the Salt of *Antimony* purifies the whole Blood, as the Salt of Gold doth. And although, in healing very many other Diseases it may be profitably applied, yet it is not so perfect, as the above described red Oil of *Antimony*, in which its Sulphur is deduced to the highest, purified and separated, as I said; therefore I forbear to speak more of this.

Now, since I have treated of the Sulphur and Salt of *Antimony*, and shewed how they may be reduced into Oil and Spirit, to be subservient to Medicine; I here treating further, purpose to speak of its *Mercury* also, and to manifest what Medicine lies absconded, and as it were buried in it.

[MERCURY LIVING EXTRACTED FROM ANTIMONY]

Take the *Regulus* of *Antimony*, made in such manner, as I above taught, eight Parts. Salt of Humane Urine clarified and sublimed, one Part. Sal-Armoniack one Part: and one Part of Salt of Tartar. Mix all the Salts together in a Glass, and having poured on strong Wine- Vinegar, lute it with the Luting of Sapience, and digest the Salts with the Vinegar for an entire Month in convenient Heat; afterward put all into a *Cucurbit*, and in Ashes distill off the Vinegar, that the Salts may remain dry. These dry Salts mix with three Parts of *Venetian* Earth, and by Retort distil the Mixture with strong Fire, and you will have a wonderful Spirit. This Spirit pour upon the aforesaid *Regulus* of *Antimony* reduced to a Powder, and set the whole in putrefaction for two Months. Then gently distil the Vinegar from it, and with what remains mix a fourfold weight of the filings of Steel, and with violent Fire distil by Retort: then the Spirit of Salt, which passeth out, carries over with itself the *Mercury* of *Antimony* in the Species of Fume. Wherefore in this Operation you must apply a great Recipient with a large quantity of Water in it, so doing, the Spirit of Salt will be mixed with the Water, but the Mercury collected in the Bottom of the Glass into true living *Mercury*.*

**What were Arcanum's in the times of Basilus, are now in our times but vulgar Chymical Works. How often shall we find any One, who numbers himself among true Chymists, that is ignorant of the way of making Mercury of Antimony? either in this manner, as Basilus teacheth, or in another. For various Artificers have now invented various Methods, and every One useth that, he best approves of.*

Behold, O Lover of Art, I have showed you, how of *Antimony* may be made running *Mercury*, which very many have so long, and in so many Parts of the World sought; and how we may use this *Mercury* with praise in Medicine, I will here discover and set down in Writing.

[MERCURY OF ANTIMONY, ITS MEDICINAL PREPARATION AND USE] Take in the Name of the Lord, of this *Mercury* one Part, express it through a Skin, and pour on it of red Oil of Vitriol highly rectified, four Parts. Extract the Oyl, and the Spirits of the Oyl will remain with the *Mercury*: Force it with vehement Fire, and somewhat

will be sublimed. Thus Sublimate again put down upon the Earth in the Bottom. Then pour on other Oil, of the same weight as before, and repeat this labour a third time. The fourth time, put the Sublimate which ascends with the Earth, and grind both together, and the whole will be clear and pure, like a *Speculum* or Crystal. Put this into a Circulatory, and pour on it a like weight of Oil of Vitriol, and thrice so much Spirit of Wine. Circulate until Separation be made, and at length the *Mercury* resolve itself into Oyl, and float about like Oil Olive. When you see this, separate this Oil from the other Liqueur, and put it into a Circulatory, and there pour on strong distilled Vinegar, and permit it so to rest for about twenty Days. Then this Oil again acquires its own Gravity, and settles to the Bottom; and whatsoever Veneosity was in it, remains in the Vinegar, which will be tenebrous and altogether confused.*

**There is no need of Torches at Noon Day, nor or of Commentaries in so perspicuous a Description, by which Basilius teacheth to make the Mercury of Antimony. Begin leisurely, give heed to all particulars, and your Work shall never deceive you. Lest I should darken the Author, I desist from Commenting; but add, that I doubt not, but that this Mercury will manifest wonderful Effects in the Humane Body: Yet I have not experienced its Virtues for the health of Animals, therefore my Commentaries must not exceed my Experience.*

But in the Emendation of Metals, it shows itself to be endued with singular Virtues. For I say, and clearly affirm, he that can bring this Oil here described by Basilius, to the state of a fixed Stone, may glory that he hath a fixed Tincture, only inferior to the one only King of Kings, the Great Stone of Philosophers. When thou hast proceeded thus far, O Lover of Chymistry, go not back, nor take off thy hand from the Plough: but go on cheerfully, perhaps in so great a Grove.

*The Golden Branch, with Leaves and Twigs of Gold
Will shew itself to Thee.*

[OIL OF THE MERCURY OF ANTIMONY]

This is a great *Arcanum*, and seems repugnant to Nature, that this Oil should first swim, and afterward being rendered more ponderous, settle to the Bottom. But consider, the Oil of Vitriol is also heavy, yet when the *Mercury* in its Separation is not altogether pure, it stands above it; but when the impure Lightness is taken from it by Vinegar, because the Vinegar assumes that, then the Oyl receives its just weight, becomes compact, and settles to the Bottom. This is the Oyl of the *Mercury* of *Antimony*, which is the fourth Column of Medicine.

Now come hither you Lepers! where be you? I will supply you with means for Health. This Oil is profitable against the Apoplexy, comforts the Brain, makes a man industrious, and cherisheth the vital Spirits of the Ehad. If anyone hath laboured long with grievous Diseases, and will for some time daily use this Oil, his Hairs and Nails will fall off, and he will be renovated, as a man newborn. All the Blood in the Humane Body is by it so purified, as every Evil is taken off from it, and expelled. This heals the *French Disease*, which we have lately inherited; for by this Medicine it is radically extirpated. And, to comprehend much in few words, the praise of this Oil is greater in Medicine, than can be expressed in Speech or Writing.

Why do we, miserable Mortals, taken from the Earth, and ready to return into Earth, stick here? Why do we not hasten to give Thanks to *God* our *Creator*, for this Medicine so mercifully granted to Us? You *Doctors* (if it please the Gods) of either Medicine, come to me a religious man and Servant of *GOD*, I will manifest to you what your Eyes never saw, and will show you the way of Health and Sanity, which before you never knew. Yet if any one be found among you, who understands my Processes, and the way of Preparation, better than I; let him, I pray, not be silent, or set a Seal to his Lips: for here I stand ready to learn, nor am I ashamed further to inquire, and desire that Light, which before I knew not. For I have often said, that this our Life is circumscribed with more strait Limits, than that one man should be able to search out all Things, which Nature bears absconded in her Bosom.

[IDLENESS, CONDEMNED] But on the contrary, I being the Author, let them be silent, who have experienced less than the Author, let them be silent, who have experienced less than I, and if they have not attained to a solid Understanding of my Writings, let them not attempt to amend them, or (like Brawlers) with inconsiderate Words reprehend, what they never learned in the Schools, and the Processes of which they never received from men skilled in the Law. For my Terms otherwise sound, and signify other than theirs, who oppose themselves against me, and who are shamed of the Labour of Planting Trees, and of Grafting fruitful Sprouts thereon; therefore they always abide among dry and withered Wild Trees, and can never attain to any Branch of green, sappy, and well manured Fruit Trees.

[FISHES DIE NOT OF COLD]

Hasten not, I say, O man experienced in our Art, to pass your Sentence of Judging, and be not willing to condemn, what you have not yet yourself acquired by Thoughts, or gained by Discipline. Many imprudent men frequently say, Fishes are frozen in Waters; but these discover their own imprudence and want of Knowledge. for it will never be proved, that a Fish, even in the bitterest Winter will ever be frozen in Waters, as long as the Ice of those Waters is daily broken by the diligence of Mortals. [WHY THEY DIE IN FROZEN WATERS] But the reason why Fishes

die, is because, when the Ice is not opened, their respiration is hindered, and they thence are suffocated. For it may easily be proved, that no Animal can live, when to it the Use of air is denied. Whence it may well be concluded, that those Fishes, which are found dead under the Water, in an extreme Cold Season, die not of Cold (as men of little understanding think) but because they are deprived of Air. By like Reason (that we may apply this Example) I say; since *Antimony*, is to produce such admirable Fruits, it is to be taken out of the Mountains; but first, by the Care of the Miners spiracles, or breathing places, are to made for it, and afterward it must be prepared with Water, Air and Fire, as with auxiliary Mediums, lest its fruitlessness be suffocated in the Earth. But with many and laborious Preparations of Artifice, it must be manifested and brought to Light, for the expected Sanation of Diseases, by reason of which it hath been so long sought into.

[ADVICE AFTER REPREHENSION] Where now, O wretch! who contemnest *Antimony*, and among all men accusest it as mere Venom, where is thy Rhetorick, or Dialect, wherewith to defend thyself? But since thou understandest neither White, nor Black, nor Green, nor Red, nor Yellow; nor knowest which way to go about to justify *Antimony*, its Virtue, Power and Utility, being unknown to thee, thou doest well, if thou keepest Silence, and permittest this Reprehension of thy Ignorance, as a Wave driven with vehement wind to fly over thy Head; fearing, that if those Winds and Waves should be predominant, thy own weak and frail Bark would be sunk and submerged. To avoid this peril, seasonably call upon thy Sleeping Master, as the Disciples of our *Saviour Jesus Christ* did, when they feared they should perish. Yet this must not be done with a dissembled and feigned, but with a true and pure Heart, without all Hypocrisy; then your Redemption and Help will undoubtedly follow, so that in all Verity you will see and find the Winds and the Sea to obey you, and all Things be brought to the desired End.

I wish man were but so disposed, as he would study to obtain somewhat with labour and Diligence, then certainly the gods, the Presidents of Prosperity and Art would give Success, by which such a Disciple and Follower of Art might be assured, that in the wished School of Art, and desired Domicile of Grace, Felicity and Health should not be denied him, but that he himself should certainly see and find the Foundation of the Corner Stone, upon which he might commodiously build up all the other Orders of Stones. Then would cease the so many evilly founded Impertinencies of Bablers, which in the Schools stun the Ears of Disciples, and in Houses the Ears of the Sick; and the Matter itself would speak, as it were with open Mouth, and by certain Experience confirm, that a Castle or Palace of Stone cannot so easily be set on Fire and burnt, as a Pidgeon-House, or the old Nest of a Stork composed of rotten Wood, and daily dried more and more by the Sun.

[CENTER OF ART, NOT KNOWN BY EXTERNAL ASPECT]

But my Auditor and Disciple, do thou with sharp Judgement weigh this my sincere Information, and with fervent desire strive to penetrate the inmost Center of Art, which by the external Face can be known to no man; prosecute and press after the Virtue and Power thereof, no otherwise, than as a Hunter pursues a Wild Beast; search out its Footsteps through the Snow, that you may rightly distinguish, and not take an Hart instead of an Hind, or an Hare instead of a Fox, or give a false estimate thereof, by erring from its Footsteps. Well, cast out your Nets, and take a multitude of Fishes, according to your own Wish or Desire. Place your Threads as is behooful, and dispose of the Birds, which allure others to their place, and by this way of Fowling you will fulfil your desire with profit. That by these, to every Searcher I may briefly propose my Admonition and Advice, I say: My Friend the Hunter, dispose rightly your Nets and Instruments for Hunting as behoveth; and you Mariner, who Night and Day sail through the vast Seas, and are often driven hither and thither by the Winds, give heed to the Point of your Compass, and undoubtedly you will reap profit, and not bring home your Ship, swiftly returning, without great Gain of Merchandize.

But why do I treat of many things, or spend time unprofitably (as tating Sophisters are wont to do) in beating out the empty Chaff? I am deceived; [WORDS OF THE AUTHOR ALL OF USE] I do not unprofitably spend my time; for all the Words in my Writings are of use, and in them are found few empty Letters, which contain not some Utility together with a profitable Instruction, so that the time I spend in Writing will rather be a Recreation, than a Burthen to me. Therefore now, after the manner of Fencers, I will step back one pace, and into the Chymical Laboratory infer a new Doctrine of External Things; [ANTIMONY IS A PRESENT HELP AGAINST WOUNDS] viz. Show, that *Antimony* is of such a Nature, as may be prepared so, as to yield present help in Medicine pertinent to External Wounds, which manifoldly offer themselves to us, and are delcared by Chirurgy. therefore I will begin and briefly explain my Processes, viz. how that is to be used in Medicine, and how it may profitably be prepared. Whosoever thou art, among Junior Students, that desirest to search out the Occult things of Nature, and to bring her hidden Secrets to Light, attend to what I say, that thou mayest be able to distinguish Day from Night, and what is clear from the Obscure.

[ARCANUM OF ANTIMONY]

Take of *Hungarian Antimony* one part, Common Salt half a part, and six parts of *Argilla* not burnt, grind all together, and distil vehemently with a continual Fire without Intermission and at length an Oil will come forth: from

this abstract its Phlegm by Distillation, that a red dry Powder may remain in the bottom of the *Cucurbit*. This Powder grind subtly, and resolve it into a Liquor, upon a Marble Stone; and you will have a red shining Balsom for Wounds, which far excels very many other Balsoms. [ITS USE AND VIRTUES] Its Use* is principally in Wounds, which have been a long time open, and in the Cure of which the *Doctors* with their Plaisters, Unguents, Oils and Ligaments could effect nothing: but with very great Disgrace they at length take off the Horse's Bridle and Saddle, and return him to the Stable, whence they had him.

**A wise General of an Army so disposeth his Soldiers in time of Fighting, that in the beginning of the Battle, the good and strong Soldiers fight, and in the End of the same the best and most strong come to deal with the Enemy; but such as are not powerful enough, for the first and last Encounter, in Arms or strength, are by him placed in the midst, that they may take Example of fighting from the Former, and hope of help and Victory from the Later. The Emperor is imitated by the Orator, in placing his Arguments so, as he may overcome the minds of men. Basilus imitates the Orator, in disposing his Processes so, as he may lead his Disciples to Sapience, and the Fruit of Wisdom. We have already had famous Processes, and in explaining them have used our Endeavour, and contributed some Light. Now follow those, that are in themselves clear enough, and not of so great moment as the former; therefore we shall not insist upon them.*

[WHY THE AUTHOR SPEAKS SIMPLY]

My Form of Speaking Savours of Simplicity; for I am a man Religious, to whom the Method of Secular Men is unknown; therefore cannot so clearly detect and describe all Things, as the Matter itself seems to require. Such a man as I, as to the Terms, because he cannot so formally use them, desires to be pardoned in this, and if he neglect anything therein, he craves the candid Acceptation of all men, and in respect of his State offers himself willing and ready to serve all *Christians* Day and Night, and by his Prayers to *GOD*, to recompence this their Benevolence.

[BALSOM FOR WOUNDS, ITS USE]

This Oil is salutary in many grievous Accidents, and especially in old wounds, so that few Medicines are found, which must not give place to this. Only that Oil, which is prepared with the Vulgar Sublimate of Apothecaries, is equal unto it in Effects, and is oftentimes by Experience found to be better, especially in the *Wolf* and *Cancer*, and in the *Noli me tangere*. But in ordinary *Fistula's*, and the *Herpes* the superior Oyl effects wonders, which were they not confirmed by Experience, could not be believed, and all which I recite not, lest someone or other should judge me to do it from Ambition, or that thence I hunt after Fame, which was never by me either sought or desired; nor at this time, as I can holily affirm, is it aimed at by me.

[ANOTHER OIL OF ANTIMONY]

Now I will give you the Preparation of another Oil.

Take *Mercury* mortified (which is sublimed to clearness and Splendor, and sold by Apothecaries) and *Antimony*, of each equal parts. Grind them together, and distil them by such a Retort, as will retain the Spirits thrice, and afterward rectify this Oil with Spirit of Wine. Then the Operation is absolved, and the Oil becomes red as Blood; but at first it is White, and like Ice or congealed Butter. This Oil effects wonders in many Affects, where Nature gave no hope of Amendment, and it always mostly shows its force, virtue, power, and efficacy, in the perfect Emendation of Evil into Good.

By Addition may be prepared another Oil very profitable in external Wounds.

Take of *Antimony* one part, *Sulphur* one part, *Sal-Armoniack*, or Salt of Urine purified half a part, and *Calx-vive* two parts. Expel the Oil strongly: whatsoever is sublimed, that grind with the *Caput-Mortuum*, and thereon again pour the Oil distilled off, and thrice distil it; then the Oil is prepared.

When old Wounds can in no wise be healed, then use this Oil. For it is strong, potent and penetrative: and lays a good Ground (even as Oil of Vitriol doth) for future Sanation.

[BALSOM OF ANTIMONY, AND OTHER INGREDIENTS]

An admirable Balsom of divers Ingredients (among which is *Antimony*) very useful in old Wounds is thus prepared. Take of *Sulphur*, four ounces, set it over a moderate Fire to melt, and put into it half a pound of *Mercury*, and stir the Mixture so long together, as until both become one Mass. [CINNABAR, HOW MADE] This Mass grind to Powder (for it is made as *Cinnabar* is wont to be prepared) then grind with it four ounces of *Antimony*, of red *Arsenick* four ounces, of *Crocus Martis* two ounces and of Powder of Tiles eight ounces. Put all these into a Glass *Cucurbit*, and sublime them, as such things are wont to be sublimed; [RUBIES OF ANTIMONY] and in this Sublimation you will have Rubies in Colour not inferiour to the Oriental, but they are not fixed; for they are volatile, and fly from the Fire. Let the Artificer separate these Rubies from the *Cinnabar*, which ascends in the Sublimation, grind them to Powder and extract them with strong Vinegar. This being done, let him abstract the Vinegar leisurely in *B.M.* and a Powder will remain; this Powder grind small as before, and having put it into another glass, extract its Tincture with Spirit of Wine, and separate the remaining Feces. This Extraction with Spirit of Wine digest in *B.M.* well closed for one Month. Then abstract the Spirit of Wine, as you abstracted the Vinegar, and put the remaining Powder into a flat

Glass Dish, and set that dish in a Cellar into a Pail full of Water, that it may Swim upon the Water, as a Boat. So doing, the Powder which is in the Glass will in a few days resolve it self into a clear nad perlucid Liquor. This Liquor is salutary in old open Wounds, and is a vulnerary Balsom in like Accidents, if put into them, and they covered round with a common Stiptick Plaister. In diuturnal open Wounds, it leaves no man destitute of help, although such, as in the Cure of which all otehr Remedies have been tried in vain. Of open Ulcers, which have their Original from within, I speak not here; for they cannot perfectly be healed without internal Remedies, [ROOTS OF DISEASES MINDED BY FEW] which dry up all Fluxions, and radically extirpate the Disease: although at this time few are found, who bend their thoughts this way, or take any Course to touch the Root itself of those Diseases, of which I now treat.

If Men would in their Minds well consider the Calamities of Life, into which the Fall of our first Parents precipited us, and seriously weigh that Original Sin, and the great troop of Evills thence issuing, *viz*: of Sadness, Anguish, Diseases and Miseries, they certainly would spend their time better, and employ more labour to search out the health of their neighbours, so strictly commended to them by the Supreme Ruler of Heaven, and by him commanded as their proper Duty. [SUCH AS SHUN LABOUR DO NOT WHAT THEY OUGHT] But how many (with grief be it spoken!) shunning labour, consume their time unprofitably, and do not what was to be done by them, but what they formerly have done, and still ahve a lust to do, being afraid to do so much, as will soil their Fingers Ends; as if they did envy the Tradesman, who perhaps gets a small Gain by selling Soap, which they would not willingly buy, to wash their delicate hands. Are not all we miserable Mortals, that live here, Strangers in the Earth, possessing nothing, that we can call ours? [GOODS OF GOD LENT, ONLY FOR TIME OF LIFE] Are not all Things we here use, the Goods of our *Lord*, lent to us, whilst we live and no longer? Therefore we ought so to behave our selves in using them, taht supported with a good Conscience we may be able to stand in that Day, in which an Account is to be given for them; and be not for our Ingratitude cast into Prison, and utter Darkness where shall be weeping and gnashing Teeth. If this were the Meditation, and this the Intention of every Man, he would be like a Monster, if he should think of admitting Sin in himself, or of neglecting his Office; and all Men would, with a certain Emulation strive to pleasure their Neighbours, with the Gifts received from *GOD*. But these things are remote from the thoughts of the World, and Wordly Men; *Money, Money*, is the Scope of all their Intentions; this the Potent seek directly or indirectly, and for this the Poor are subservient to them, that they also may participate of the Mamon of Iniquity.

Yet take heed, I advise you to take heed, lest the Bones of that Flesh, sticking in your Throat, suffocate you, or the Back-bones of Fishes pierce your Heart. But what doth Admonition help which the World little esteemes of and derides? Hear, I pray you an History; or learn a Parable. [AUTHORS PILGRIMAGE] When I, according to my vow, undertook a Pilgrimage to *St. James*, to visit that holy Place as a Stranger, I prayed to *GOD*, and bound myself with a Vow, that if he granted me an happy Return to my Monastery, I would render him due Praise. He granted my Request, and I daily return Thanks to him. But I thought many more would have rejoiced with me, and have given thanks to the same *GOD*, for the famous Reliques, which at that time I brought with me to our Monastery, (for Consolation of the Poor, and many Others) that it might procure to it self a Name, in this perishing Valley of Tears, that could not be wiped out by any Oblivion. Yet hence few were rendered either better, or more grateful to *GOD*, for so great a benefit; but persevered in Derision and Contempt of that, which *GOD* will vindicate in the last Day. But of these enough at this time, let us proceed in our Instruction of *Antimony*, whence yet another Medicine may be prepared, which I myself have experience to be very salutary; and effectual in every kind of Feavers, and in the Pestilence.

[ANOTHER OIL OF ANTIMONY PER SE]

Grind *Antimony* subtly, put it inot a Glass Retort, and distil it with a strong fire, without any Addition, 3 or 4 times, and always with a large Receiving Vessel; at length of it is made a Red Powder, which extract with Vinegar, and circulate the Extraction with a gentle fire for ten whole Days; abstract the Vinegar by Distilling, and that which remains, by a singular* Artifice in distilling will be changed into an Oil. Let this Oil be further Circulated until all Humidity be drawn off therefrom, and it again be reduced to Powder, as it was; when the Vinegar is abstracted and separated by Distillation, then gather the Oil in a new Receiver.

**This Extraction may be rendered volatile with Spirit of Wine, after the same manner, as I taught you in former Operations.*

[QUARTAN, QUOTIDIAN, AND TERTIAN FEVERS CURED]

Four Grains of this Oil taken with water of *Carduus Benedictus*, if the Sick be well covered and Sweated, heal *Quotidian, Tertian and Quartan* Fevers. The same Dose is very available for expelling the Pest, either given with Spirit of Wine, or with distilled Vinegar, according as the *Paroxysm* of the Pest first invades, either with Heat, or with Cold. [HISTORY OF 3 OF THE AUTHORS BRETHREN CURED OF THE PLAGUE] Which is witnessed by three Brethren in our Monastery, who recovered of the Plague by this Arcanum, when they expected no other but

Death, and had made their Wills. This so reconciled their Minds to this my Art, as they helped me, with greater Zeal then before, both by their Prayers and Labour, and spent the leisure time they had exempt from Religious Duties, in serving me daily; and in a short time attained to so great Experience, that by their own Industry, and the Industry of their Brethren, they gained more true Knowledge in searching out the Arcanums of Nature, then they could before obtain in a longer *series* of time. Therefore, for these Men, I give them thanks, even unto my very old Age, and in very deed I return them thanks, because they deserved so well of me, and of others, by their so faithful Labour; but they finished their Course of this Life before me, and entred the way of all Flesh, wherefore I recommend their Reward to the Supreme Physitian, who dwells in the highest Heavens, and there will refresh them with sufficient Joy, and make up in Heaven that Just Recompence, which here on Earth was denied them by ignorant, and ungrateful Men.

[ANOTHER OIL OF ANTIMONY PER SE]

Another Oil of *Antimony* for wounds, is prepared with Addition in the following manner.

[OIL OF SULPHUR PER CAMPAN. HOW MADE] Take of *Antimony*, *Sulphur*, *Salnitre*, of each equal parts; Fulminate those under a Bell, as Oil of *Sulphur per Campan.* is made; which way of preparing hath long since been known to the Ancients. But Consider, you will have a better way, if instead of a Bell, you take an Alembeck*, and apply to it a Recipient; so you will obtain more Oil, which will indeed be of the same Colour, as that which is made of Common Sulphur, but in powers and virtues not a little more excellent, then it.

**I now, O Lover of Chymistry, Speak to you by Pictures, not in words onely that by a Compendium of Speech, you may also have this Compendium of Labour, and Charge. Behold this Instrument, and provide for yourself such an One, that you may follow Basilus, in making Oil of Sulphur per Campan. For this way one ounce will yield you as much Oil, as a Pound will make in the Common Method. From Sixteen ounces of Sulphur you may extract half an Ounce of Oyl, which others, in their way, do scarcely expect from Sixteen Pounds.*

We use 3 or 4 Drops of this inwardly taken with Spirit of Wine against the Phthisick of the Lungs; but outwardly, if it first be anointed, and a Stiptick Playster applyed, against all Wounds stinking, and tending to putrefaction, and so you will find it to be the most certain Remedy of all Wounds.

[ANOTHER OIL OF ANTIMONY PER SE]

Again another Oil of Antimony against all corroding Wounds very profitable, is this way made.

Take of *Antimony*, one pound, Common Salt dried, one-half pound, Tiles broken; five pounds. Grind all together, and put them into a Retort, whence distil a Yellow Oil. When all the Spirits are come forth, put the Matter in another glass. and from it extract the Phlegm, and a powder will remain; which in an humid place spread upon a stone, and you will have an Humid Balsom, which is a singular Remedy in all Verminant Wounds, and in the Cancer, which hath being cheifly in the Face of a Man, and in the Breasts of a Woman. Much more might be written of this Balsom, did I not fear, that every unskillful Man, and the Rabble of Sophisters would fall foul on me, and say I speak too largely, and commit more to writing, then Experience hath taught me; and so that I boast only of Speculations, and mere Imaginations.

[ANOTHER OIL OF ANTIMONY PER SE]

Moreover, another Oil is made in this manner.

Sublime one part of *Antimony*, with a fourth part of Sal Armoniack, with subtile Fire. The Salt carries up the Sulphur of *Antimony*, red as Blood. Grind this Sublimate to a fine Powder, and if you took at first one pound of *Antimony*, grind with it again five ounces of Sal Armoniack, and Sublime as before. The Sublimate dissolve in a moist place. Or otherwise, take the Sublimate, and edulcorate it from the Salt added, gently dry it, and you will have Sulphur, which burns like Common Sulphur, which is sold at the Apothecaries. From this Sulphur extract its Tincture with distilled Vinegar, and when you have abstracted the Vinegar by gentle Heat of B.M. and by a subtile Operation again distilled the remaining Powder, you will have (if in this Operation you erre not) a most Excellent* Oil, grateful, Sweet, and pleasant in its use, without any Corrosiveness or peril.

**This is another Repetition of the Process, by which the Balsom of Antimony is made, as our Author calls it in this Treatise, or the Quintessence of Antimony, of which often above. Yet in the process there is this difference, that here the Sulphur is separated by the Sal Armoniack from the Antimony, and then extracted from the Vinegar; whereas in the other Process, the Sulphur is extracted by the Vinegar, whilst it is yet united with the Antimony. But these are not things of so great a Moment, as to frustrate the Effect of Operations. Therefore this Variety gives the greater Liberty to the Operator, that he may not be Scrupulous in these Things, in which he understands the Reason of what he doth, and of the Method by which he acts.*

It heals the Phthisick, remedies the Prickings of the Sides; and if any One labours with difficulty of Breathing, let him take two Grains in the morning, and as many at Night going to Bed. In the Elixir or Spirit of Wine, and he shall be healed, For it dilates the Passages of the Breast, expells all Impurities, and Phlegmes out of the Breast; and to me it hath often produced many unlooked for Effects. But since in other Preparations of *Antimony*, I have described

such Virtues, as with this are common to them, I Judge it needless to repeat them all, lest in the Sectators of Art I should create tediousness through multiplicity of Words, or alien thoughts by an impertinent Tautology. In the mean while, the Liquor, which, as I above said, was resolved in an Humid Place, is an external Medicine, and very profitable; for it cleanseth the Impurities of the Skin, and if a little Oil of Tartar be mixed therewith, it heals the Phagedena of the Fingers; and it often anointed therewith, it purifies the Skin and cures Scrophulaes.

[TRUE SULPHUR OF ANTIMONY, OTHERWISE PREPARED]

Also, Sulphur of *Antimony* is prepared in another Manner.

Grind *Antimony* to a fine Powder, which boil for two hours or a little longer, in a sharp Lixivium made of the ashes of Beechwood. When boiled, filter the *Antimony* clear, and pour Vinegar upon the filtered Liquor, and then the Sulphur will settle to the bottom wholly red. Pour off the Phlegm and gently dry the Powder. Distil this Powder with Vinegar of Wine; extract the Tincture, and do as you did with the former Sulphur. To reduce the same into an Oil by Distilling, is worth your while: Although the Oil above mentioned hath greater Virtues, because its Body, by the Sal Armoniack, in the beginning of the Sublimation was better dissolved and opened.

There yet remain many things to be written of *Antimony*, and especially Three, necessary to be known by the *Spagyrick* Physician and Philosopher, viz. the Preparation of Vinegar, which is made of its Minera; and then the Philosophick Signate Star, which is not to be omitted; and lastly the Lead of Philosophers, of which we shall speak somewhat; touching which Many have imagined Great Things, and though (in their way of Reasoning, and Speculation) to prepare the true and sincere Mercury of Philosophers of it; which indeed cannot be done, since so great Efficacy is not from above insited in *Antimony*, as that in it can exist that Mercury, or of it be prepared. That Mercury is the first *Ens*, or first Water of Metals, which is perfect, otherwise the Great Stone of the ancient Wise Men could not be made of it. That first *Ens*, I say, and the Seeds thereof, are found in another Mineral, in which the Operation (according to the Genius Metals) is Particular, and most profitable Operation; and besides in it you may find whatsoever appertains to internal and external Medicine. For it is the *Column* of every Shop of Apothecaries, if duely prepared, as I often admonish; nor is anything wanting in it, provided the Artist hath learned well to distinguish the Disposition of Metals and Minerals, and diligently observes both the Preparation and Use of *Antimony*; because then, and not before, follows a perfect Judgement of it. Therefore I will stand to my Promise and comfort my Disciples, according to their Wish, by satisfying and instructing them, which way the Separation of Good from Evil may be known to them, and giving Information touching the Vinegar of Philosophers, which is made of *Antimony*.

[VINEGAR OF ANTIMONY]

Melt the Minera of *Antimony*, and purify it, grind it to a Subtile Powder, this Matter put into a Round Glass, which is called a Phial, having a long Neck, pour upon it distilled Water, that the Vessel may be half full. Then having well closed the Vessel, set it to putrefy in Horse-dung, until the Mineral begins to wax hot, and cast out a Froath to the Superficies: then 'tis time to take it out; for that is a Sign the Body is opened. This digested Matter put into Cucurbit, which well close, and extract the Water, which will have an acid Taste. When all the Water is come off, intend the Fire, and a Sublimate will ascend; this again grind with the *Feces*, and again pour on the same Water, and a second time abstract it, then it will be more Sharp. This Operation must be repeated, until the Water be made as Acid, as any other Sharp distilled Vinegar of Wine. But the Sublimate, the oftner the Operation is repeated, the more it is diminished. When you have obtained this Acid Vinegar, take fresh Minera as before and pour this Vinegar on it, so as it may stand above it three Fingers; put it into a Pelican, and digest it two days in Heat, then the Vinegar becomes red, and much more sharp than before. Cant this clean off, and distil it without Addition in B.M. The Vinegar comes off white, and the Redness remains in the bottom, which extract with Spirit of Wine is an excellent Medicine. Again rectify the Vinegar in B.M. that it may be freed from its Phlegm; lastly dissolve in its proper Salt, viz: in four ounces of it, one ounce of the Salt, and force it strongly by Ashes; then the *Vinegar becomes more sharp, and acquires greater Strength, and virtue.

**This Vinegar also is numbered among the chief of those things, which are prepared of Antimony, therefore I thought it worthwhile to illustrate this with some Commentaries. For although it may be made in the way Basilius prescribes, yet there are still some things wanting to render the Work both more easy and more perfect, which I here subjoin; For six pounds of Antimony are required sixteen pounds of Distilled Water, and when (after Digestion) we would distil it, a certain manual Operation must be observed, on which depends the Success of the whole Work almost. For the Alembeck must be so placed, as his Pipe or Beak may be covered with Water, which either must be put into the Recipient, or pass out by distilling into the same; otherwise the Spirit's of the Antimony will be lost, and more then half part of the same perish, or the Work require much more time for its perfection. I have expressed this by a Figure here placed, that if any by hearing do not sufficiently perceive this, they may be seeing understand. When the whole Water hath passed over by Alembeck, the Fire (as the Author admonisheth) is to be increased, and three Days, and as many Nights continued without intermission. Then let all cool, and the Sublimate, as he teaches,*

must again be mixed with the Antimony; this Labour for three Days and Nights must be re-assumed, and afterwards repeated to the third time. [AUTHOR BALSOM OF LIFE, WHAT.] Then your Water will be acid, as common Vinegar. If you tinge this Vinegar with new Minera of Antimony, you will have a Tincture, which Basilius names his Balsome of Life, so often described, but never sufficiently commended. O, did Mortals know what Mysteries lie absconded in this Tincture, I question whether they would be desirous to set about any other Preparation of Antimony. All things are in this One. I have spoken, O Lover of Chymistry, do thou act.

[VINEGAR OF ANTIMONY, ITS PROPERTY]

This Vinegar Cools vehemently, not as common Vinegar, but with great Admiration, and certain Experience, especially for assuaging the Gangrene, produced from Gunpowder; also it heals other enraged Wounds and Members, when joined with the Soul of Saturn, wrought up into an Unguent, and applied outwardly. And mixt with Water of Endive, to which Salt *prunella* is added, it consumes the Squinancy, and extinguisheth its great Heat: besides, it assuageth the Motion of the Blood inflamed. In time of the Pestilence, taken inwardly, the Dose of one Spoonful, several times, and outwardly applied to the Swellings by Linen Clothes moistened therein, extracts the Venom, and most excellently cools: but consider, when you would use it in this manner outwardly, it must be mixed with a third part of Water distilled from Frogspawn.

Many highly esteem the Signate Star of *Antimony*, and very many have endeavoured to prepare it, sparing no labour to attain the same. Which some have acquired with good success, others have lost all their labour and Cost, Many have assumed an Opinion, that this Star is the true Matter, whence the Stone of Philosophers may be made, induced hereunto, by this thought or Imagination, *viz.* because Nature herself hath signed it into a Star, therefore they could not choose but esteem of it, and by these Cogitations were led into the Way of Error, But I sincerely denounce, that it is nothing so. For these kind of Searchers erre from the Kings high-way, and kill themselves in clambering up Rocks and Cliffs, in which wild Goats inhabit, and Birds of Prey build their nests. It is not given to this Star to contain in itself so great Potency, or from itself to form so precious a Stone. Yet I affirm, that in it lies *absconded* a famous Medicine, which may be made of it. The Star is thus made.

[SIGNATE STAR OF PHILOSOPHERS]

Take of *Hungarian Antimony* 3. parts. of Steel 1 part. melt these together with 4. parts of burnt Tartar, when melted pour out the whole into a cone, when cold take out the Regulus, and separate it from all impurity, and the Scoria. Grind this Regulus to Powder and weigh it, then add thereto thrice so much of burnt *Tartar*, and pour it out as before. Repeat this labour the third time; then the Regulus purgeth itself, and becomes pure and clear. Note, when you have rightly completed the Fusion, and have used a manual Operation, as is fit (which is of principal concern in this Work) you will obtain a fair Star* bring and shining like Cupellate Silver, no less artificially formed, then if some Painter had with Compasses diligently divided the same.

**Here it is to be noted. In the third fusion of the Regulus, the Fire must be vehemently heightened, that if any Impurity remain with the Regulus, it may by that intense heat be taken away. By this means you will have a Regulus in beauty and Whiteness comparable to Silver, but in Virtue and Price far Superior.*

This Star with Sal Armoniack is reduced to red *Sublimate; for the Tincture of *Mars* ascends. Such a Sublimate may be resolved in a moist place into a Liquor, which discovers wonderful Virtues in Chirurgy.

**This Sublimate, before it is set in a Cellar to be there resolved, should be purged from the Sal Armoniack with distilled Water. They are few Things which I admonish, but by the ignorance of these or those, great Errors are committed, and the Work with all its Costs and Charges perisheth, or at least yeilds not sufficient to pay what the Materials cost.*

[ANOTHER OIL OF ANTIMONY MADE OF REGULUS]

This Regulus, or Signate Star, melted often with the Stone *Serpent*, is brought to such a state, as at length it consumes itself in it, and wholly unites itself with the Serpent.* This being done, the *Sectator* of Art hath a Matter altogether hot and fiery in which very much of Art is *latent*. This prepared Matter resolves itself into an Oil; this very Oil ought to be brought over the Helm by Distillation, and then rectified, that it may be pure and clear,

**Of a Snake or Serpent the Nature is such, if you slacken your hold he riseth up, if you gripe him hard he bursts, the same I fear here: Therefore the Author calls that a Serpent, which he mixeth with this Regulus. But it is the Serpent of a Stone, or a Stony-Serpent; because the Salt, as a Snake willing licks a Stone.*

This Oil may commodiously and securely be taken inwardly; but with great Prudence and Caution, and not oftner then twice or thrice in a Week, and no more at one time, then three Drops in two ounces of Wine, or other Water distilled from Herbs, according to the Exigency of the Disease. For this Reason, it is the Physicians part to know the Causes of Diseases, together with the Complexion of the Sick, that he may the more securely use his Remedies.

[SOME ARTS WHY SUPPRESSED]

This is a famous *Acrimony** containing in itself many *Arcanums*; but there is no need to reveal all things together and at once to unskillful men. Some Arts are to be suppressed, that some Secrets and *Arcanums* may remain proper to the Philosopher, who in searching them out hath daily sustained grievous Toil.

**They, who understand of how great Utility it is to extract the Essences from Metals, are not ignorant of the Virtues of this sharp Oil. For this is the only Menstruum for this purpose. How many are they who have spent their whole Life in Chymical Operations, and never could arrive to the knowledge of a true Menstruum? To thee it is here revealed, if Health be your aim, you may safely use it in the Body; if you attempt somewhat more sublime, and have already conceived good hope you shall compound it, this is the principal help of all, for ascending to the Throne of the Chymical Kingdom.*

But let him, who resolves to tread in my Footsteps not be weary of Searching; but what I have done, let him do, and what I have so often desired, and what with so earnest Wishes I have sought, let him seek. These Principles, which I have prescribed you, are sufficient for to search out the End by. Many have failed, yea many have been cut off by Death, before they could in their Learning attain to the Principles only; that is, they are deprived of Life, before they could acquire the Magistracy of Art. Therefore, I at first set forth a Book of Rudiments, that the Studious follower of Art (who in his first Experiences had need of so much time) might the sooner attain his desired end, and wished Scope, and next unto *GOD* give me thanks.

[ANOTHER OIL OF ANTIMONY MADE OF REGULUS, ITS EFFECTS]

Moreover, in this Oil a wonderful Effect is latent. For if this Oil be circulated with Crystals for sometime, *viz.* for three Days and Nights (the Crystals being first Calcined) it from them extracts a Salt: which being done, the Oil may again be distilled off by Retort. Thus you will have a Medicine, which admirably breaks the Stone in the Bladder, and expels it, and there also effects many other Things, by a certain famous virtue in it.

[LEAD OF PHILOSOPHERS]

But that we may also say something of the Lead of Philosophers, let the curious searchers of Nature know, that between *Antimony* and common Lead, there is a certain near affinity, and they hold a strict friendship each with other. As a Tree casts out of its side it's superfluous Rosin, which is the Sulphur of that Tree; as the Cherry-tree, and other Trees, which give forth such Gums: there are other kinds of Trees also, which by reason of their abundance of *Mercury*, produce and cast forth from themselves a certain Excrescency, which neither in Form, nor Virtue is in any wise like to their Fruit; but hath wholly other properties, as in Oaks and Apple-trees is apparent, which produce like bastard Fruits, or Monsters: So the Earth also hath like abortive Fruits, which in Separation from the pure Metals, are severed and cast out.

Now although there is so strict an affinity between *Antimony*, and *Saturn*; yet by reason of the too much *Sulphur*, which *Antimony* hath in itself, it is cast out from it: because its viscous Body (in it's Nativity) could not come to perfection; and therefore it was constrained necessarily to consist among Minerals: because it's abundance of hot *Sulphur* was the Cause, that hindred it's *Mercury*, that through defect of Cold it could neither come to Coagulation, nor into a Malleable Body. Moreover, I say, the Lead in *Antimony* is no other, then its *Regulus*, which hath not as yet obtained Malleableness. And, as above I said, when the *Regulus* and Steel by Liquefaction are united, and deduced to a Star, there are many, who would thence make the ancient stone of Philosophers; which I before denied to be possible. Yet what Medicines may be prepared of it, you have already briefly heard; therefore touching them, I shall not add a Word more.

[WHY THE REGULUS IS CALLED LEAD]

But the Reason, why the *Regulus* is called and accounted Lead, is this. When that *Regulus* is taken, which *Antimony* gives forth from itself in making glass, and put into a Crucible well closed, which can resist the fire, with the Salt of *Saturn* (having been first Cemented with the Salt for three hours) and these permitted to melt together, in a Wind Furnace, the **Regulus*, when taken out, is found to be rendered soft, and more ponderous, then it was before. For it receives it's ponderosity from the Spirit of the Salt, which also gave it softness, so that it's Body now is compact and heavy.

**I not enviously, as many Chymists do, but affectionately deal with Chirurgeons: wishing that they would in their mind, as according to their faculty they may and ought, endeavour to prepare such helps, for their miserably afflicted Patients, and such Compendiums of Sanity, as may be prepared of this *Regulus*. Would you have me discover to you the Mystery? Hear with pleasure, and use it. This *Regulus*, by the Salt of *Saturn* rendered Malleable, must be mixed with equal parts of *Mercury* condensed by *Saturn*, and in a vehement fire fluxed, and so well mixed. The Matter comes forth, in it's external Face like unto Silver, but in its internal Virtues is more noble, and more precious than any Silver. But you Chyrurgeon, studious of your own Art, and by Art covetous of Glory, deduce that into thin plates, and externally apply it to Wounds, and Malignant Fistula's. So doing, you will be amazed, when you shall see Nature, helped by this Art, to perform more, in a very short time, then you could have hoped for in a longer time, by so many Unguents and Plaisters. The Rusticks (to use the Words of *Basilus*) will no more deride and*

upbraid you, saying, they can effect more with a piece of crude and stinking Lard, then you are able to do with the laborious Process of your whole Chirurgick Art.

Therefore I say, there is not much difference between the Stignate Star, and Lead of *Antimony*; which notwithstanding are every where distinguished as two diverse things. For either of them is made of the Glass of *Antimony*, and prepared into one and the same Medicine, as is already by me sufficiently declared. Here therefore I break off my Discourse, that I may explain what the stone of fire is, after I shall have declared the Appendix which follows.

O GOD grant thy Grace, and open the Hearts and Ears of Men unwilling to hear, and to them impart thy Blessing, that they may acknowledge Thee in thy Omnipotency, and wonderful Works of Nature, to thy Praise, Honor and Glory, and for the Health, Solace, and Confirmation of the Strength of their Neighbour, and also for Restoring the Sick to their Pristine Health. Amen.

THE APPENDIX

For a Conclusion you are further to know, that *Antimony* may be applied to many other Uses, then as above expressed, as to Scripture or Printing, for which Printers use it. Also under a certain Constellation and Concourse of the Planets, a Mixture of Metals is made with *Antimony*, of which Artists form Signatures and Characters endued with singular Virtues. Of the same Mixture also are made Speculums, of many and wonderful Aspects and Properties. Also Bells and other Instruments may be made thereof, of admirable sound. Likewise Images of Men, and many other Things*.

[ANTIMONY ITS WONDERFUL VIRTUES, THE HUNDREDTH PART OF THEM NOT KNOWN] **The virtues and powers of Antimony which the Author here in this Appendix so lightly toucheth, and passeth over, are so many and so various, as indeed the hundredth part of them is not yet known to Men. Which Ignorance undoubtedly redounds to the Reproach and Ignominy of our kind; because we Men, among so many other Animals, only endued with Reason, and a Faculty of Discoursing, are hurried with so great impetuousness, to that wicked and abominable Desire of Gain, as scarcely any Man hath leisure to search out the Wonders, which the Author of Nature hath insited in his Creatures. But I am unwilling to repeat this Reprehension so often spoken of by Valentine; I do only call it to mind. This Mineral, in which lies hid so admirable Spirit, that by Exhausting it cannot be exhausted, hath also Virtues, which by no man studying can be sufficiently known. What I have tried, out of the way of Chymistry and Medicine are few; yet Experience hath taught me so much, as I judge Antimony in other things will show itself no less admirable, then in Chymistry and Medicine.*

Yet what I think of Characters and Signatures, which the Author saith may be made under a Concourse of certain Constellations, I shall not here discover. It sufficeth me, that I can say, that among all Metals and Minerals, there is not any Substance known, which contains so much of a Celestial Spirit, and hath so great Sympathy with the Stars, as Antimony. Weigh this, with all that I have before said of Antimony, but not negligently, and Hasten to the Stone, which is called the Stone of Fire.

But since these things concern not Medicine, nor appertain to my Order, Rule, and Calling, I rest well satisfied in my Vocation, and commend them to the Handling of Others, who know them better.

OF THE TRIUMPHANT CHARIOT OF ANTIMONY AND What the STONE of FIRE is.

[AUTHORS PARABLE]

When, at a certain time an abundance of Thoughts (which my internal and fervent Prayer to *GOD* suggested) had set me loose and wholly free from all terrene Businesses, I purposed in my self to attend to Spiritual Inspirations, of which we have need, for the more accurate scrutiny of Nature. Therefore I resolved to make myself Wings, that I might ascend on high, and inspect the stars* themselves, as *Icarus*, and his Father *Daedalus* in times past did, if credit may be given to the Ancient Writings of Poets.

**This Leave is to be given to all, who treat of Sacred Things, viz. to declare those things, which they are willing to discover (not to the unlearned ignorant Deriders, but only to Men, worthy, and to such as sincerely desire, and aspire to the knowledge of the same) in a certain singular and Parabolical kind of Writing. In which our Author is the more to be excused, because when he comes to the greatest of Mysteries, which he intended to explain in this Book, he betakes himself to certain hiding Places of Parables, and with the Heaven of Piety, which is wont to cover all things (yea even the most wicked) he so veils his Secrets, as None but Pious and sincere Disciples of Art can with the acuteness of their sight penetrate these Clouds. Do thou therefore, with a certain intellectual Luxury sport with him, he will not delude thee.*

But when I soared to near the Sun, my Feathers with it's vehement heat were consumed, and burnt, I fell headlong into the depth of the Sea: yet to me, in this my extreme Necessity invoking *GOD*, help was sent from Heaven, which freed me from all peril and the present Destruction. For an Angel hastened to my assistance, who commanded the Waters they should be still, and instantly, in that deep Abyss appeared a most high Mountain, upon which at length I ascended, [INFLUENCE OF SUPERIORS ON INFERIORS] that I might thereon examine, whether (as Men had affirmed) there was any Friendship* and Familiarity between Superiors and Inferiors, and whether the Superior Stars have acquired power from *GOD*, their Creator, to produce any one Thing like themselves in the Earth.

**There hath been no Man, who had darted his sight but as it were through a Lattice, into the Penetrals of Chymistry, who did ever deny this Influence of Superiors upon Inferiors. Therefore let Basilius so holily affirming, and so often openly declaring it to Men, be credited by those, who, the true Light being not yet risen upon them, do by feign without sight practice Chymistry.*

And having searched into Things, I found, that whatsoever the Ancient Masters had so many Ages since committed to Writing, and delivered to their Disciples, who earnestly desired to be the true Imitators of them, was (as I may say) more true than Truth itself. Wherefore, as is fit, I give praise and thanks to my *Lord* and Heavenly Father, for his incomprehensible Works.

[MINERALS HOW MADE] In very deed (that I may expound the matter in few Words) I found all Things, which are generated in the Bowels of Mountains, to be infused from the Superior Stars, and take their beginning from them, in the form of an *aqueour* Cloud, Fume or Vapour, which for a very long time fed and nourished by the Stars, is at length educted to a tangible form by the Elements. Moreover, this Vapor is dried, that the Wateriness may lose its Dominion, and the Fire next, by help of the Air, retain the Ruling Power. Of Water Fire, and of Fire and Air Earth is produce: which notwithstanding are found in all things consisting of Body, before the Separation of them. Therefore this, *viz.* Water is the first Matter* of all things, which by the Dryness of Fire and Air is formed into Earth.

**This is an Old Song, this is the Sum of Art; from this Imitation of Nature is found the lesser Stone of Fire, from this it is made, whensoever it is prepared, from the Same also the great Philosophick Stone derives its Original.*

[WATER OF ANAXAGORAS, WHAT] *This is the water of Anaxagoras, the Fire of Empedocles, and Aristotle's first Matter, of which all things have been, and to this Day are made. Which is clearly evident in the Nutrition of Man, the Growth of a Tree, and in the Generation of Metals, for that, which constitutes Flesh, Woods, and Metals, is not taken from Food, Rain or Earth, but is infused into them from elsewhere. [ALIMENT, WHICH NOURISHETH ALL THINGS, WHAT] That very Thing is the Aliment, which nourisheth all things, but that it may be so variously specificate, it must be separated from that Body, in which it dwells, and by joined to another, which by the Chymical Art is performed.*

But now since my Intention is to describe the Stone of Fire, how it is made of *Antimony*, together with the Process of its Preparation, which not only heals Men, but Metals also particularly; it will be necessary before all Things, to speak somewhat of these following Heads. What properly the Stone of Fire is; what is its Minera; whether a Stone can be made without Matter or no; what is the extreme difference of Stones, and how many Species of them are found, and lastly of their use.

[AUTHORS PRAYER] *In this my purpose, I pray, O spirit of Heaven illuminate me, that I may give a true and sincere Instruction, viz. according as is fit for me, and the matter itself permits. Indeed I have hopes of Eternal Absolution from this my Supreme confessor, who from Eternity possesseth the Throne of Mercy, and will give Testimony of all things, when the Decretory Sentence shall be pronounced upon all Men, in the Last Judgement, without any appeal.*

[TRUE TINCTURE OF ANTIMONY NOT MADE OF CRUDE AND MELTED ANTIMONY]

Therefore first know and consider, that the True Tincture of *Antimony*, which is the Medicine of Men and Metals, is not made of crude and melted *Antimony*, as it is sold by Merchants and Apothecaries; but extracted from the Minera, as it is taken out of the Mountains, and before it is formed into Glass. But how that Extraction should be made, is the principal Work in which the whole Art consists: Health and Riches attend him, who rightly attains to that. [TRUE TINCTURE OF ANTIMONY NAMED THE STONE OF FIRE] But, my Reader, you must diligently mind this, *viz.*

that the Tincture of *Antimony* prepared fixed and solid, or the Stone of Fire (as I name it) is a certain pure, penetrative spiritual and fiery Essence, which is reduced into a coagulated Matter, like the Salamander, which in Fire is not consumed, but purified and conserved.

Yet the Stone of Fire tingeth not universally, as the Stone* of Philosophers, which is made of the Essence of Gold itself. To this no such power is given, as that it should perform such things, but it tingeth particularly; viz, Silver into Gold, Tin also and Lead; but *Mars* and *Venus* it toucheth not, nor do they yield more, then from them by Separation may be effected.

[*THE DIFFERENCE BETWEEN THE STONE OF FIRE AND THE STONE OF PHILOSOPHERS*] *As much as Heaven is elevated above the Earth, so much doth the true Stone of the Philosophers differ from this Stone of Fire. I myself do candidly confess, that although I have found this, yet I am very far distant from the other. And this, whatsoever it is, I own to be received from the Wisdom of Basilius. Do you take heed you be not deluded by your own Fantasy, and that others deceive you not.*

Moreover, one part of it can tinge no more, then five parts of Metal, so as to persist in the Trial of *Saturn* and *Antimony*; whereas, on the contrary, the Great Stone of Philosophers can transmute to infinity. Also in augmentation it cannot be so far exalted; yet the gold is pure and solid.

[*EARTH OF ANTIMONY*] The Minera, out of which this Stone or Tincture is made, is no other then (as I above mentioned) the very Earth of *Antimony*; from which, I say, it is made: but how or with what virtue, force, and power it is endued, you shall hear anon.

[*POWDERS FIXED, WHY CALLED STONES*] Let the Reader consider, that there are many kinds of Stones found, which tinge particularly; but all fixed Powders, which tinge, I here signify by the name of Stones; yet one tingeth more highly then another, as especially the Stone of Philosophers, which obtains the principal place; [*TINCTURES, THEIR DIFFERENCE*] the next is the Tincture of *Sol*; and of *Luna*. For the White: after these, the Tincture of *Vitriol* or *Venus*; likewise the Tincture of *Mars*; either of which hath in it self the Tincture of *Sol*, when reduced to Fixation. Next to these follow the Tinctures of *Jupiter* and *Saturn* for Coagulation of *Mercury*; and lastly, the Tincture of *Mercury* itself. This is the difference and multiplicity of Stones and Tinctures, all which notwithstanding are generated from Seed, and from one original *Matrix*, from which the true Universal Stone proceeds, but out of these no other Metallic Tincture is to be found. But all other Things, by what name soever called, all Stones (whether precious or common) I touch not now, nor have I any Intention to write or speak anything of them at this time; because they contain in themselves no other Virtues, then what appertain to Medicine. Nor shall I here make mention of *Animal* or *Vegetable* Stones; because they are only conducent to Medicine; but for Metallic Works unprofitable and void of all Virtue. Yet all the Virtues of all Things, *Mineral*, *Animal*, and *Vegetable*, collected into one, are found in the Stone of the Philosophers.

[*SALTS, ENDUED WITH NO TINGING VIRTUE*] Salts are endued with no tinging Virtue, but are only Keys* for the Preparation of Stones; otherwise of themselves they effect nothing.

[*SALTS ARE KEYS*] **Salts, as here is rightly said, are Keys; they open the Chest wherein the Treasure lies. But you must be sure to take the true Key; otherwise you may spoil the Lock, and not open the Chest. It is not safe in this Case to take Quid for Quo, as Apothecaries are wont. You must have a Philosophic Key, and proper Salts fit for opening must be taken. Nor condemn this Distinction, which is intimated, between Salts opening, which the Author here calls (as they are) Kleys, and Salts fixing, which enter the Treasure itself; as is sufficiently manifest by the Text.*

[*FIXATION, WHENCE*] Yet, as for Metallic Salts (I now speak to the purpose if you rightly understand, what distinction I put between Mineral Salts) they are not to be slightly esteemed, nor to be rejected in Tinctures, since we can in no wise be without them, in their Composition, For in them lyes that most precious Treasure, from which every Fixation derives its Original.

[*A STONE, WHETHER MADE WITHOUT MATTER*] Here some may ask, and indeed very properly; whether such a Stone can be made without matter? I answer, No. For every Thing must have its own Matter; but not without Distinction. *Animals* require their Matter, *Vegetables* theirs, and *Minerals* theirs. Only consider and before all things observe this; [*FERMENTATION, NECESSARY, WHY*] viz. that no Body can be profitable for any Stone, without Fermentation, which I find in the end of the Work (I mean as to the Preparation of the Great Stone) cannot be omitted, if I would convert Metals with gain; for although in tangible is taken; yet from that formal Body must be extracted a certain Spiritual and Celestial Entity (shall I call it) or Apparency; for I find no other more fit name to give it: which Entity was by the Stars, before infused into that Body, and by the Elements concocted and made perfect. Yet this Spiritual Entity must again by a lesser Fire, and by the *Regimen* and Direction of the Microcosm, be reduced to a tangible, fixed, Solid and inconsumptible Matter.

But what do I, or what do I speak? I act as if I were deprived of my Reason*, in uttering words so openly. For if I had either Reason or Judgement, I should not discover so great Things with my Tongue, or command my hand to proceed in writing them.

**Art thou well in thy Wits, Basilius, who doest thus prostitute the Arcanum of the Stone, which hath unto this day been so diligently absconded by all Philosophers? Surely, if thou hadst not laboured with I know not what Intemperance of Mind, thou wouldst have closed thy Lips, and not have so clearly opened, what it is to separate the Pure from the Impure, what to render the fixed volatile, and again to fix that; how the Inferior becomes Superior, and that again plunged into the Deep Abyss, from which it had ascended. To discover so many Mysteries, in so few Words, as here thou doest, assuredly if it be not Madness, it is a certain very great benevolence to Posterity. This is that which moved him. Valentine seems to have burned with this Affection, and could not overcome that Inclination of Well-doing to many, by the Obligation (imposed on all Philosophers) of concealing the Secret Mystery of Nature, which by the Author thereof, that is, by Nature naturating with Intellectual Revelation, is communicated only to the Sons of Art worthy and chosen. The Secret of Secrets hath fallen from Basilius, do thou Reader attend, if you find the Pearl, be not like Aesop's Cock.*

All Tinctures of Metals ought to be separated, as that they may be moved with a certain principal Love and Affection to Metals, and have a propensity and desire of uniting themselves with them, and of reducing them to a better State. Will you have an Emblem, or Example? [EXAMPLE OF MAN AND WOMAN] Behold here it is of Man and Woman. If they two be inflamed with Mutual Love, neither Delay, nor Rest is admitted, until they be united, and their Desire satisfied: after this Union they rest, and are multiplied, according to the good pleasure of *GOD*, and the promise of his Blessing.

Man lives obnoxious to many and perillous Diseases, some of which debilitate and consume the powers of Nature so, as the Man can by no Remedies be perfectly restored to Health and his former Strength [LOVE, A DISEASE] But Love is a disease, with which no other Disease may be compared, which is not healed unless by Production of its own like, which either Sex desireth, and that Desire is not satisfied, unless by fulfilling his will of the enkindled affection. How many Testimonies of this violence, which is in Love, are daily found? for it not only inflames the Younger Sort, but it so exagitates some Persons far gone in years, as through the burning Heat thereof, they are almost mad. Natural Diseases are for the most part governed by the Complexion of Man, and therefore invade some more fiercely, others more gently; but Love, without distinction of poor or rich, young or old, seizeth All, and having seized so blinds them, as forgetting all Rules of Reason, they neither see or fear any Snare. Peculiar Members are infected with the Singular Symptoms of other Diseases, all the other parts remaining sound and free from that Dolour. Whom Love infects, it invades all over, penetrates the Body and its whole Substance, Form, and Essence, and leaving nothing unoffended. For taking place in the Heart there it kindles a Fire, the burning heat of which is diffused through the Veins, Arteries, and all the Members of the body, and in a word I say, where Love once hath fixed its Root, the man is so deprived of all sense, reason and understanding, as he forgets all things, seriously minds nothing; he is unmindful of *GOD* and his Law, his promises and threats he little regards; the torments of Hell and rewards of Eternal Life he condemns. I speak of inordinate and unlawful Love, to which, if a man be once addicted, he adheres so pertinaciously, as nothing can reclaim, nothing can restrain him; he forgets his Duty, Calling and Condition; derides all admonition, despiseth the Counsels of Parents, Superiors, and others who wish him well; briefly I say, he is so blind with Love as he cannot see his own Misery; so deaf, as he cannot hear those, who by their faithful advice, endeavour to turn and avert from him, the damage and evil, which would befall him. Love leaves nothing entire, or sound in the Man; it impedes his Sleep, he cannot rest either Night or Day; it takes off his Appetite, that he hath no disposition either to Meat or Drink, by reason of the continual Torments of his Heart and Mind. It deprives him of all Providence; hence he neglects his Affairs, Vocation, and Business; he minds neither Labour, Study nor Prayer; casts away all thoughts of any Thing but the Body beloved; this is his study, this his most vain Occupation. If to Lovers the Success be not answerable to their Wish, or so soon and prosperously as they desire, how many Melancholies hence arise, with griefs and sadnesses, with which they pine away and wax so lean, as they have scarcely any flesh cleaving to the Bones; yea, at length they loose the Life itself, as may be many Examples! [LOVES SAD EFFECTS] For such Men (which is an horrible thing to think of) slight and neglect all perils and detriments, both of the Body and Life, and of the Soul and Eternal Salvation.

[AUTHORS CONTINENCY] But of these enough; for it becomes not a Religious Man to insist too long upon these Cogitations, or to give place to such a flame in his heart. Hitherto (without Boasting I speak it) I have throughout the whole course of my Life kept myself safe and free from it, and I pray and invoke *GOD* to vouchsafe me his Grace, that I may keep holy and inviolate the Faith, which I have Sworn, and live contented with my Spiritual Spouse, the Holy Catholic Church. [TINCTURE OF ANTIMONY OUGHT TO HAVE LOVE TO METALS] For no other reason have I alleged these, then that I might express the Love, with which all Tinctures ought to be moved toward Metals, if ever they be admitted by them into true Friendship, and by Love, which penetrates the inmost parts, be converted into a better State.

Now let us proceed to the Preparation of the Stone, and leave its use to the Close of this Discourse. This Stone is of a penetrable and fiery Nature, is cocted and brought to Maturity by fire, no otherwise, then all other Things, which

are found in this Orb; which notwithstanding as they are of a diverse Nature, so they in diverse manners obtain that, according as the Nature of Things supplies with Disverse Fires.

[DIVERSE FIRES] The first Fire is *Celestial*, by *GOD* kindled in our Hearts, by which being inflamed we are moved with Love and a certain confidence in and of *GOD* our creator, of the Most Holy and incomprehensible *Trinity*, and of the Mercy, Grave of our Saviour *JESUS CHRIST*; which Confidence kindled is Us by Love, never fails, never deserts us in our Necessities, but will most certainly deliver our Souls from everlasting destruction. The second Fire is Elemental, produced by the Sun, and tends to the Ripening of all things in the Macrocosm. The third Fire is corporal, with which all Foods and Medicines are cocted and prepared, without which Men can neither obtain Health of Body, nor sustentation of Life. Of a fourth Fire mention is made in the Sacred Scriptures, *viz.* that, which before the Supreme Judgement of *GOD* shall consume this visible World: but what Fire is, and how it shall operate, that (if we be wise) we must leave to be judged of by his own Supreme Majesty. A fifth Fire is also spoken of in Holy-Writ, *viz.* Eternal Fire, in which never to have end, the Divels shall never be set at liberty from their Infernal Prison, and wicked Men, their Companions, adjudged to those Eternal Fires, shall be vexed, punished and miserably tormented forever: from which I pray the Omnipotent and merciful Lord to preserve us. Here I would admonish all and every Creature endued with Reason, by their Prayers to beg that Grace and Mercy from the Omnipotent, that they may so conform their Life to the Divine Precepts, and their own Duty, as that they may escape this Fire, and its Eternal Torments.

Our stone of Fire (which is to be noted) must be cocted ripened with Corporal Fire in the Microcosm, as all other Medicines and foods are prepared by the same. For where the great Fire of the Macrocosm ceaseth from it's Operation, there the Microcosm begins to produce a new Generation; therefore this Concoction should seem strange to no Man. [EXAMPLE OF CORN] Corn is augmented and ripened by the Elementary Fire of the Macrocosm; but by the Corporal Fire of the Microcosm a new Coction and maturation is effected, that man may use and enjoy that Divine Gift for his sustentation, and by the same perfect the Last and the Least, which is produced of the first and the Greatest.

The true Oil of *Antimony*, of which the said stone of Fire is made, is above measure sweet, and from it's earth is in such wise purged and separated, as if a Glass full of it be exposed to the Sun, its casts forth various and wonderful Rays (as if many fiery *Speculums* were there present) resembling a Ruby and other Colours. Now attent O lover of Art and Truth, and hear what I shall teach.

[ITS PREPARATION] Take in the Name of the Lord, of the *Minera* of *Antimony*, which grew after the Rising of the Sun, and Salt Nitre, of each equal Parts; grind them subtly and mix them; burn them together with a moderate Fire very artificially and warily; for in this the principal Part of the Work consists. Then you will have a matter inclining to Blackness. Of this matter make Glass, grind that Glass to a subtile Powder, and extract from it an high red Tincture with sharp distilled Vinegar, which is made of it's proper *Minera*. Abstract the Vinegar in B.M. and a Powder* will remain, which again extract with Spirit of Wine highly rectified, then some feces will be put down, and you will have a fair, red, sweet Extraction, which is of great Use in Medicine. This is the pure Sulphur of *Antimony*, which must be separated as exactly as is possible.

**Take heed, take heed, O Lover of Chymistry, lest by this Fire, you burn the Wings of your Bird, which hath now raised itself to the top of Mountains. Few words are sufficient to the Intelligent, there is no need to inculcate the same things often, our careful Father Basilus doth that often enough.*

If of this Extraction you have one pound two ounces take of the Salt of *Antimony*, as I taught you to prepare it, four ounces and on them pour the Extraction, and circulate them, for a whole Month at least, in a Vessel well closed, and the Salt will unite itself with the Extracted *Sulphur*. If *Feces* be put down, separate them, and again abstract the Spirit of Wine by B.M. The Powder which remains urge with vehement Fire, and not without admiration will come forth a varicoloured sweet Oil, grateful, pellucid and red. Rectify this Oil again in B.M. So that a fourth part of it may be distilled, and then it is prepared.

This Operation being completed, take living **Mercury* of *Antimony*, which I taught you how you should make, and pour

**This word, our Mercury, which hath so often rendred Thee ambiguous, is also here to be understood: for if you take not the true Mercury of Philosophers, you do nothing. Whosoever he be, that shall candidly tell you this, he will be to you Pylades, and you to him Orestes, and nothing will be more pleasant to me in Life, then to join myself to you, as a third Sociate in Friendship.*

upon it red Oil of Vitriol made upon Iron, and highly rectified. By Distillation in Sand remove the Phlegm from the *Mercury*; then you will have a precious Precipitate, in Colour such, as never was any more grateful to the Sight; and in Chronical Diseases and open Wounds, it may profitably be used for recovering the *Pristine Sanity*. For it vehemently dries up all Symptomatical Humors, whence Martial-Diseases proceed; in which the Spirit of the Oil, which remains with the *Mercury*, and conjoins and unites itself thereto, powerfully helps.

Take this precipitate, and of the Superior Sweet Oil of *Antimony*, equal parts, pour these together into a Phial, which well closed set in convenient heat, and the Precipitate will in time resolve and fix itself in the Oil. Also the Phlegm by the Fire will be consumed, and what remains become a Red, dry, fixed and fluid* Powder which will not in the least give forth from itself any Fume.

**Far hence, far hence ye Prophane, and you that are initiated in the Sacred Mysteries of Chymistry keep silence. Let the King enter into his Bed-Chamber, that he may consummate his Marriage.*

O tua te quantis attollet Gloria rebus,

Connubio tali!

Yet make not too much hast to enter, or disturb this Matrimonial Conjunction, let them for many Months delight themselves with their mutual Embraces, and not go forth, until from their mutual Love they be changed into an Hermaphroditic Body, and have produced that Son desired by all, if not a King of Kings, yet at least a Regulus or Ruler, which delivers his Subjects from Diseases and Necessity.

Now my Follower, and Disciple of Arcanums, I will speak after a Prophetic manner. When you have brought your Philosophic Studies (in the Method by me prescribed) to this end, you have the Medicine of Men and Metals; which is grateful and Sweet in use, without all peril, it is penetrative, yet causeth not Stools, it induceth Emendation, and expells Evil. Use it as is fit, and it will yield you many Commodities, both for health and temporal necessity; by which means you will be freed from want in this World; which is a thing of so great Moment, as no Sacrifice of Gratitude can be found sufficient to answer this favour of *GOD* showed to you.

Here, O my *GOD*, I as a Religious Man am troubled in Mind; and know not whether I do well or ill, whether in * speaking I have exceeded or not reached the due Bounds; whilst I propose, and show to everyone, as it were, his proper House. Do thou, that art a young Follower of Art, inquire, search and try, as I have done; if you attain your End, give greatest thanks to *GOD*, and after him to me your Master. But if you turn aside into devious and by-paths, blame yourself, not me; for I am not guilty of your Error.

**Our Author judgeth himself to have spoken too much, if you also think the same, you will rejoice in his Sadness. Yet it is strange, that no Man can contribute a little Light to this Philosophy, but he presently repents.*

Now I have said enough, and writ enough, and taught so clearly and openly, and plainly, as more manifestly or clearly cannot be done by Writing, unless some lost and rash Man, knowing and willingly would cast himself into Hell, to be there Submerged and Perish: Because, by the Creator of all Things we are most severely prohibited further to unlock these Mysteries, or to eat of the Tree which was planted in the midst of Paradise. Therefore here I will desist, until Others show, what is here to be done by Me, and what they judge is to be omitted, and say no more of this, but pass to its Use.

[ITS USE, DOSE, ETC]

Therefore know, that the Use consists in Observation of the Person and his Complexion, with relation to what appertains to Humane Health, that Nature be not overpowered with too great a Quantity, or not helped by too small. Yet too much is not so Religiously to be feared; for it will not readily hurt; because it helps to recover the pristine Sanity, and fights against Venom, if any be in the Body. This I only add, three or four grains of it, given in one only Dose, are sufficient for expelling every Evil, if taken in Spirit of Wine. For this Stone or Tincture passeth through all the Members of the body, and contains in itself the Virtues of many *Arcanums*. It remedies the Giddiness of the Head, and all Diseases, which have their Original from the Lungs. It cures difficulty of Breathing, and the Cough; the Leprosy and *French Disease* are amended by it, in a wonderful manner. The Pest, Jaundices, Dropsies and all kinds of Fevers, are often cured by it, Likewise it expels Venom taken. It profits those, who have drunk a *Philtrum* or Love-potion: it confirms all the Members, Brain, Head, and all things depending thereon. It helps the Stomach and Liver; heals all Diseases, which proceed from the Reins; cleanseth the impurity of the Blood. Also this Tincture of *Antimony*, breaks the Stone of the Bladder to Powder; and expells it; it provokes Urine, when stopped by *Flatus's*. It restores the vital Spirits, cures Suffocation of the Matrix, makes the Menstrues flow if stopped and stays them if inordinate. It causeth Fruitfulness, and makes the Seed sound, and available for Generation, both in Women and in Men. Lastly, this Stone of Fire inwardly taken (convenient Plaisters being also outwardly applied) heals the Cancer, Fistula's, Rottenness in the Bones, and all corroding Ulcers, and whatsoever takes beginning from the Impurity of the Blood, also the Disease itself called *Noli me tangere*. And that I may comprehend all in few Words, this Stone, like a Particular Tincture, is a * Remedy against all Symptoms, which can happen to the Humane Body. All which Experience will very clearly demonstrate to you, and open the way further to you, if you be a Physician, called by *GOD* to that Office.

**Here the Medicinal Virtues are spoken of at large. For Basilius supposeth Thee not to be defiled with the Filths of Avarice, but splendid in the Light of Charity, and burning with a Desire of helping thy Neighbour, following him discovering these Secrets. Now farewell, O Lover of Chymistry, and if thou, hast gained any Light, either from the Interpretation of Basilius, or my Commentaries, enjoy it, and communicate the same to the Sons of Art, that*

Philosophy oppressed for so many Years with the intollerable Yoak of Avarice, may at length be revived, and a return be of those times of Egyptians, in which Trismegistus and so many wise Magi, Philosophized not with empty denominations, but with wonderful Works.

In these, I think I have done my part, and writ more then sufficiently of *Antimony*. If any One follows me, he may add his own Experiences to these, that (with the singular favour of *GOD*) before the consummation of the World, the Mysteries of the most High may be revealed, to his Glory and honour, and the Conservation of health. Having finished this Discourse, I intend for a time to be silent and return to my Monastery, there to learn Philosophy further, that I may be able to comment of other Thigns and as I have already promised, I shall (*GOD* willing) write of Vitriol, common Sulphur, and the Loadstone, and open their Principle, Powers, Operations, and Virtues.

Let GOD the Lord of Heaven and Earth grant to us temporal Health here, and hereafter Eternal Salvation for the Refreshment of our Souls, in the Seas of Joy and Gladness, never to be limited within any Bounds of time. Amen.

Thus I conclude this Treatise of *Antimony*, and all whatsoever I have written of the Red Oil of *Antimony*, which is made of its Sulphur highly purified, and of the Spirit, which is prepared of its Salt. Incline your Mind to those, and with them compare these last, which I have prescribed you touching the Stone of Fire. If you acutely consider them, you may easily find their Union unto the End, by this Comparison. For the Foundation is the same, the Reason the same, the Friendship the same, by which Health is required, and the Stag long sought taken with a pleasant Hunting.

FINIS.

Aphorisms of Urbigerus

Aphorismi Urbigerani, Or Certain Rules, Clearly demonstrating the Three Infallible Ways of Preparing the Grand Elixir or Circulatum majus of the Philosophers..London, 1690.

To our Dear Disciples, Honor'd Coadepts, and all Well-Wishers to our Hermetic Art.

Finding you, dear Sons who have through our means attained to the true knowledge of our first Matter, worthy to receive our farther Instructions in the remainder of the Process, to extirpate all such Ambiguities, as you may have conceived in our Absence, to facilitate your Labors, and to precaution you in the bringing your Work to its Highest Perfection. We here, according to your desire, expose to you, and for your sakes, to the Public, all the most infallible Rules, necessary for preventing of Errors in this great Undertaking And tho you, ever - honored Coadepts, could never yet so far prevail on yourselves as to come to a Resolution of presenting the World with the full Practice of this our Art, joined to the Theory, we are nevertheless most certain, that we shall not receive any Reprimand from you for bringing to light these our Rules which we have so penned, that even those, who know not our Person, will not only soon perceive, that all we have written, is the real Truth, clearly exhibiting both the Theory and Practice of the whole Hermetic Art, but also conclude, that these Operations must of necessity have very often passed through our own hands from our giving such positive Rules and infallible Instructions, elucidating all the most obscure and intricate Enigrns of time Philosophers, and warning them of all the Accidents, that may happen is the working of our Subject. We are, we say, confident, you neither will, nor can blame us for this: since you will easily discern, that our Design is purely to instruct our Disciples, and prevent all the Well-wishers to this most noble Art from being imposed upon, and cheated, by any false pretended Adept : to the end that those, who shall from the Divine Benignity, by the help of these our Aphorisms, or otherwise, have received the blessed knowledge of our first Matter, which is the very same in all our three ways of producing the grand Elixir, may through these our certain Rules obtain the accomplishment of their Desires.

Having in our Travels fortun'd to meet with some Persons of true Principles in Philosophy and Religion, we could not but embrace them and instruct them towards its farther Perfection, which cannot be attained without the true knowledge of our Celestial Art. by which comprehending all the Mystery of Mysteries, we learn also how to serve God in Faith and Truth. And since we have no Obligation to any living Soul for time knowledge, we possess, having attained it all by the only Blessing of Almighty God on our Industry and Experiences being therefore at more liberty than those, who receive such a Favor from us, or some other Adept, 'tis our Determination, whenever we meet with Persons so qualified, always to do the same. Wherefore being at present in England though we are no Native of this Kingdom we think it necessary to set forth these our Aphorisms in the English tongue not in the least doubting, but that the Knowing, minding only the sense, will easily pardon any Impropriety, they may find in our Expressions: and when Providence shall carry us into any other Country, we, having attained to some competent Knowledge of most

European Languages, shall again take care to publish them in the Speech of the Place, where we shall be. that we may the sooner obtain the effects of our Desires, which aim at nothing, but the undeceiving of the World by setting down certain and evident Marks, distinguishing the Worthy from the Unworthy, and at the bringing of Men to leave their unnecessary Forms, by instructing them in the true way of Serving God, being the only means to render them happy both in this World, and the next.

Aphorismi Urbigerani **Or Certain Rules, clearly demonstrating the Three infallible Ways of** **preparing the Grand Elixir of the Philosophers.**

- I. The Hermetic Science consists only in the right knowledge of the first Matter of the Philosophers which is in the Mineral kingdom not yet determined by Nature.
- II. An undetermined Matter being the beginning of all Metals and Minerals, it follows, that as soon as any one shall be so happy, as to know and conceive it, he shall easily comprehend also their Natures, Qualities, and Properties.
- III. Although some Persons, possessed with foolish Notions, dream, that the first Matter is to be found only in some particular places, at such and such times of the year, and by the Virtue of a Magical Magnet; yet we are most certain (according to our Divine Master Hermes) that, all these Suppositions being false, it is to be found every where, at all times and only by our Science.
- IV The Hermetic Art consists in the true Manipulation of our undetermined Subject, which before it can be brought to the highest degree of Perfection, must of necessity undergo all our Chymical Operations.
- V. Our Chymical Operations are these Amalgamation Sublimation, Dissolution Filtration, Cohobation, Distillation, Separation, Reverberation, Imbibition, and Digestion.
- VI. When we call all these Operations ours, they are not all to be understood according to the common Operations of the Sophisters of Metals, whose Industry consists only in disguising of Subjects from their Form, and their Nature: but ours are really to transfigure our Subject, yet conserving its Nature, Quality, and Property.
- VII. This our Subject, after its having passed through all those artificial Operations, which always imitate Nature, is called the Philosophers Stone, or the fifth Essence of Metals, being compounded of the Essence of their four Elements.
- VIII. Time Metals and Minerals, which Nature already determined, although they should be retrograded into running Mercury Water, and Vapor; yet can they by no means be taken for the first Matter of the Philosophers.
- IX. Our true and real Matter is only a Vapor, impregnated with the Metallic Seed, yet undetermined, created by God Almighty, generated by the Concurrence and Influence of time Astrums, contained in the Bowels of the Earth, as the Matrix of all created things.
- X This our Matter is called undetermined, because, being a Medium between a Metal and a Mineral, and being neither of them, it has in it power to produce both, according to the Subject, it meets withal.
- XI. Such a Metallic Vapor, congealed and nourished in the Bowels of the Earth. is called the undermined, and when it enchants the Serpent with the Beauty of its terminated and additional Fire, the determined Green - Dragon of the Philosopher and without the true knowledge and right Manipulation of it nothing can be done in our Art.
- XII. This Green-Dragon is the natural Gold of the Philosophers, exceedingly different from the vulgar, which is corporeal and dead, being come to the period of its Perfection according to Nature, and therefore incapable of generating, unless it be first generated itself by our Mercurial Water but ours is spiritual, and living, having the generative Faculty in itself, and in its own Nature, and having received the Masculine Quality from the Creator of all things .
- XIII. Our Gold is called Natural, because it is not to be made by Art, and since it is known to none, but the true Disciples of Hermes, who understand how to separate it from its original Lump, 'tis called also Philosophical; and if God had not been so gracious, as to create this first Chaos to our hand, all our Skill and Art in the Construction of the great Elixir would be in vain.
- XIV. Out of this our Gold, or undetermined Green-Dragon, without the addition of any other created thing whatsoever, we know how through our Universal Menstruum to extract all our Elements. or Principles, necessary for the performance of our great Work: Which is Our first way of preparing the Grand Elixir and since this our first Chaos is to be had without any Expense, as costing only the trouble of digging it out of the Mines, This is not unfitly called the only way of the Poor.
- XV The Operations in this our first way being in a manner the same with those of our second, which is, when we join our determined Dragon with our Serpent, we shall (to avoid Repetitions) in the subsequent Aphorisms give Instructions for them both together.

XVI. Our Serpent, which is also contained in the Bowels of the Earth, being of all created things whatsoever the nearest subject of a Feminine Nature to our Dragon, through their Copulation such an astral and metallic Seed, containing our Elements, is also to be brought forth as can, though with somewhat more of Expense and Time, perform the whole Mystery of Hermes.

XVII. Since our Serpent is of all created things the nearest subject of Feminine Nature to our Dragon, she is after her Copulation to be taken for the Basis of our Philosophical Work: for out of her Bowels, without the help of any other Metal or Mineral, we must draw our Principles or Elements, necessary to our Work, being retrograded by the Universal Menstruum.

XVIII. This Feminine Subject cannot be retrograded, unless to free her from her Impurities, and Heterogeneous Qualities, she is first actuated by her Homogeneous ones, that she may be in better Capacity to receive the spiritual Love of our Green Dragon.

XIX After our Serpent has been bound with her Chain, penetrated with the Blood of our Green-Dragon, and driven nine, or ten times through the combustible Fire into the elementary Air, if you do not find her to be exceeding furious, and extremely penetrating,, 'tis a sign, that you do not hit our Subject, the Notion of the Homogenea, or their Proportion.

XX If this furious Serpent, after it has been dissolved by the Universal Menstruum, filtrated, evaporated, and congealed nine or ten times, does not come over in a Cloud, and turn into our Virgin Milk, or Metallic argentin Water, not corrosive at all, and yet insensibly, and invisibly devouring every thing, that comes near it, 'tis plainly to be seen that you err in the Notion of our Universal Menstruum.

XXI. The Serpent, of which I now speak, is our true Water of the Clouds, or the real Eagle and Mercury of the Philosophers, greatly different from the Vulgar, which is corporeal, gross, dead, and full of Heterogeneous Qualities, and a Subject fallen from its Sphere, like unripe Fruit from the Tree; but ours is spiritual, transparent, living, residing in its own Sphere, like a King on his Throne

XXII. Though the vulgar Mercury is such an unripe fruit, corporeal, and dead; yea, if you know how to amalgamate it with our Dragon, and to retrograde it with the Universal Menstruum, you may assure your self, that out of this also you shall be able to prepare a Sophic Mercury, with which you shall certainly produce the great Elixir, discover the Secret of Secrets, unlock the most difficult Locks, and command all the Treasures in World.

XXIII. Our Mercury is called the Mercury of the Philosophers, because it is a Subject, which is not to be found ready prepared to our hand : for it must of necessity be made by our Philosophical Preparations, out of the first Chaos, and although it is Artificial, yet it is naturally prepared, Nature, which is imitated in the Preparation of it, contributing likewise thereunto.

XXIV. Since our Subject cannot be called the fiery Serpent of the Philosophers, nor have the power of overcoming any created thing, before it has received such Virtue and Quality from our Green-Dragon, and the Universal Menstruum, by which itself is first overcome, devoured, and buried in their Bowels, out of which being born again, 'tis made capable of the same, it follows, that such a Virtue of killing and vivifying is natural to our Dragon and the Universal Menstruum.

XXV. The Universal Menstruum of the Philosophers is that Celestial one, without which nothing can live nor subsist in this World: 'tis also that noble Champion, which delivers time uncorrupted Virgin, Andromeda, who was with a strong Chain fastened to the: Rock in the power of the Dragon, of whole spiritual Love having admitted, for fear of being eternally ruined and devoured by him (which could not have been avoided, if this noble Champion had not come to her assistance) She is to be delivered of a Child, which wilt be the Wonder of Wonders, and Prodigy of Nature.

XXVI. If our Virgin in her Confinement, before she is set at liberty, does not manifest her extreme Beauty with all her internal, divers, delicate natural Colors wonderfully charming, and very pleasant to the Eye, it signifies, that she has not sufficiently enjoyed the spiritual Company of the Dragon.

XXVII. If the Universal Menstruum has not totally delivered the Virgin from the Claws of the Dragon, it is a sign, either that she was not sufficiently free from her Heterogeneous Qualities, or that she had not received from the external Heat a sufficient penetrating Quality, or that the Universal Menstruum was too weak to perform its Undertaking.

XXVIII. To know, whether the Amalgamation, Sublimation, Dissolution, Filtration, Coagulation, and Distillation have been Natural and Philosophical, the whole Body of the Serpent must come over spiritual and transparent, leaving only some few and very light Feces at the bottom, which can by no Art be reduced! - either into a running Mercury, or and other kind of metallic Substance.

XXIX. After all these above-mentioned Operations, and the Separation, if our Serpent, being amalgamated with any Metal, pure or impure, cannot suffer the Fusion, it will be in vain for you to go any farther with it: for you may assure your self, that you do not walk in the true Paths of the Hermetic Art.

XXX. Our Philosophical Distillations consist only in the right Separation of our Spiritual and Mercurial Water from all its poisonous oily Substance, which is of no use at all in our Art, and from though Caput Mortuum, which is left behind after the first Distillation.

XXXI. If after the first Distillation an exceedingly corrosive and extremely penetrating red Oil does not ascend (which as soon as it begins to appear in the Neck of the Retort, the Receiver must be changed it signifies that the Distillation has not been rightly performed, and by Consequence, that the internal Fire of our metallic vaporous Water, being burnt up, and corroded by its poisonous Vapor, and the outward Fire, is still mixed with it, and with the Caput Mortuum.

XXXII. In case you should commit so great an Error in the performance of this first Distillation, although it will never be in your power to prepare the Mercury Duplex of the Philosophers, unless you should begin the whole World agan; from the very beginning; yet, if you have any farther Skill in our Art, you may easily prepare our Mercury Simplex, with which you will effect great and miraculous things.

XXXIII. This blood red Oil with its only Fumes penetrates every Part and Atom of all Metals and Minerals, and principally of Gold out of which Dissolution one may easily extract the right Tincture or Essence with highly rectified Spirit of Wine, and bring it over the Alembic with it: which is indeed a great Medicine for humane Bodies.

XXXIV. A deep blood-red Tincture of excellent Virtue is to be extracted also out of the above-mentioned Caput Mortuum. accidentally and unfortunately intermixed with the internal Sulfur of our Mercurial Water, and with the red Oil, with highly rectified Spirit of Wine : with which after it has been evaporated to a Powder, imbibed, and Philosophically digested, you may assure your self of having the Medicine of Medicines, next to the great Elixir, by which you may, imperceptibly and quickly cure all sorts of Distempers, to the great Admiration. Of all Galenists, and to the Astonishment of all Vulgar Chymists.

XXXV. The most part of the Philosophers, whilst their Intention was to go farther to the noblest Perfection of our Celestial Art, either employed this red Oil brought to a Potability, for internal Medicines, or to external Diseases without any farther Preparation of it, till they had obtained the great Elixir.

XXXVI. If the Caput Mortuum has not the Magnetic Quality in attracting the Spiritus Mundi into itself from the Astrums, it is a sign, that at time end of the Distillation of the red Oil the outward fire was so violent, as quite to burn up the Magnet, which is contained in the first Feces of our Mercurial Water.

XXXVII. After the first Distillation, if the least Part of the Virgin Mercurial Water can by any Art whatsoever be brought to running Mercury, or any other kind of a Metallic Substance, it is an evident sign, that either the Subject, or its Preparation and Reduction into Water, has not been real, natural, or Philosophical.

XXXVIII. The above-mentioned Spiritus Mundi, although of no use at all in this our great Work, is yet a great Menstruum in extracting of Tinctures out of Metals, Minerals, Animals, and Vegetables, and in performing great things in the Art volatilizing all fixed Bodies, and principally Gold.

XXXIX. A great many Pretenders to the true Hermetic Knowledge prepare Menstruums, to dissolve common Mercury, and to turn it into Water several manner of ways, and by several additions of Salts, Sulfurs, Metals, and Minerals. but, since all those Preparations are sophistical, any one, expert in our Art, will be able to reduce it to its running Quality again.

XL. The Quality of our Mercurial Water: being to volatilize all fixed Bodies, and to fix all those, that are volatile, fixing It self with those, that are fixed, according to the Proportion of it, dissolving its own Body, it unites inseparably with it, conserving always its own Qualities and Properties, and receives no Augmentation from any other created thing, but only from its crude Body.

XLI. Our Mercurial Water has such a sympathy with the Astrums, that, if it is not kept very close, and Hermetically sealed, it will in a very short time, like a winged Serpent, fly away in a wonderful manner to its own Sphere, carrying along with it all the Elements and Principles of Metals, and not leaving so much as one single drop, or the least remainder, behind.

XLII. Several Pretenders to the Magical Science prepare Magical Magnets, to draw from the Air, and (as they pretend) from the Astrums such Menstruums, as they think necessary for she Production of the Great Elixir; but their Magnets being compounded of several determinate things, although their Menstruums are great Dissolvents yet we do on assured knowledge affirm that they can never perform any real Experiments in our Art.

XLIII. Some are of Opinion, that, unless the Operator is Master in the Magical Science, and fundamentally understands all its Experiments, he will never be able by any other Art whatsoever to bring forth any such things, as can produce the Universal Elixir. Now, although we do not deny, that the Magical Knowledge is required to attain to the highest degree of Perfection in all Sciences, yea; we are most certain, that it is not at all necessary to the Formation of the Grand Elixir upon Animals, Metals, Precious Stones, and Vegetables.

XLIV. Our Virgin Milk, or Metallic Water, being brought to a perfect Spirituality, and excellent Diaphanity, is called the true Chaos of the Philosophers: for out of that alone, without any addition of any created, or artificially

prepared thing, we are to prepare and separate all the Elements, which are required to the Formation of our Philosophical Microcosm.

XLV. To understand aright, how out of this our Chaos we are to form our Philosophical Microcosm, we must first of necessity rightly comprehend the great Mystery and Proceeding in the Creation of the Macrocosm: it being extremely necessary to imitate and use the very same Method in the Creation of our little one, that the Creator of all things has used in the Formation of the great. One.

XLVI. When our Chaos or Celestial Water has purified itself from its own gross and palpable Body, it is called the Heaven of the Philosophers, and the palpable Body the Earth, which is void, empty, and dark : And if our Divine Spirit, which is carried upon the face of the Waters, did not bring forth out of the palpable Body that precious Metallic Seed, we should never be able by any Art whatsoever to go on any farther with time perfect Creation of our Microcosm according to our Intent.

XLVII. This Heaven of the Philosophers, after it has separated itself from the Earth, containing our Philosophical Seed, and the Magnet of our Salt of Nature, and from the superfluous Waters, is called the Mercury simplex of the wise men. for whosoever attains it, at the same time attains also the Knowledge and Power of retrograding Metals, Minerals, &c. so as to reduce them to their first Being, to perfect imperfect Bodies, and to vivify dead ones, conserving always its own Property and Quality to it self, and to produce the Great Elixir according to the usual ways of the Philosophers.

XLVIII. After we have separated the Water from the Water, by which I mean the Mercurial Celestial Water from the superfluous Water, which is the Flegm, by the Blessing of God and the Infusion of our holy Spirit, we do not in the least doubt, but we shall be able to bring forth out of our Earth such Fruits and Subjects, with which we shall certainly perform the whole Creation, carrying our Work to the highest Degree of Perfection.

XLIX. Our Mercurial Water being of the: same Brightness with the Heavens, and our palpable gross Body, which did separate it self from our Celestial Water. having the same Properties and Quality with the Earth, none, but Ignorance, will deny them to be the right Heaven and true Earth of the Philosophers.

L. If, after the Separation of the Spirit from the superfluous Waters, the World, in which it is contained, does not appear mighty clear, and full of light, and of the same brightness with our Celestial Water, it is a sign, that the Separation is not fully performed, the Spirit being still intermixed with the Waters.

LI. If in the space of nine or ten Weeks, or two Philosophical Months at longest, our Mercurial Water has not done separating it self from all its own Earth containing the Metallic Seed, it is an evident sign, that you have either erred in the working of it, or that its Digestion, having been too violent, has confounded and burnt up the principal Subject of the Creation.

LII. This Philosophic Earth, containing our principal Subject, after it has been separated from all the Waters, is very gently to be dried by some external Heat, to free it from its extraneous Humidity, that it may be in a proper Capacity to receive the Celestial Moisture of our Argentin Water, to which it unites its most noble Fruits, with which our Philosophical Microcosm is generated, nourished, and saturated.

LIII. If the Earth, after it has been reverberated, humected with our Celestial Moisture, does not presently enrich our Air with the divine expected Fruits, you must certainly believe, that in the drying of it the external Heat has been so violent, as to burn up the internal Head and Nature of the Earth, and consequently spoil your Undertaking as to the performance of the whole Mystery of the Creation, according to the noblest, richest, shortest, most natural, and secretest ways of the Philosophers.

LIV. In case the Earth should be totally destroyed by the violent external Heat, although it is most certain, you cannot carry on our noble Creation any farther with it; yet if you know how to amalgamate our Mercury simplex with your common Gold, which is dissolved, vivified, and renewed by it, you may be sure of effecting the Great Elixir, although neither so quick. So natural, nor so rich, as you might have done without it. And this is our third way.

LV. The Amalgamation of our Mercury simplex with common Gold consists only in the right Proportion, and in the indissoluble Union of both, which is done without any external Heat in a very short time, without which exact Proportion and right Union nothing of any Moment is to be expected from their Marriage.

LVI. Know then, that this right Proportion is ten parts of our Mercury simplex to one of your finest common Gold in filings, which is dissolved in it, like Ice in common Water, after an imperceptible manner, and as soon as the Dissolution is over, the Coagulation and Putrefaction presently follow, which Effect, if you find not, 'tis a sign, that the Mercury exceeds its due Proportion. Now when your Gold has been thus well amalgamated, united, putrefied, and inseparably digested with our Mercury simplex, you will then have only our Philosophical Sulfur, in which time one might easily have performed the whole Work, working without common: Gold.

LVII. Although our Mercury simplex is exceedingly spiritual and volatile, yet since it is the right Agent, digesting the Seed or Essence of all Metals and Minerals it will, though undigested, naturally adhere to any of them although

corporeal, that shall come near it, and will never leave it, unless it be forced away by the Test, though kept in a great Fusion for many hours.

LVIII. This Mercury simplex, which before its retrogradation was of a Feminine Nature, and before it left all its own Earth, was Hermaphroditic, being powerful in both Sexes, is now become of a Feminine Quality again, and although it has lost the Masculine visible Fire. yet it has conserved its own, which is invisible to us, and with which it performs visible Operations in digesting of imperfect Metals, after its Determination with any of them.

LIX. If this our Mercury (the Proportion rightly observed) should be amalgamated with any imperfect Metal, being first determined with a fixed one, it will regenerate and perfect the same, not losing the least Particle of its Virtue or Quantity: Which Metal after the digestion of a Philosophical Month will (as most Philosophers teach) be able to resist all manner of Tryals, and will be far better than any Natural one.

LX. The Determination of our Mercury simplex with any of the fixt Bodies is to be done by dissolving a small quantity of Filings of red or white according to the Color and Quality of the Metal, that you desire to meliorate, and if you do not err in the Separation and Union of the Subjects, you may assure your self of obtaining your desire after a Philosophical Digestion.

LXI. To examine aright, whether the Mercury simplex is rightly prepared, or come to its Perfection, one only Drop, put upon a red-hot Plate of Copper, must whiten it through and through, and must not part with it, although brought into a great Fusion: Which, if you find, it does not, it will be a plain Demonstration, that either your Mercury is not well prepared, or that it has not yet done separating itself from its own Earth.

LXII. If your Mercury simplex, put upon its own dried Earth, does not presently unite with the Essence of Metals, appearing deeper than any Blood, and shining brighter than any Fire, which is a mark of the Reception of its own internal Fire, and that the Eagle has suckt the Blood of our Red Lion, it is an evident sign, that you have erred in the Manipulation of the Earth.

LXIII. This Mercury, thus impregnated with its Essence, or Sulphur of Metals, is called the Mercury duplex of the Philosophers, which is of a far greater Quality, and Virtue than the simplex, with whose Imbibitions in the Salt of Nature, after its being saturated with the simplex, the whole Mystery of the Creation of the Philosophical Microcosm is maintained and perfected.

LXIV. To know, whether your Mercury duplex is Philosophically prepared, and sufficiently impregnated with its own internal Natural Fire, put one single Drop of it upon a red-hot Plate of fine Silver: and if the Silver is not by this Drop penetrated through and through with a deep-red Tincture, enduring the greatest fire of Fusion, it will signifie, that you either fail in the Preparation of it, or that you have not given it time enough to receive a full Saturation out of its own Earth.

LXV. This deep-red Tincture, extracted out of our Philosophical Earth, is called our Sulphur, our undigested, essentificated Gold, our internal elementary Fire, and our Red-Lion: for without its Help and Concurrence our Philosophical World cannot be nourished, digested, or accomplished, being the right Ground, and true Essence of the whole work of our Creation.

LXVI. When the Earth has lost its Soul, the remainder of it is the true Magnet, attracting the Salt of Nature from the combustible Fire after a violent Calcination for several hours: which Salt, after its Purification and Clarification, is called the clarified Earth or Salt of the Philosophers, which, Uniting it self with our single and double Mercury, after their Digestion, is called by our Master Hermes the Universal Spirit earthified.

LXVII. The Extraction, Purification, and Clarification of our Earth or Salt of Nature is to be performed by our Mercury simplex: which being put upon the reverberated Earth, will presently draw to it self, and unite it self with it, yet separable by gentle Distillation, after which the clarified Salt of the Philosophers is at hand.

LXVIII. Although we use our Mercury simplex in the Extraction of its own Soul out of its Body, and for the Clarification of the latter; yet, since it is a philosophical and perpetual Menstruum, it loses nothing of its connatural Prerogatives, nor does in the least diminish in Quantity, being our true Alkahest, as Paracelsus is pleased to call it.

LXIX. Those three Principles, or Elements of our Chaos, perfectly separated from their Impurities, and brought to their highest Perfection, are rightly called the three Herculean Works: for after the Preparation of them all the Labor, Trouble, and Danger will be past.

LXX. Some foolish Operators pretend, that our Great Elixir is to be prepared in a very easie manner, and without any trouble at all, to whom we will with our Master Hermes, briefly answer, That such Impostors neither know our Matter, nor the right Preparation of it. Yet we do not deny, but any Healthy Person, of what Age soever he may be, may understand all our Herculean Labors, necessary to the Performance of it.

LXXI. These our Operations are therefore called Herculean in respect to the rest of the Work, which is exceeding easie, and without the least Trouble or Danger, being for that reason called Childrens Play, because a Child or a Woman, that has any Sense, may easily work it, and bring it to the highest Perfection, according to the Saying of all true Philosophers.

LXXII. Although all those above-mentioned Operations are, according to the common Opinion of the Philosophers, esteemed difficult, and dangerous; yet we can upon our Conscience assure you, that we have our self alone without the help of any Creature living prepared them all on a common Kitchin Fire, as is very well known to several Coadepts, our Friends, who could not but admire and approve of our Industry.

LXXIII. No true Adept or perfect Artist can deny, but that the whole Work of the Great Elixir may from the very beginning to the end be performed on one only Furnace, in one only sort of Vessel, and by one only Person alone, at a very small charge.

LXXIV. Some Impostors would perswade the Vulgar, that Gold, Silver, and many other Ingredients are required to the making of the Grand Elixir according to our noblest ways: which the Doctrines of all the Philosophers, and our own infallible Rules clearly shew to be false: for 'tis most certain, that we neither use any of their Ingredients, nor yet any Silver or Gold, (unless, as we have mentioned, in our third way) till we come to the Fermentation of our Elixirs.

LXXV. We do with all true Philosophers assure you, that all things, necessary for our Philosophical Work, besides the Fewel, Vessels, and some new Instruments, belonging to the Furnace, are to be purchased for less than the Expence of one single Guinea, and that every where, and at all times of the year.

LXXVI. Since neither Gold nor Silver is to be used at all in the Formation and Cibation of our Philosophical Work, it follows, that the old and common saying of some Authors, viz. That without working with Gold 'tis an impossible thing to make Gold, proved to be only a false Notion of Men, who understand not our Art.

LXXVII. When our Herculean Works are brought to Perfection, which is, when our three Principles, or Elements are prepared, purified and perfected, unless the Philosophical and unseparable Union of them is exactly performed, the Great Mystery of our Creation is not to be expected.

LXXVIII. Our Principles or Elements being brought to a perfect and unseparable Union and Digestion, it is called the Triple Mercury of the Philosophers, which being finished, the whole Creation and Formation of our work is crowned.

LXXIX. All our Work of the Creation from its very Beginning to its perfect End may, on our certain knowledg, be perfected in less than nine Months by any skilful and careful Artist, that follows our Rules, unless some Accident should happen in the Preparation of our Herculean Works: which to prevent, we wrought them our self in an earthen Vessel, which we count far better and surer than any Glass, and which is most agreeable to the Practice of the most ancient Philosophers.

LXXX. Before you come to the Union of your Elements, your clarified Earth is before all things to be digested in a moderate and continual Heat of Ashes, to free it from any unnatural Moisture, that it might have attracted after its Purification, to be in a fit Capacity to receive your Mercury simplex, by which it is to be nourished in its Infancy.

LXXXI. If your clarified Earth, after it has been digested the space of a whole Month, does not appear exceeding dry, subtil, and frangible, it will signifie, that you have failed in the Purification or Clarification of it, or that the external Moisture, it had attracted, is not yet parted from it.

LXXXII. Take great Care, that you do not begin your Imbibitions of your Earth, before you find it to be very well purified, clarified, dried, and brought to be very subtil, and extremely frangible: for it would be a great Detriment as well to your Work, as to your Mercury; and, although it should not spoil your Work, yet it would be to you a great loss of Time.

LXXXIII. After our clarified Earth had been brought to a perfect Purity, Dryness, and Frangibility, it is to be imbibed with the eighth part of our Mercury simplex, or Virgins Milk, which will in a very short time be soaked into it, as into a Sponge, which shews the hungry State of our Infant, and then the Fire is to be continued, till the Infant is hungry again.

LXXXIV. If in the space of two or three days, or four, at the farthest, the Infant does not shew it self to be extreme hungry by becoming very dry and frangible again, it will become an evident sign, that you have overcome it by your excessive feeding of it.

LXXXV. Great care is to be taken also in the feeding of the noble Infant: for if you do not well observe all our infallible Rules, you will never be able to bring it to a perfect Maturity: for in the Notion and Proportion of our Imbibitions, and the Management of them, the prosperous and unfaillable End of our Work is to be expected.

LXXXVI. 'Tis always to be observed, that the Fire be very moderate, as long as you are making your Imbibitions, for fear or forcing any part of your Mercury to leave the Earth: for as a moderate Heat makes the Union between the Soul and the Body, and perfects all the Work: so on the contrary a too Violent Heat disunites and destroys all.

LXXXVII. The Infant being dry, the Imbibition is to be repeated again, and this Method is to be used, until the Matter has received its weight of the Mercury: at which time if you do not find it to flow like Wax, and be whiter then any Snow, and very fixt, you must proceed with your Imbibitions, until you perceive the same.

LXXXVIII. The Imbibitions are not to be made any oftner, than once every three or four days, in which time you will find your Matter, having soaked up all your Mercury, to be in great want of Food, which must be supplied, until it be saturated: the Mark of which will be, when it flows like Wax again.

LXXXIX. Your Matter being brought to a perfect Fluxibility, incomparable Whiteness, and unalterable Fixedness, know then, that you have perfected the white Elixir, which, being fermented with fine Silver in Filings, will be in a Capacity to transmute all inferior Metals into the finest Silver in the World.

XC. Before the white Elixir is fermented with common Silver, you may multiply it, as well in Virtue, as in Quantity, by the Continuation of Imbibitions with the Mercury simplex, by which it may by Degrees be brought ad Infinitum in its Virtue.

XCI. The white Elixir being brought to its Degree of Maturity, desiring to go on to its highest Degree of Perfection, instead of fermenting it with Silver, it must be cibated with its own Flesh and Blood, which is the double Mercury, by which it being nourished, multiplied in Quality and Quantity, and digested, the whole Work is accomplished.

XCII. As soon as the first Imbibition is made, you will see a great Alteration in your Vessel: for there will be nothing seen but a Cloud, filling the whole space of the Vessel, the fixt being in controversie with the Volatil, and the Volatil with the fixt. The Volatil is Conqueror at the beginning, but as last by its own internal Fire, conjoynd with the external, both are united, and fixed inseparably together.

XCIII. It is to be observed, that the Glass Vessel, which must be oval, with a Neck half a foot long, and very strong, be of a fit bigness, and of such Capacity, that your Matter, when it is put into the Vessel, may take up only the third part of it, leaving the other two vacant: for, if it should be too big, it would be a great hinderance in performing the Work, and if too little, it would break into a thousand pieces.

XCIV. After you have cibated the noble Elixir with your double Mercury, before it can come to its perfect Fixedness, it must of necessity wander through all the States and Colours of Nature, by which we are to judg its Being and Temperament.

XCV. The constant and essential Colors, that appear in the Digestion of the Matter, and before it comes to a Perfection, are three, viz. Black, which signifies the Putrefaction and Conjunction of the Elements; White, which demonstrates its Purification; and Red, which demonstrates its Maturation. The rest of the Colors, that appear and disappear in the Progress of the Work, are only accidental, and unconstant.

XCVI. By every Cibation of its own Flesh and Blood, Regeneration of its Colors, and Digestion, the Infant will grow stronger and stronger, that at last being fully saturated and digested, it is called the Great Elixir of the Philosophers, with which you will be able to perform, Wonders in all the Regions, as well Animal, as Mineral, and Vegetable.

XCVII. When your Elixir is brought to a Fluxibility, and a perfect Fixedness, if you desire to make a Medicine upon Metals, you must determinate or ferment it with common Gold in Filings, in which Determination it will vitrify, and then you will have an incomparable Medicine, capable to transmute all imperfect Metals into the purst Gold, according to the Doctrine of all the Philosophers, though our self never designed any thing, but an universal Remedy for the Cure of all curable Diseases, incident to Human Bodies, as is well known to our Friends, who have enjoyed the Benefit of these our Labors.

XCVIII. It is to be observed in the Fermentation, that the Elixir exceed not the Ferment in Quantity, otherwise the Spousal Ligament of it cannot be actually performed, and when the Ferment is predominant over the Elixir, all will be presently turned into dust.

XCIX. The best Method of Fermentation is to take one part of the Elixir, and put it into the midst of ten parts of Gold in Filings, cast through Antimony, to free it from all its Impurities, and to keep it in a circulary Fire for the space of six Hours, so increasing the Fire by Degrees, that the last two hours it be in a good Fusion, and when cold, you will find all your Matter exceeding frangible, and of the Color of the Granate-Stone.

C. Common Mercury, amalgamated with Lead, is counted the most proper Subject for making Projection, which being in Fusion, your fermented Matter being divided into three parts, one part of it rolled, in Wax, is to be flung upon the Amalgam: then presently cover the Crucible, and continue the Fire, until you hear the Noise of the Separation and Union: then the second and third part, as before, and being kept for two hours in a continual Fire of Fusion, let it cool by it self.

CI. Whoever shall presume to prepare the Great Elixir according to our most Secret Ways without following and observing all these our infallible Rules, will certainly find himself mightily mistaken at last, having after a great deal of Troubles, Charges, and Pains, reaped nothing but Discontent; and on the contrary they, that shall walk in our true and infallible Paths, shall with very little Trouble and Expences attain to their desired End, which we cordially wish to all those, who are sincere well-wishers to the Hermetic Philosophy.

Circulatum Minus of Urbigerus

Circulatum minus Urbigeranum, or the Philosophical Elixir of Vegetables, with The Three certain Ways of Preparing it, fully and clearly set forth on One and Thirty Aphorisms. By Baro Urbigerus. A Servant of God in the Kingdom of Nature. Experto Crede. London, Printed for Henry Faithorne, at the Rose in St. Paul's Church-yard, 1690. Contained in Aphorismi Urbigerani... London, 1690.

To all True Lovers of the Hermetic Philosophy.

Having in our Precedent Aphorisms clearly delivered such infallible Rules and Instructions, as are necessary for producing our Grand Elixir, or Circulatum majus, the only real Secret of the true Adepts, commanding in all the Kingdoms of Nature, which will, we question not, be no less pleasing to all other lovers of Sciences, than to our Disciples; and being farther inclined fully to inform them, how to preserve themselves and others in perfect Health by obviating any Distemper, that may otherwise overcome them, before they can attain to the Accomplishment of their Desires: We have thought it convenient to impart likewise to them our three several ways of making our Vegetable Elixir, or Circulatum minus, which may be prepared, and brought to its utmost Perfection in the space of a Philosophical Month by any skilful Artist, who shall comprehend and follow our certain Directions, laid down in these our subsequent Aphorisms, where the whole Work is so evidently demonstrated, that none, who is ever so little versed in Chymistry, can be liable to mistake. Nor do we any way doubt, but all those, who shall with a sincere and upright Intention peruse these our plainly-written Aphorisms, will find themselves obliged to bless Almighty God for his infinite Mercy in having inspired us to open their Eyes, that they may see, what is requisite for their present Health, and future Happiness, both which we heartily wish to every one, who, as becomes a true Philosopher, unfeignedly loves God and his Neighbor.

Circulatum minus Urbigeranum, or the Philosophical Elixir of Vegetables, with The Three certain Ways of Preparing it.

- I. Our Circulatum minus is only a specificated Elixir, belonging to the Vegetable Kingdom, by which without any Fire, or further Preparation of the Vegetables, we can in a Moment extract their true Essence, containing their Virtue, Quality, and Property: which is a great Chymical Curiosity, performing Wonders in the Practice of Physick, and in demonstrating some Works of Nature.
- II. We call it Circulatum, because, tho ever so often used in any Extraction, or Chymical Experiment what-ever, it loses nothing of its Quality, or Property: which is a Prerogative, pertaining to the Universal Elixir, called also the Circulatum majus, because it commands in all the three Kingdoms of Nature; whilst this, being restrained to one only Kingdom, is for that reason called Minus.
- III. Out of Diana's undetermined Tears, when Appollo has appeared, after the Separation of the three Elements, Determination, Digestion and glorious Resurrection, we can, without the Addition of any other created thing, prepare this our determined Elixir: Which is the first, noblest, and secretest way of the Philosophers.
- IV. The Determination of our Diana's Tears consists only in their perfect and indissoluble Union with the fixt Vegetable Earth, philosophically prepared, purified, and spiritualized: for the love of which they are forced to leave their first universal undetermined Property, and be clothed with a determined particular one, which is required to this our Circulatum Minus.
- V. Our second way of preparing this our Vegetable Elixir is by a right Manipulation of a Plant of the noblest Degree, standing by itself, or supported by others: after the Preparation of which, and its Putrefaction, Reduction into an Oil, Separation of the three Principles, with their Purification, Union, and Spiritualization, the whole is to be turned into a spiritual ever-living Fountain, renewing every Plant, that shall be plunged into it.
- VI. The third and common way is only a Conjunction of a fixt Vegetable Salt with its own volatil sulphureous Spirit, both to be found ready prepared by any vulgar Chymist, and since in their Preparation the purest Sulphur, containing the Soul, has suffered some Detriment by their not being philosophically manipulated, they cannot be inseparably joined without a sulphureous Medium, by which the Soul being strengthened, the Body and Spirit are also through it made capable of a perfect Union.
- VII. The proper Medium, requisite for the indissoluble Union of these two Subjects, is only a sulphureous and bituminous Matter, issuing out of a plant, living or dead, which is to be found in several parts of the World, and is known to all manner of sea fishermen (the Copavian we find to be the best, and after that the Italian), by which, after it has been separated from its feculent parts through our Universal Menstruum, all the Pores and Atoms of the fixt

Vegetable Salt, which is extremely fortified by it, being dilated, it is made capable of receiving its own Spirit, and uniting itself with it.

VIII. To fortify the Sulphur, and open the Pores of the Salt, no other Method is to be used, but to imbibe the same with the bituminous Matter in a moderate digestive Heat, as if one would hatch Chickens, and as the Salt grows dry, the Imbibitions are to be repeated, until you find it so fully saturated that it refuses to imbibe any more of the Matter.

IX. In the Course of Imbibitions the whole Mass is at least nine or ten times a day to be stirred with a Spatula, or some other Instrument of dry Wood, by which reiterated Motion, the bituminous Matter receives a better ingress into the Body, and perfects its Operation the sooner.

X. Great care is to be taken, that in the performance of the Imbibitions, no kind of Soil or Dust fall into your Matter, for the prevention of which your Vessel may be kept covered with a Paper, prickt full of holes, or any other suitable Covering, and that nothing come near it, which has its own internal Sulphur: for the Pores of the Salt being very much dilated and opened, it may easily determine itself to any other Subject, and so spoil your Undertaking.

XI. If in three, or four Weeks time at farthest, your fixt Vegetable Salt does not manifest its full Saturation, it will certainly be in vain for you to go on any further with it: for you may assure yourself, that you either err in the Notion of the Salt or of the real sulphureous Medium, or in the Management of the Imbibitions.

XII. When your Imbibitions are fully performed, your Salt will then be in a convenient readiness to receive its own Spirit, by which it is made volatil, spiritual, transparent, and wonderfully penetrating, entering on a sudden into the Pores and Particles of every Vegetable, and separating in a moment their true Essence or Elements.

XIII. Although the Salt is fully prepared for the Reception of its own Spirit, yet unless you well observe the right Proportion of them (which is, that the volatil always predominate over the fixt) you will never be able to make any perfect Union between these two Subjects, contrary in Quality, though not in Nature.

XIV. Before you begin your Distillations and Cohobations, after the Addition of the Vegetable Spirit to its own Salt, a Putrefaction of eight to ten days is to precede, during which time, the sulphureous Spirit, strengthened by the bituminous Matter, and finding its Salt fit for Conjunction with it, has the power to enter into its Pores, to facilitate its Volatilization, and Union.

XV. If after six or seven Distillations and Cohobations of the distilled upon the Remainder, you do not find your Spirit to be extremely sharp, and the Remainder in the bottom altogether insipid, it will be an evident Sign, that you fail in the true knowledge of the Vegetable Spirit, which, being exceeding volatil, has in its Nature power to volatilize its own Body, and unite itself inseparably with it, finding it capable of its Reception.

XVI. It is to be observed, that in the Progress of your Distillations the sulphureous Medium does not in the least ascend: for as it is a real Medium, concurring to unite the Body with the Spirit, before the Spiritualization of the Body, and without the Concurrence of which no perfect Union of these two Subjects is to be expected; so on the contrary in the Progress of the Work its Concurrence would be highly disadvantageous to them both, and totally subvert your Operation.

XVII. The ascending of the sulphureous Medium, when the Spirit begins to carry over its own Body, to unite itself inseparably with it, evidently and certainly signifies, that you do not regulate your Fire, as you should, and that, instead of giving a gentle vaporous Heat to facilitate the Union, you give a violent one to destroy it.

XVIII. When your Salt is brought to its perfect Spiritualization, and real Union with its own Volatile Spirit, then you will have in your power your Circulatum Minus, or Vegetable Elixir, and Menstruum, with which you will be able to perform wonders in the Vegetable Kingdom, separating in a moment not only their Principles or Elements, but also at one and the same Operation the Pure from the Impure.

XIX. If into this your Vegetable Elixir you put any green Vegetable, shred in pieces, it will in less than half a quarter of an hour without any external Heat putrify, and precipitate itself into the bottom quite dead, (which is nothing but the cursed Excremental Earth) and on the top will swim a yellow Oil, containing the Salt and Sulphur, and the Elixir will be of the Color of the Plant, comprehending its Vegetable Spirit; which if it does not, 'tis a sign, that your Operations have not been Philosophical.

XX. Only one drop of this yellowish Oil, given in Distempers according to the Virtue and Quality, attributed to the Plant, every Morning and Evening in a Glass of Wine, or any other convenient Vehicle, will infallibly and insensibly cure those Distempers, and corroborate the vital Spirits, if constantly taken to purify the Blood in sickly and infectious Times.

XXI. If you put Coral into this Menstruum, you will see an admirable Experiment: for although its Pores are compacter, than in any other Vegetable; yet it will on a sudden transmit its internal Spirit into the Menstruum, and sending its Soul and Body, like a blood-red Oil to the Top, will at last fall to the Bottom like a greyish Excrement.

XXII. If Myrrh, Aloe, and Saffron, of each an equal Quantity, are put into this Menstruum, the truest Elixir Proprietatis (as Paracelsus terms it) which is a most excellent Cordial, and almost of as great Efficacy and Virtue, as

the Universal Elixir itself, and curing all curable Distempers, will presently swim on the Top, and its Caput Mortuum will separate itself into the Bottom.

XXIII. This Vegetable Menstruum dissolves not only all sorts of Gums, or any other kind of Substance in the Vegetable Kingdom, but also all sorts of Oils and Balsams, coming out of Trees, separating their true Essence, by which you may perform wonderful things both upon living Bodies, and dead ones, the last of which it preserves forever without opening or any further Preparation of them.

XXIV. Though this Menstruum is only specificated upon Vegetables, it will nevertheless in a moment draw the Tincture out of Metals and Minerals; but it will not separate all their Principles, not being the appropriate Menstruum for such Operations; and though such Sulphurs are highly balsamic for the Lungs and Spleen, yet since our Elixir Proprietatis far exceeds those praeter natural Preparations, we only give this as a curious Chymical Experiment.

XXV. Since this Vegetable Menstruum is Eternal, you must observe, that you lose nothing of its Quantity or Quality in separating of it from the Oil, and Spirit of the Vegetable, which is done by a gentle Destillation in Balneo vaporoso, the Vessel being very well luted and dried before. The Menstruum, coming over with the Flegm of the Vegetable, from which it is by a Destillation in Balneo to be separated for farther uses, leaves the Oil at the Bottom, united with its own Spirit, which will easily go over in any common Heat, not leaving any thing behind it: which is a Mark of its Spiritualization, Purification, and Regeneration, that it has receiv'd from the Menstruum.

XXVI. Out of this Oil or Essence of your Vegetable so prepared, or by any other Philosophical way, (as we have mentioned in our second Manner of making this our Elixir) if you know how to putrify it naturally without any Fire, and to separate all our Principles out of it, purifying and uniting them inseparably together, being all made spiritual and transparent, you will then have out of this second Regeneration the greatest Arcanum in the World, as upon Vegetables, so also upon Minerals and Metals, except Gold and Silver.

XXVII. If this regenerated Essence be determined with our first Matter, it will then be in a Capacity radically to dissolve all sorts of Metals or Minerals, and principally Gold, which is imperceptibly dissolved in it, like Ice in common Water, and can never be separated common Gold again, neither by Destillation, nor Digestion: out of which, after a Philosophical Digestion, Separation of the three Principles, with their Purification, Union, Digestion, and third Regeneration, you may prepare the great Medicin of Medicins, of equal Virtue and Quality with the Grand Elixir upon human Bodies, and with our Medicine simplex, upon Metals or Minerals.

XXVIII. The determinating this regenerated Menstruum with our first Matter is to be performed by its Amalgamation with it, in which the Vegetable Menstruum, drawing out of it all its Qualities and Properties, and uniting them with its own, is made capable of the same Virtue and Property, as our Mercury simplex, in dissolving and volatilizing every created thing, that shall come near it.

XXIX. Some are of Opinion, that both the Elixirs may be produced out of several determined things, as Human Excrements, May-dew, (which they call also their Menstruum from above, or Water from the Clouds) &c. as also that the Grand Elixir may be prepared out of this, or any other Vegetable regenerated Menstruum; but since we know, that such Menstruums, which they call their Philosophical Mercury, although they may dissolve and volatilize Metals, yet cannot meliorate any of them, this Dissolution and Volatilization being neither natural nor Philosophical, we therefore with good Reason judge all those Opinions to be only false Suppositions and ill-grounded and imaginary Notions.

XXX. We with our Divine Master Hermes, absolutely affirm, that, Almighty God having, after he had created all things, commanded every one of them to procreate out of its own kind, our Elixirs are not to be produced by any of those sophistical ways, as we have fully made appear in these and our precedent Aphorisms, in which we have given ample Instructions for the preparing the Universal Elixir out of our undetermined Matter, and the specificated one out of the Root of Vegetables.

XXXI. Out of the true Affection and Charity, we have for all Lovers of Arts, we advise every one, who shall desire to prepare either of these our Elixirs, only to follow our Infallible Rules, being the Compendium of the whole Practice and Theory according to all true Philosophers, and not to mind any other: for some having delivered things by Hearsay, others from Reading, and very few from their own Practice, they may easily be imposed upon and deluded by any Pseudochymist or pretended Adept. Experto Crede.

Urbigerus - frontispiece engraving

There is an interesting engraved frontispiece to *Aphorismi Urbigerani*.....London, 1690. At the end of the book is an explanation of the symbolism on this engraving.



A Postscript, containing An Explanation of the Figure, prefix to the Aphorismi Urbigerani.

Having in our One Hundred and One Aphorisms so perspicuously laid open all the Difficulties, and so amply taught the compleat Theory and Practice of the whole Hermetic Mystery, that any ingenious Lover of Chymistry will not only be enabled to understand the most abstruse writings of the Philosophers, but also to effect any real Experiment, which is to be expected in the Progress of our Celestial Art; and yet being apt to believe, that such, as are not our Disciples, may perhaps meet with some of the Philosophical Figures, the meaning of which they may not so easily comprehend, we have judged it highly expedient, in the Front of this our little Book to place this our Figure, by which, being a perfect Compendium of all the Philosophical Emblems, the rest may be without any great difficulty understood. Now since this our Figure, mystically representing all our Subjects and Operations, cannot but admit of many and various Interpretations, all which if we should here set down, our Aphorisms (where they are already delivered, and of which this would then be a Repetition,) would be altogether useless and insignificant: we therefore at first esteemed it very superfluous to give any farther Illustration of it. But our desire being to do all the good, we can, to the Public, we have on second Thoughts resolved with our wonted Brevity to deliver the following Explanation for the better Comprehension both of it and our Aphorisms.

The Tree is a Supporter of the Motto, 'Virtus unita fortior': which, being to be read from the side of the Serpent, representing by the Half-Moon on its Head the Planet, under whose Influence it is born, is to be referred to it according to its particular Motto, which signifies, that, if you take it alone, it can do little or Nothing in our Art, as wanting the Assistance of others. By the Green Dragon is to be understood our first undetermined Matter,

comprehending all our Principles, (as is demonstrated by the Half-Moon on its Head, the Sun in its Body, and the Cross on its Tail,) and denoting by its Motto, that it can perform the whole work without being joined with any other created or artificially prepared thing: which is our first way. But this our Dragon, when copulating with our Serpent, is forced to comply with her, degrading it self from its undetermined Being for the production of our second way. Apollo with the Sun on his head, and Diana with the Half-Moon, embracing each other, shew our third way, and the Continuation of our first and second. The River, into which they descend, signifies the State, they must be reduced into, before they can be in a Capacity of being born again, and before in any of our three ways they can be brought to a perfect Spiritualization and Union. Apollo and Diana, coming out of the River in one wonderful Body, Diana having obtained all, represent our Herculean works, ready finished and the beginning of their Conjunction, and by their going to set their foot on firm ground, where she is to sow the noble Fruits for the Procreation, is to be understood the Continuation of their Conjunction, till they are fully united and perfected. In this Scheme also, as well as in our Aphorisms, are mystically exhibited all the principal Points of Faith and Religion, comprised in the Volumes of the Old and New Testament: whence it manifestly appears, that the Contemplation of Nature truly leads to the Comprehension of those heavenly Verities, by which alone we can expect to arrive at the Enjoyment of that blessed Immortality, to which, as to the true and ultimate End of our Creation, all our Endeavours are to be directed.

John French - *The Art of Distillation*

The Art of Distillation. Or, A Treatise of the Choicest Spagyricall Preparations Performed by Way of Distillation, Being Partly Taken Out of the Most Select Chemical Authors of the Diverse Languages and Partly Out of the Author's Manual Experience together with, The Description of the Chiefest Furnaces and Vessels Used by Ancient and Modern Chemists also A Discourse on Diverse Spagyricall Experiments and Curiosities, and of the Anatomy of Gold and Silver, with The Chiefest Preparations and Curiosities Thereof, and Virtues of Them All. All Which Are Contained In Six Books Composed By John French, Dr. of Physick
London. Printed by Richard Cotes and are to sold by Thomas Williams at the Bible in Little-Britain without Aldersgate, 1651.

[The Epistle Dedicatory](#)

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[Art of Distillation - Book I](#) What distillation is and the kinds thereof

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[42 woodcuts of alchemical apparatus in the text](#)

John French - The Art of Distillation - Dedication

The Epistle Dedicatory

To My Much Honored Friend, Tobias Garbrand, Doctor of Physick and
Principal of Gloucester Hall in Oxford.

Sir ! It is my ambition to let the world know upon what score it is that I do especially honor men. It is not, Sir!, as they are highborn heirs of the great potentates, for which most honor them (and upon which account I also shall not deny them their due) but as they excell in honesty and are friends to art. That poor philosophers should take no delight in riches, and rich men should take delight in philosophy, is to me an argument, that there is more delight, honor, and satisfaction in the one than in the enjoyment of the other.

I once read of a nobleman's porter who let in all that were richly apparessed, but excluded a poor philosopher. But I should, if I had been in his place, have rather let in the philosopher, without the gay clothes, than the gay clothes without the philosopher. As long as I have sense or reason, I shall improve them to the honor of the art, especially that of alchemy. In the perfection thereof there are riches, honor, health and length of days. By it, Artefius lived 1000 years, Flamel built 28 hospitals with large revenues to them, besides churches for it, both they and diverse more were accounted philosophers, and wise men, which sounds with more honor in my ears than all the rattling and empty titles of honor whatsoever besides.

In the perfection of this art, I mean the accomplishing of the Elixir, is the sulphur of philosophers set at liberty, which gratifies the releasers thereof with three kingdoms, viz. Vegetable, Animal, and Mineral. And what cannot they do, and how honorable are they, that have the command of these? They may commend lead into gold, dying plants into fruitfulness, the sick into health, old age into youth, darkness into light, and what not? A month would fail to give you an account of their power and dominations. Now for the effecting of this I shall besides what I have advised in the Epistle to the Reader, say only this: court the mother, and you win the daughter. Prevail with nature, and the fair Diana of the philosophers is at your service.

Now, if you cannot prevail with nature for the fairest of her daughters, viz. the mercury of philosophers, yet she has other daughters of wonderful beauty also, as are the essences and magisteries of philosophers which also are endowed with riches, honor, and health, and any of these you may more easily prevail with their mother nature for. This art of alchemy is that solary art which is more noble than all the other six arts and sciences, and if it did once thoroughly shine forth out of the clouds whereby it is eclipsed, would darken all the rest (as the sun does the other six planets) or at least swallow up their light. This is that true natural philosophy which most accurately anatomizes nature and natural things, and visually demonstrates the principles and operations of them.

That empty natural philosophy which is read in the universities, is scarce the meanest hand-maid to this Queen of Arts. It is a pity that there is such great encouragement for many empty end unprofitable arts, and none for this, and such similar ingenuities which, if promoted, would render a university far more flourishing than the former. I once read or heard of a famous university beyond the sea that was fallen into decay through what cause I know not. But there was a general council held by the learned to determine how to restore it to its primitive glory. The medium at last agreed upon was the promotion of alchemy, and encouraging the artists, themselves. But I never expect to see such rational action in this nation, until shadows vanish, substances flourish, and truth prevails, which time I hope is at hand and desired by all true artists and, to my knowledge, especially by yourself, upon which account I truly honor you.

Now, to yourself therefore I crave to adumbrate something of that art which I know you will be willing, for the public good, to promote. I dedicate this treatise to you, not that it is worthy of your acceptance, but that it may receive worth by your acceptance of it. I present it to you (as men bring lead to philosophers to be tinged into gold) to receive the stamp of your favor and approbation that it may pass current, with acceptance among the sons of art, whereby you will continue to oblige him who is

Sir,
Your most obliged servant,

John French.

London,
November 25, 1650

John French's preface to his *Art of Distillation*

John French worked at a time when alchemy was being actively reassessed. The preface to his famous *Art of Distillation*, London 1651, is particularly interesting in that it gives some good advice on how to investigate alchemy.

There is a glut of chemical books, but a scarcity of chemical truths. Nature and art afford a variety of spagyric preparations, but they are as yet partially undiscovered, partially dispersed in many books, and those of diverse languages, and partially reserved in private men's hands. When therefore I considered what need there is of, and how acceptable a general treatise on distillation might be, especially to our English nation (and the rather since Baker upon distillations is by reason of the description of a few furnaces and vessels therein, besides which there is small variety either of preparations or curiosities sold at such a high rate) I thought I could do them no better service than to present them with such a treatise of that subject which should contain in it the choicest preparations of the most select authors, both ancient and modern, and those of several languages, and which I have attained by my own long and manual experience, together with such as I have by way of exchange purchased out of the hands of private men which they had monopolized as great secrets.

But on the other hand, when I considered what a multitude of artists there is in this nation, from many of which more and better things might be expected than from myself, I was at a nonplus in my resolutions, fearing it might be accounted an unpardonable presumption in me to undertake that which might be better performed by others. But for the avoiding of this aspersion, be pleased to understand that I present not this to the world under any other notion than of a rough draft (which indeed is the work of the more unskillful and, therefore, of myself without exception) to be polished by the more expert artist.

I rejoice as at the break of day after a long and tedious night to see how this solary art of alchemy begins to shine forth out of the clouds of reproach which it has for a long time undeservedly laid under. There are two things which have eclipsed it for a long time, viz., the mists of ignorance and the specious lunny body of deceit.

Arise, O Sun of truth, and dispel these interposed fogs, that the Queen of arts may triumph in splendor! If men did believe what the art could effect, and what variety there is in it, they would be no longer straightened by, nor bound up to or lurare in verba Galeni, vel Aristotelis, but would now subscribe a new engagement to be true and faithful to the principles of Hermes and Paracelsus, as they stand established without Aristotle, their prince, and Galen and Hippocrates, their lords and masters. They would no longer stand dreaming forth, Sic dicit Galenus, but Ipse dixit Hermes. I desire not to be mistaken as if I did deny Galen his due, or Hippocrates what is his right for, indeed, they wrote excellently in many things, and deserve well thereby. That which I cannot allow of in them is their strict observation of the quadruplicity of humours (which in the school of Paracelsus and writings of Helmont, where the anatomy of humours has been most rationally and fully discussed, has been sufficiently confuted) and their confining themselves to such crude medicines which are more fit to be put into spagyric vessels for a further digestion than into men's bodies to be fermented therein.

Certainly, if men were less ignorant, they would prefer cordial essences before crude juices, balsamical elixirs before phlegmatic waters, and mercury of philosophers before common quicksilver. But many men have so little insight in this art that they scarce believe anything beyond the distilling of waters and oil, and extracting of salts; nay, many that pretend to philosophy, and would be accounted philosophers, are so unbelieving that, as says Sendivogius, although he would have intimated the true art to them word by word, yet they would by no means understand or believe that there was any water in the philosophers sea. And, as he in this case, so I in another know diverse that will not believe that common quicksilver can of itself be turned wholly into a transparent water, or that glass can be reduced into sand and salt of which it was made, saying "fusio vitrificatoria est ultima fusio", or that an herb may be made to grow in two hours, and the idea of a plant to appear in a glass, as if the very plant itself were there, and this from the essence thereof, and such like preparations as these: the two former whereof may be done in half an hour, but the latter requiring a longer time, but yet possible. And for the possibility of the elixir, you shall as soon persuade them to believe they know nothing (which is very hard, if not an impossible thing to do) than to believe the possibility thereof. If there be any such thing (they say) why are not the possessors thereof infinitely rich, famous, doing miracles and cures and living long? These objections, especially some of them, scarce deserve an answer; yet I shall show the vanity of them and make some reply thereunto. Did not Artefius by the help of this medicine live to 1000 years? Did not Flamel build fourteen hospitals in Paris, besides as many in Boleigne, besides

churches and chapels with large revenues to them all? Did not Bacon do many miracles? And Paracelsus many miraculous cures? Besides, what says Sendivogius? I have, he says, incurred more dangers and difficulties by discovering myself to have this secret than ever I had profit by it, and when I would discover myself to the great ones, it always redounded to my prejudice and danger. Can a man that carries always about him 10,000 pounds worth of jewels and gold travel everywhere up and down, safe, and not be robbed? Have not many rich money mongers been tortured into a confession where their money was concealed? Did you never hear of a vapouring fellow in London that, pretending to the knowledge of this mystery, was on a sudden caught aside by money-thirsters and by them tormented with tortures little less than those of hell, being forced thereby (if he had known it) into a discovery of it? To say nothing of being in danger of being subjected and enslaved to the pleasure of princes and of becoming instrumental to their to their luxury and tyranny, as also being deprived of all liberty, as was once Raimundus Lullius. The truth is, the greatest matter that philosophers aim at is the enjoyment of themselves, for which cause they have sequestered themselves from the world and become hermits. Well, therefore, and like a philosopher spoke Sendivogius when he said, "Believe me, if I were not a man of that state and condition that I am of, nothing would be more pleasant to me than a solitary life, or with Diogenes to live hid under a tub. For I see all things in this world to be but vanity and that deceit and covetousness prevails much, that all things are vendible, and that vice does excell virtue. I see the better things of the life to come before mine eyes and I rejoice in these. Now I do not wonder, as I did before, why philosophers, when they have attained this medicine, have not cared to have their days shortened (although by the virtue of their medicine they could have prolonged them) for every philosopher has the life to come so clearly set before his eyes, as your face is seen in a glass. Thus much by way of reply to the frivolous objections of those that believe not the verity of this art, and not only so, but will not believe it. If you should discover to them the process of the Philosopher's Stone, they would laugh at your simplicity, and I will warrant you never make use of it. Nay, if you should make projection before them, they would think that even in that there was a fallacy, so unbelieving are they. So I find them, and so I leave them, and shall forever find them the same.

There is another sort of man by whom this art has been much scandalized, and they indeed have brought a great odium upon it by carrying about, and vending their whites and reds, their sophisticated oils and salts, their dangerous and ill-prepared turbithes and aurum vitae. And indeed it were worthwhile, and I might do good service for the nation, to discover their cheats, as their sophisticating of chemical oils with spirit of turpentine, and salts with salt extracted out of any wood-ashes and such like, but here is not place for so large a discourse as this would amount to. I shall only at this time relate to how Penotus was cheated with a sophisticated oil of gold, for he said he gave 24 ducats for the process of an aurum potable which was much cried up and magnified at Prague, but at last it proved to be nothing but a mixture of oil of camphor, cloves, fennel-seed and of vitriol tinged with the leaves of gold. I know I shall incur the displeasure of some, but they are sophisticating, cheating mountebanks who indeed deserve to be bound to the peace, because many men, I dare swear, through their means go in danger of their lives. Better it is that their knavery should be detected, than a noble art through their villany be clouded and aspersed. Now we must consider that there are degrees in this art, for there is the accomplishment of the elixir, itself, and there is the discovery of many excellent essences, magisteries, and spirits, etc., which abundantly recompence the discoverers thereof with profit, health, and delight. Is not Paracelsus, his Ludus that dissolves the stone and all tartarous matter in the body into a liquor, worth finding out? Is not his Tinea Scatura a most noble medicine, that extinguishes all preternatural heat in the body in a moment? Is not his alkahest a famous dissolution that can in an instant dissolve all things into their first principles, and withall is a specificum against all distempers of the liver? Who would not take pains to make the quintessence of honey and the philosophical spirit of wine which are cordial and balsamical even to admiration? A whole day would fail to reckon up all the excellent, admirable rarities that by this spagyric art might be brought to light, in the searching out of which, why may not the elixir, itself, at last be attained unto? Is it not possible for them that pass through many philosophical preparations to unfold at last the riddles and hieroglyphics of the philosophers? Or were they all mere phantoms? Is there no fundamentum in re for this secret? Is there no sperm in gold? Is it not possible to exalt it for multiplication? Is there no universal spirit in the world? Is it not possible to find that collected in one thing which is dispersed in all things? What is that which makes gold incorruptible? What induced the philosophers to examine gold for the matter of their medicine? Was not all gold once living? Is there none of this living gold, the matter of philosophers, to be had? Did Sendivogius, the last of known philosophers, spend it all? Surely, there is matter enough for philosophers, and also some philosophers at this day for the matter, although they are unknown to us. There are, says Sendivogius, without doubt many men of a good conscience both of high and low degree (I speak knowingly) that have this medicine and keep it secretly. if so, let no man be discouraged in the prosecution of it, especially if he takes along with him the five keys which Nollius sets down which indeed all philosophers with one consent enjoin the use and observation of.

1. Seeing it is a divine and celestial thing, it must be sought for from above, and that not without a full resolution for a pious and charitable improvement of it.

2. Before you take yourself to the work, propound to yourself what you seek, and enter not upon the practice until you are first well versed in the theory. For it is much better to learn with your brain and imagination than with your hands and costs, and especially study nature well, and see if your proposals are agreeable to the possibility thereof.

3. Diligently read the sayings of true philosophers, read them over again and again and meditate on them, and take heed that you do not read the writings of imposters instead of the books of the true philosophers. Compare their sayings with the possibility of nature, and obscure places clear ones, and where philosophers say they have erred, do beware, and consider well the general axioms of philosophers, and read so long until you see a sweet harmony, and consent in the sayings of them.

4. Imagine not high things, but in all things imitate nature, viz. in matter, in removing what is heterogeneous, in weight, in color, in fire, in working, in slowness of working, and let the operations not be vulgar, nor your vessels. Work diligently and constantly.

5. If it is possible, acquaint your self thoroughly with some true philosophers. Although they will not directly discover themselves that they have this secret, yet by one circumstance or another it may be concluded how near they are to it. Would not any rational man that had been conversant with Bacon, and seeing him do such miraculous things, or with Sendivogius who did intimate the art to some word by word, have concluded that they were not ignorant of it? There have been philosophers, and perhaps still are, that although they will not discover how it is made, yet may certify you, to the saving of a great deal of costs, pains, and time, how it is made. And to be convinced of an error is a great step to the truth. If Ripley had been by any tutor convinced of those many errors before he had bought his knowledge at so dear a rate, he had long before, with less charges attained to his blessed desire.

And as a friendly tutor in this, so in all spagyric preparations whatsoever, is of all things most necessary. A faithful well experienced master will teach you more in the mysteries of alchemy in a quarter of a year than by your own studies and chargeable operations you will learn in seven years. In the first place, therefore, and above all things apply yourself to an expert, faithful, and communicative artist, and account it a great gain if you can purchase his favor, though with a good gratuity, to lead you through the manual practice of the chiefest and choicest preparations. I said apply yourself to an artist, for there is scarce any process in all of chemistry so easy that he who never saw it done will be to seek, and commit some errors in the doing of it. I said expert that he may be able to instruct you aright; faithful, that as he is able, so may faithfully perform what he promises; and communicative, that he may be free in discovering himself and his art to you. The truth is, most artists reserve that to themselves, which they know, either out of a desire to be admired the more for their undiscovered secrets or out of envy to others' knowledge. But how far this humor is approvable in them, I leave it to others to judge; and as for my part, I have here communicated upon the account of a bare acceptance only what I have with many years of pains, much reading, and great costs known. There is but one thing which I desire to be silent in, as touching the process thereof. As for the thing itself to be prepared, what it is I have elsewhere in this treatise expressed. And the preparing of that is indeed a thing worth of anyone's knowing, and which perhaps hereafter I may make known to some. I am of the same mind with Sendivogius that the fourth monarchy which is northern is dawning, in which (as the ancient philosophers did divine) all arts and sciences shall flourish, and greater and more things shall be discovered than in the three former. These monarchies the philosophers reckon not according to the more potent, but according to the corners of the world, whereof the northern is the last and, indeed, is no other than the Golden Age in which all tyranny, oppression, envy, and covetousness shall cease, when there shall be one prince and one people abounding with love and mercy, and flourishing in peace, which day I earnestly expect.

In the meantime, if what I know may add to your experience, you may have it freely. And if I shall see that this treatise of distillation passes with acceptance among the artists of this nation, I shall hereafter gratify them for their good will with two other parts of chemistry, viz. sublimation and calcination. And I hope this will be occasion to set the more expert artist on work, for the communicating their experiences to the world. One thing (courteous reader) let me desire you to take notice of, viz. whereas every process is set down plain, yet all of them must be proceeded in secundum artem alchymistae (which art indeed is obtained by experience) and therefore many that work according to the bare process effect not what they intend, and the reason is this, because there was some art of the alchemist wanting. To conclude, if you know more or better things than these, be candid and impart them (considering that I wrote these for them that know them not); if not, accept the endeavors of your friend, John French.

John French - The Art of Distillation - Book I

BOOK I

WHAT DISTILLATION IS AND THE KINDS THEREOF

I shall not stand here to show where the art of distillation had its origin, as being a thing not easily to be proved and, if known, yet little conducing to our ensuing discourse. But let us understand what distillation is, of which there are three principal and chief definitions or descriptions:

1. Distillation is a certain art of extracting the liquor, or the humid part of things by virtue of heat (as the matter shall require) being first resolved into a vapor and then condensed again by cold.
2. Distillation is the art of extracting the spiritual and essential humidity from the phlegmatic, or of the phlegmatic from the spiritual.
3. Distillation is the changing of gross thick bodies into a thinner and liquid substance, or separation of the pure liquor from the impure feces.

I shall treat of distillation according to all these three acceptions, and no otherwise, hence I shall exclude sublimation and degrees of heat there are, and which are convenient for every operation, and they are principally four.

The first is only a warmth, as is that of horse dung, of the sun, of warm water, and the vapor thereof, which kind of heat serves for putrefaction and digestion.

The second is of seething water and the vapor thereof, as also of ashes, and serves to distill those things which are subtle and moist, as also for the rectifying of any spirit or oil.

The third is of sand and filings of iron which serves to distill things subtle and dry, or gross and moist.

The fourth is of a naked fire - close, open or with a blast which serves to distill metals and minerals and hard gummy things, such as amber, etc. I do not say serves only to distill these, for many former distillations are performed by this heat, as the distilling of spirits and oils, etc., in a copper still over a naked fire; but these may be distilled by the two former degrees of heat. But minerals and such like cannot but by this fourth degree alone.

OF THE MATTER AND FORM OF FURNACES

The matter of furnaces is various, for they may be made either of brick and clay, or clay alone with whites of eggs, hair and filings of iron (and of these if the clay be fat are made the best and most durable furnaces) or of iron or copper, cast or forged. The forms also of furnaces are various.

The fittest form for distillation is round; for so the heat of the fire being carried up equally diffuses itself every way, which happens not in a furnace of another figure, as four square or triangular, for the corners disperse and separate the force of the fire. Their magnitude must be such as shall be fit for the receiving of the vessel; their thickness so great as necessity shall seem to require; only thus much observe, that if they be of forged iron or copper, they must be coated inside, especially if you intend to use them for a strong fire. They must be made with two bottoms distinguished, as it were, into two forges, the one below which may receive the ashes, the other above to contain the fire. The bottom of this upper must either be an iron grate or else an iron plate perforated with many holes so that the ashes may the more easily fall down into the bottom, which otherwise would put out the fire. Yet some furnaces have three partitions, as the furnace for reverberation, and the register furnace. In the first and lowest the ashes are received. In the second the fire is put, and in the third of the furnace for reverberation, the matter which is to be reverberated. This third ought to have a semi-circular cover so that the heat may be reflected upon the contained matter. The bottom of the third and uppermost partition of the register furnace must be either a plate of iron or a smooth stone perforated with holes, having stopples of stone fitted thereunto which you may take out or put in, as you would have the heat increased or decreased. In the top or upper part of all these furnaces where it shall seem most fit, there must be two or three holes made, that by them the smoke may more freely pass out and the air let in to make the fire burn stronger if need requires, or else which are to be shut with stopples made fit to them. The mouths of the fore-mentioned partitions must have shutters, just like an oven's mouth, with which you may shut them closed

or leave them open if you would have the fire burn stronger. But in defect of a furnace or fit matter to make one, we may use a kettle or a pot set upon a trivet, as we shall show when we come to give you a description of the furnace and vessels. The truth of the matter is, a good artist will make any still, yea and in half a day's time make a furnace or something equivalent to it for any operations.

OF VESSELS FIT FOR DISTILLATION

Vessels for distillation are of various matter and form. For they may be either of lead, which I altogether disapprove of for that they turn the liquors into a white and milky substance besides the malignity they give to them, or they may be of copper, iron, or tin which are better than the former. They may be of jug-metal, or potter's metal glazed, or glass which are the best of all, where they may be used without fear of breaking or melting. Some make them of silver, but they are very changeable. They that are able and willing may have the benefit of them.

OF LUTES FOR COATING OF GLASSES AND FOR CLOSURES AS ALSO SEVERAL WAYS OF STOPPING GLASSES

The best lute is made thus. Take of loam and sand tempered with salt water (which keeps it from cleaving). To these add the caput mortuary of vitriol or aqua fortis, and scalings of iron, and temper them well together. This serves to coat retorts or any glass vessels that must endure a most strong fire, and will never fail if well made. Some add flax, beaten glass, and pots and flints, etc.

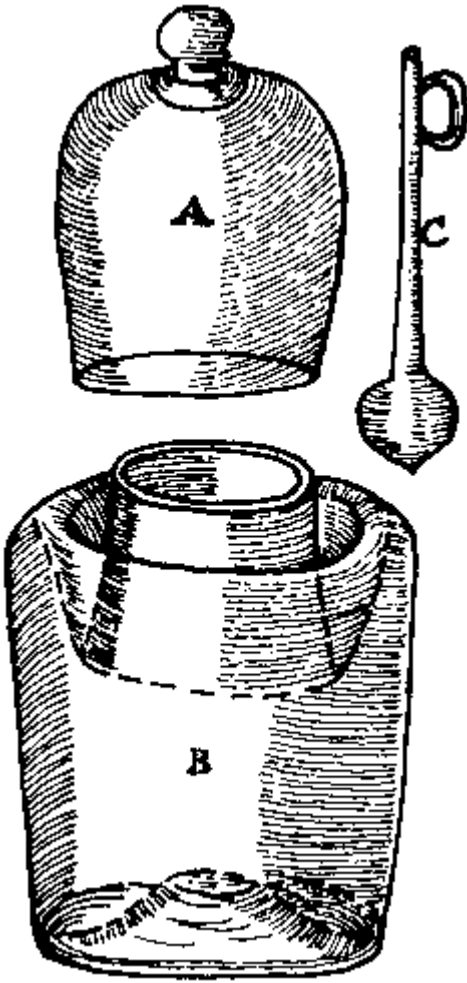
Take unslaked lime and linseed oil. Mix them well together and make thereof a lute which will be so hard that no spirit will pierce it, and this serves for the closure of glasses.

Or, moisten an ox bladder in the white of an egg beaten to water, or in defect of a bladder, use paper and bind them round where the vessels are joined together, one over another two or three times.

Or, if the spirits in the glass be exceedingly corrosive, then use the caput mortuary of aqua fortis, linseed oil, and chalk mixed together.

If a glass be cracked, then wet a linen cloth in the white of an egg beaten to water, and lay upon it, an upon that presently while it is wet, sift some unslaked lime and press it close with your hand. When that is dry, lay on another cloth thus wet as before and on it sift more lime.

A vessel may be stopped so close with quicksilver that no spirit can breathe forth, by which means the glass will be preserved from breaking by the enclosed spirits (for the head will first yield before the glass breaks). The vessel must be made as the figure hereunder shows. This also is a good way to preserve spirits already distilled from the air.



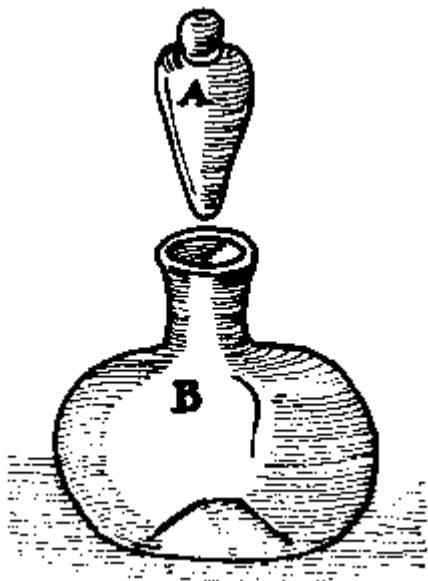
A. Signifies the head or cover.

B. The body or vessel itself.

C. The little glass to take out the liquor that is in the vessel because it cannot well be poured out, as by reason of the quicksilver which will be apt to be lost, so by reason of the form of the vessel itself.

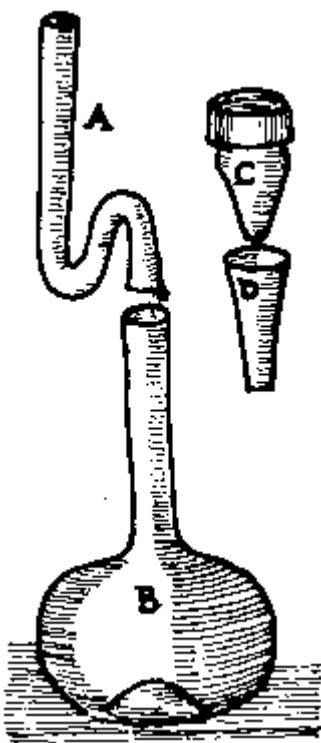
D . A false bottom where the quicksilver must lie, into which the head must be set upon the quicksilver so that the quicksilver may come above the bottom of the head.

Also, you may make stopples of glasses ground so smooth that no vapor can get forth by them, as you may see by this pattern.



- A. Signifies the stopple of glass ground very smooth and fit to the mouth of the vessel.
- B. The glass body.

But the best way is to have a crooked pipe which may have quicksilver in it, and be well luted to the body that no spirit can get forth. By this means the glass will never break, for the quicksilver will first yield.



- A. The crooked pipe.
- B. The glass body.

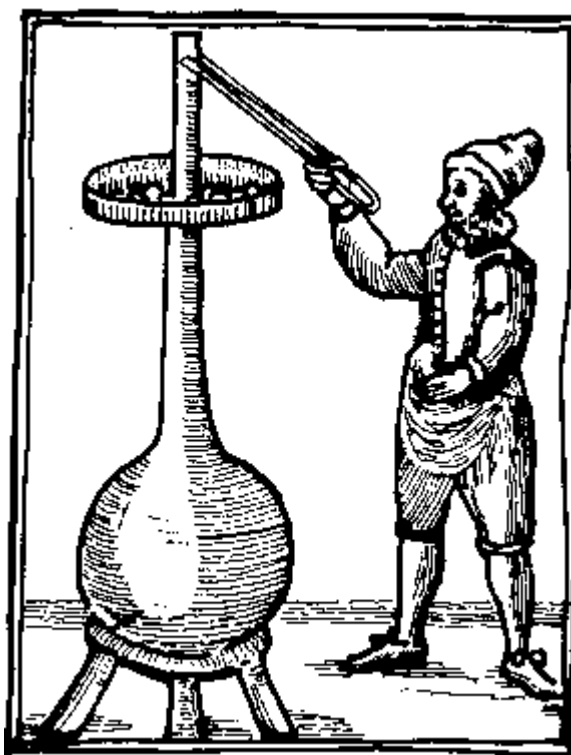
Or upon the top of a glass stopple there may be fastened some lead, that if the spirit be too strong, it will only heave up the stopple and let it fall down again.

C. The glass stopple with lead on the top.

D. The mouth of the vessel itself.

Now the way to nip up a glass, or seal it up hermetically is after this manner .

Put what matter you please into a bolt head with a long neck or pipe, put this pipe through a pan that has a little hole made in the bottom, that the top of it may be three or four inches above the pan. Close up the hole round about the pipe with clay. Then put coals in the pan and kindle first those that are furtherest off from the pipe that the heat may come by degrees to the pipe (for otherwise a sudden heat will break it). When the pipe is hot, blow the coals about it until it melts. Then with a pair of shears, cut it off where it is melted, and then with a pair of tongs close it together. Note that after you have closed it you must put the burning coals upon the top thereof, and let it thus stand until all be cold which must be done by degrees, for otherwise the glass will certainly crack in the place where it is nipped. Note that the pan must stand upon some frame or some hollow place that there may be a passage for the pipe to come through it. Also the bolt head must stand upon a trivet or some other firm place according to this figure.



AN EXPLANATION OF SUCH HARD WORDS AND TERMS OF ART WHICH ARE USED IN THIS ENSUING TREATISE

AMALGAMATION is a calcining or corroding of metals with quicksilver, and it is done thus. Take any metal except iron, beaten into thin leaves or very small powder. Mix it with about eight parts of quicksilver (which may the better be done if both be heated first) that they may become one uniform mass. Evaporate the quicksilver over the fire, and the metal will be left in the bottom as a thin calx.

CALCINATION is the reducing of anything into a calx, and making it friable, and it may be done two ways - by firing, either by reducing into ashes or by reverberating; or by corrosion, either by amalgamation, precipitation, fumigation or vaporation, cementation or stratification.

CIRCULATION is when any liquor is so placed in digestion that it shall rise up and fall down, rise up and fall down, and so do continually, and thereby become more digested and mature, for which use for the most part we use a pelican.

CLARIFICATION is the separation of the gross feces from any decoction or juice, and it is done three ways - by the white of an egg, by digestion, or by filtration.

COAGULATION is the reducing of any liquid thing to a thicker substance by evaporating the humidity.

COHOBATION is the frequent abstraction of any liquor, poured often on the feces from whence it was distilled, by distillation.

CONGELATION is when any liquor being decocted to the heights is afterwards, by settling into any cold place, turned into a transparent substance like unto ice.

CORROSION is the calcining of bodies by corrosive things.

DECANTATION is the pouring off of any liquor which has a settling by inclination.

DELIQUIUM is the dissolving of a hard body into a liquor, as salt, or the powder of any calcined matter, etc., in a moist place.

DESCENSION is when the essential juice dissolved from the matter to be distilled does descend or fall downward.

DESTUMATION is the taking off the froth that floats on the top with a spoon or feather, or by percolation.

DISTILLATION is the extracting of the humid part of things by virtue of heat, being first resolved into a vapor, and then condensed again by cold. Thus it is generally taken, but how more particularly, I shall afterward show.

DIGESTION is a concocting or maturation of crude things by an easy and gentle heat.

DISSOLUTION is the turning of bodies into a liquor by the addition of some humidity.

DULCORATION or culcification is either the washing off of the salt from any matter that was calcined therewith, with warm water, in which the salt is dissolved and the matter dulcified. Or it is the sweetening of things with sugar, or honey, or syrup.

ELEVATION is the rising of any matter in matter of fume or vapor by virtue of heat.

EVAPORATION or EXHALATION is the vapping away of any moisture.

EXALTATION is when any matter does by digestion attain to a greater purity.

EXPRESSION is the extracting of any liquor by the hand or by a press.

EXTRACTION is the drawing forth of an essence from a corporeal matter by some fit liquor as spirit of wine, the feces remaining in the bottom.

FERMENTATION is when anything is resolved into itself, and is rarified and ripened, whether it be done by any ferment added to it or by digestion only.

FILTRATION is the separation of any liquid matter from its feces by making it run through a brown paper made like a tunnel, or a little bag of woolen cloth, or through shreds.

FIXATION is the making of any volatile spiritual body endure the fire and not fly away, whether it be done by often reiterated distillations, or sublimations, or by the adding of some fixing thing to it.

FUMIGATION is the calcining of bodies by the fume of sharp spirits, whether vegetable or mineral, the bodies being laid over the mouth of the vessel wherein the sharp spirits are .

HUMECTATION or irrigation is a sprinkling of moisture upon anything.

IMBIBITION is when any dry body drinks in any moisture that is put upon it.

IMPREGNATION is when any dry body has drunk in so much moisture that it will admit of no more.

INCORPORATION is a mixing of a dry and moist body together so as to make a uniform mass of them.

INFUSION is the putting of any hard matter into liquor, for the virtue thereof to be extracted.

INSOLATION is digestion of things in the sun.

LEVIGATION is the reducing of any hard matter into a most fine powder.

LIQUATION is a melting or making anything fluid.

LUTATION is either the stoppings of the orifices of vessels so that no vapor passes out, or the coating of any vessel to preserve it from breaking in the fire.

MACERATION is the same as digestion.

MATURATION is the exalting of a substance that is immature, and crude to be ripened and concocted.

MENSTRUUM is any liquor that serves for the extracting of the essence of anything.

PRECIPITATION is when bodies corroded by corrosive spirits either by the evaporating of the spirits remain in the bottom, or by pouring something upon the spirit, as oil of tartar, or a good quantity of water, do fall to the bottom.

PURIFICATION is a separation of any liquor from its feces whether it be done by clarification, filtration, or digestion.

PUTREFACTION is the resolution of a mixed body into itself by natural gentle heat.

QUINTESSENCE is an absolute, pure, and well digested medicine drawn from any substance, either animal, vegetable, or mineral.

RECTIFICATION is either the drawing of the phlegm from the spirit or of the spirit from the phlegm, or the exaltation of any liquor by a reiterated distillation.

REVERBERATION is the reducing of bodies into a calx by a reflecting flame.

SOLUTION is a dissolving or attenuating of bodies.

STRATIFICATION is a strewing of corroding powder on plates of metal by course.
SUBLIMATION is an elevating or raising of the matter to the upper part of the vessel by way of a subtle powder.
SUBTILIATION is the turning of a body into a liquor or into a fine powder.
TRANSMUTATION is the changing of a thing in substance, color, and quality.
VOLATILE is that which flyeth the fire.

RULES TO BE CONSIDERED IN DISTILLATION

1

Make choice of a fit place in your house for the furnace, so that it may neither hinder anything, nor be in danger of the falling of anything into it that shall lie over it. For a forcing furnace, it will be best to set it in a chimney, because a strong heat is used to it, and many times there are used brands which will smoke, and the fire being great, the danger thereof may be prevented and of things of a malign and venerate quality being distilled in such a furnace, the fume or vapor, if the glass should break may be carried up into the chimney which otherwise will fly about the room to thy prejudice.

2

In all kinds of distillation the vessels are not to be filled too full, for if you distill liquors they will run over, and if other more solid things the one part will be burned before the other part be at all worked upon. But fill the fourth part of gourds, the half of retorts, the third part of copper vessels, and in rectifying of spirits fill the vessel half full.

3

Let those things which are flatulent, as wax, resin, and such like, as also those things which do easily boil up, as honey, be put in a lesser quantity and be distilled in greater vessels with the addition of salt, sand, or such like.

4

There be some things which require a strong fire, yet you must have a care that the fire not be too vehement, for fear their nature should be destroyed.

5

You must have a care that the lute with which vessels are closed do not give vent and alter the nature of the liquor, especially when a strong fire is to be used.

6

Acid liquors have this peculiar property, that the weaker part goes forth first and the stronger last. But in fermented and liquors the spirit goes first, then the phlegm.

7

If the liquor retains a certain empyreuma or smatch of the fire, you shall help it by putting it into a glass close stopped and so exposing it to the heat of the sun, and now and then opening the glass that the fiery impression may exhale. Or else let the glass stand in a cold moist place.

8

When you put water into a seething Balneum wherein there are glasses, let it be hot or else you will endanger breaking the glasses.

9

When you take any earthen or glass vessel from the fire, expose it not to the cold air too suddenly, for fear it should break.

10

If you would have a Balneum as hot as ashes, put sand or sawdust into it, that the heat of the water may be therewith kept in and made more intense.

11

If you would make a heat with horse dung, the manner is this, viz., make a hole in the ground. Then lay one course of horse dung a foot thick, then a course of unslaked lime a foot thick, and then another of dung, as before. Then set in your vessel, and lay around it lime and horse dung mixed together. Press it down very hard. You must sprinkle it every other day with water. When it ceases to be hot, then take it out and put in more.

12

Note that always sand or ashes must be well sifted, for otherwise a coal or stone therein may break your glass.

13

The time for putrefaction of things is various, for if the thing to be putrefied is vegetable and green, less time is required; if dry, a longer time is required. Minerals require the longest of all. Thus much note, that things are sooner putrefied in cloudy weather than in fair.

14

If you would keep vegetables fresh and green all year, gather them on a dry day and put them into an earthen vessel which you must stop close and set in a cold place and, as Glauberus says, they will keep fresh a whole year .

15

Do not expect to extract the essence of any vegetable unless by making use of the feces, left after distillation; for if you take those feces, as for example of a nettle, and make a decoction thereof and strain it and set it in the frost, it will be congealed and in it will appear a thousand leaves of nettles with their prickles which when the decoction is again resolved by heat, vanish away, which shows that the essence of the vegetables lies in the salt thereof.

16

In all your operations, diligently observe the processes which you read and vary not a little from them, for sometimes a small mistake or neglect spoils the whole operation and frustrates your expectations.

17

Try not at first experiments of great cost or great difficulty, for it will be a great discouragement to you, and you will be very apt to mistake.

18

If any would enter upon the practice of chemistry, let him apply himself to some expert artist for to be instructed in the manual operation of things, for by this means he will learn more in two months than he can by his practice and study in 7 years, as also avoid much pains and cost and redeem much time which else of necessity he will lose.

19

Enter not upon any operation unless it be consistent with the possibility of nature which, therefore, you must endeavor as much as possible to understand well.

20

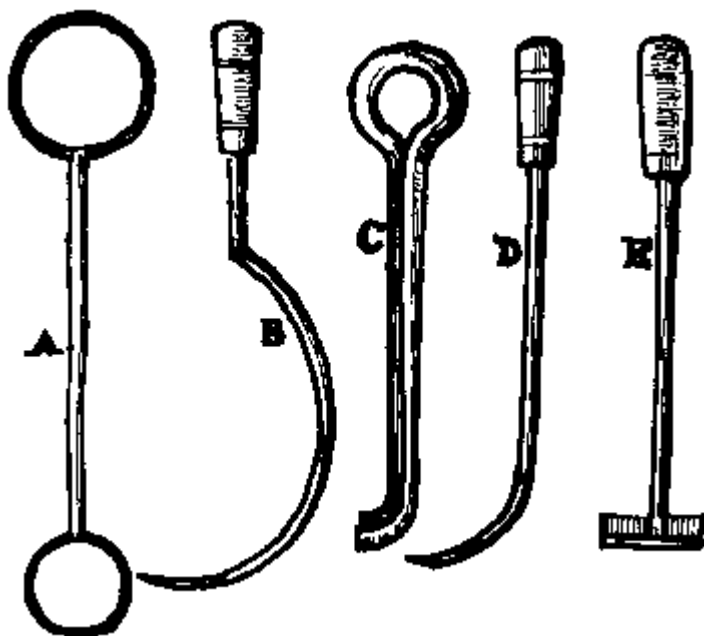
Do not interpret all things you read according to the literal sense, for philosophers when they wrote anything too excellent for the vulgar to know, expressed it enigmatically that the sons of Art only might understand it

21

In all your operations propose a good end to yourself, as not to use any excellent experiment that you shall discover to any ill end, but for the public good.

22

It will be necessary that you know all such instruments that you shall use about your furnace and glasses, whereof some are already expressed and some more are shown in the following pages.



A. Signifies an iron rod with two rings at the ends thereof, which must be heated red hot and applied to that part of the glass which you would break off. When you have held it there so long until the glass becomes very hot, then take it off and drop some cold water where you would have it break off, and it will presently crack in sunder. These rings

are for such glasses as will go into them. You must have diverse of this sort, even of all sizes.

B. An iron hook which must be heated hot and applied to any great glass that will not go into a ring. This hook has a wooden handle.

C. A pair of tongs which are for diverse uses.

D. A crooked iron to rake between the grates to clear them.

E. An iron rake to rake the ashes out of the ash-hole.

A thread dipped in melted brimstone and tied about a glass and then fired may serve instead of the iron rings and the hook.

COMMON DISTILLED SIMPLE WATERS ARE MADE THUS

Take what herbs or flowers you please and put them into a common cold still and let them distill gently.

This is the form of a common cold still.



But note that this kind of water is but the phlegm of the vegetable which you distill and has very little virtue or odor in it. Only roses and mints and two or three more have an odor, but all besides have as little virtue as common distilled water.

I do not deny but that it may be so ordered that these kinds of waters may partake both of the smell and strength of their vegetables in a good measure, and it is thus.

TO MAKE WATERS IN A COLD STILL THAT SHALL HAVE THE FULL SMELL AND VIRTUE OF THE VEGETABLE

Take what herbs, flowers, or roots you please (so that they be green). Bruise them and mix with them some leaven, and let them stand close covered for four or five days. Then distill them after the manner aforesaid.

ANOTHER WAY TO MAKE WATER TASTE AND SMELL STRONGLY OF ITS VEGETABLE

When you have distilled any vegetable in a cold still after the usual manner (so that you take heed you dry not the herb too much, which you may prevent by putting a brown paper in the bottom of the still, giving it a gentle fire and turning the cake before it is quite dried) take the cakes that remain in the bottom of the still and the water that is distilled from thence (having a good quantity thereof) and put them into a hot still and let them stand warm for the space of 24 hours, and then distill them. Then if you would have the water strong, put the said water into more fresh cakes, casting away the other and do as before. This is the truest and best way to have the water of any vegetable. Also, you shall by this way purchase some oil which is to be separated and to be kept by itself.

TO MAKE WATER AT ANY TIME OF THE YEAR IN A COLD STILL WITHOUT GREEN HERBS, SO THAT THE WATER SHALL SMELL STRONG OF THE HERB

Put fair water into the body of the cold still. Then hang a bag full of that herb that you would have the water of, being first dried, or seed or root thereof first bruised, and then make a strong fire under the still.

Note that those vegetables of which the water is made after this and the former manner must be of a fragrant smell, for such as have but little or no smell cannot yield a water of any considerable odor.

ANOTHER WAY TO MAKE A WATER TASTE AND SMELL STRONG OF ITS VEGETABLES

Take of the dry herb, or seed or root bruised, to a pound of each put 12 pints of spring water. Distill them in a hot still or alembick, and the water that is distilled off put upon more of the fresh herbs, seeds, or roots. Do this three or four times and you shall have a water full of the virtue of the vegetable, being almost as strong as a spirit.

TO MAKE THE WATER OF THE FLOWERS OF JASMINE, HONEYSUCKLES OR WOODBINE, VIOLETS, LILIES, ETC. RETAIN THE SMELL OF THEIR FLOWERS

The reason why these flowers in the common way of distillation yield a water of no fragraney at all, although they themselves are very odoriferous, are either because if a stronger fire be made in the distilling of them the grosser and more earthy spirit comes out with the finer, and troubles it, as it is in case the flowers be crushed or bruised (where the odor upon the same account is lost) or because the odoriferous spirit thereof being thin and very subtle rises with a gentle heat, but for lack of body vapors away. The art therefore that is here required is to prevent the mixing of the grosser spirit with the finer and to give such a body to the finer that shall not embase it, and it is thus:

Take either of the aforesaid flowers gathered fresh, and at noon in a fair day, and let them not at all be bruised.

Infuse a handful of them in two quarts of white wine (which must be very good or else you labor in vain) for the space of half an hour. Then take them forth and infuse in the same wine the same quantity of fresh flowers. This do eight or ten times, but still remember that they be not infused above half an hour. For according to the rule of infusion, a short stay of the body that has a fine spirit, in the liquor receives the spirit; but a longer stay confounds it, because it draws forth the earthy part withall which destroys the finer. Then distill this liquor (all the flowers being first taken out) in a glass gourd in a very gentle Balneum, or over a vapor of hot water, the joints of the glass being very well closed, and you shall have a water of a most fragrant odor. By this means the spirit of the wine which serves to body the fine odoriferous spirit of the flowers arises as soon as the fine spirit, itself, without any earthiness mixed with it.

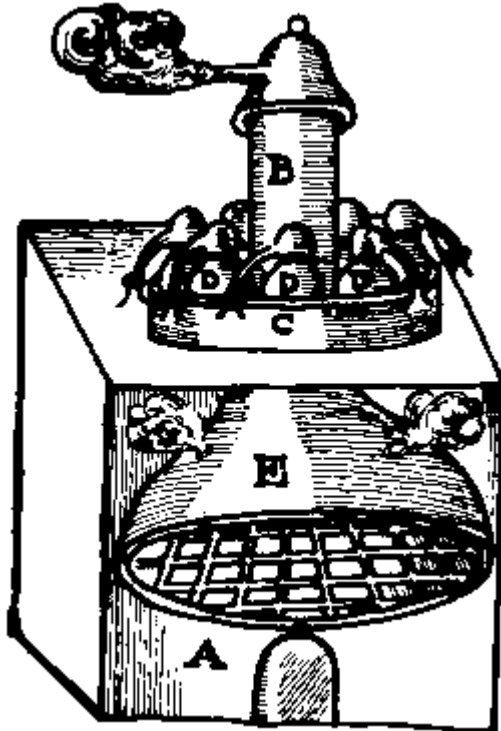
Note that in defect of wine, aqua vitae will serve; also strong beer, but not altogether so well, because there is more gross earthiness in it than in wine.

The water of either of these flowers is a most fragrant perfume and may be used as a very delicate sweet water, and is no small secret.



- A. Shows the head of the alembic.
- B. The body thereof placed in a brass vessel made for that purpose.
- C. A brass vessel perforated in many places to receive the vapor of the water. This vessel shall contain the alembic compassed about with sawdust, not only that it may better and longer retain the heat of the vapor, but also lest it should be broken by the hard touch of the brass vessel.
- D. Shows the brass vessel containing the water as it is placed in the furnace.
- E. The furnace containing the vessel.
- F. A funnel by which you may now and then pour in water to replace what is vanished and dissipated by the heat of the fire.
- G. The receiver.

The delineation of a Balneum Mariae may also serve to distill with ashes.



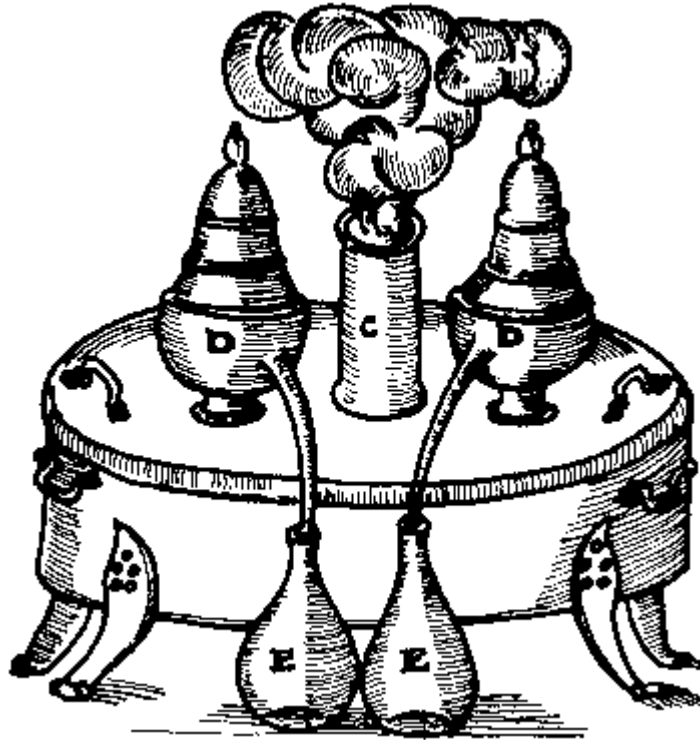
- A. Shows the furnace with the hole to take forthe the ashes.
- B. Shows another furnace, as it were set in the other. Now it is of brass and runs through the middle of the kettle made also of brass, so that the contained water or ashes may be the more easily heated.
- C. The kettle wherein the water, ashes, or sand are contained.
- D. The alembic set in the water, ashes, or sand with the mouths of the receivers.
- E. The bottom of the second brass furnace, whose top is marked with "B", which contains the fire.

A WATER OUT OF BERRIES IS MADE THUS

Take of what berries you please, being full ripe. Put them into a gourd glass, strewing upon them a good quantity of powdered sugar. Cover them close and let them stand three weeks or a month. Then distill them in Balneum . After this manner strawberries, raspberries, elderberries, and black cherries may be distilled. But note that such as have stones must first be bruised together with their stones .

A SWEATING WATER MADE OF ELDERBERRIES

Take of elderberries as many as you please. Press out the juice thereof, and to every gallon put a pint of white wine vinegar, of the lees of white wine a pint. Let them stand in a wooden vessel which you must then set in some warm place near the fireside for the space of a week. Then distill them in a hot still or alembic. The furnace for a Balneum Mariae with the alembics and their receivers.

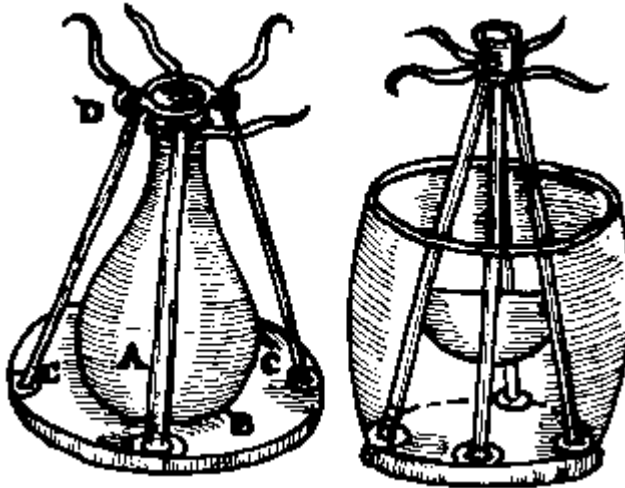


- A. Shows the brass kettle full of water.
- B. The cover of the kettle perforated in two places, to give passage forth to the vessels .
- A pipe or chimney added to the kettle, wherein the fire is contained to heat the water.
- D. The alembic consisting of its body and head.
- E. The receiver whereinto the distilled liquor runs.

The effigies of another Balneum Mariae not so easy to be removed as the former .

- A. Shows the vessel or copper that contains the water.
- B. The alembic set in water.

But lest the bottom of the alembic being half full should float up and down in the water, and so strike against the sides of the kettle, I have thought good to show you the way and means to prevent that danger.



- A. Shows the vessel or glass alembic .
- B. A plate of lead whereon it stands.
- C. Strings that bind the alembic to the plate.
- D. Rings through which the strings are put to fasten the alembic.

In defect of a furnace for a Balneum, you may make use of a pot set upon a trivet after this manner.



An ounce or two of this water of elderberries is a very excellent sudorific, and is very good in all diseases that require sweat, as also in hydropical diseases.

WATER OUT OF ROTTEN APPLES IS MADE THUS

Take as many rotten apples as you please. Bruise and distill them either in a common cold still or gourd glasses in Balneum.

This water is of greater use in fevers and hot distempers than the common distilled waters of any cold vegetables.

It is very good in any hot distemper of the veins and sharpness of the urine .

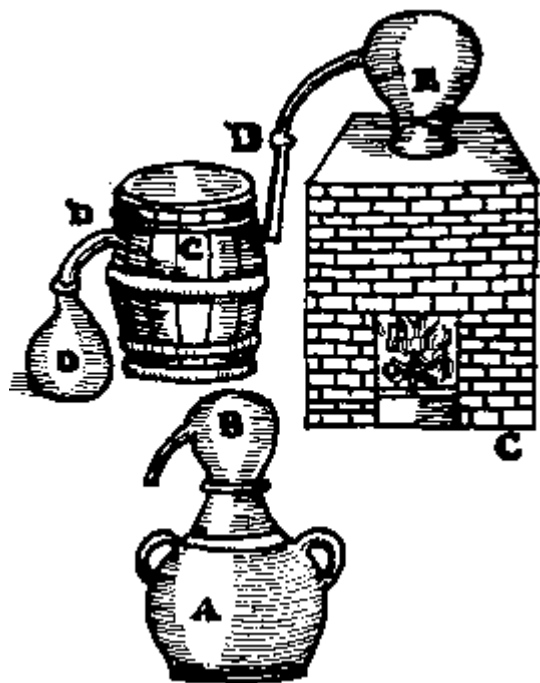
It is very good in the inflammations of the eyes.

HOW TO MAKE AQUA VITAE AND SPIRIT OF WINE OUT OF WINE

Take of what wine you please. Put it into a copper still, two parts of three being empty. Distill it with a worm until no more spirit comes off. Then this spirit will serve for the making of any spirits out of vegetables, but if you would have it stronger, distill it again and half will remain behind as an insipid phlegm. And if you would have it yet stronger, distill it again, for every distillation will leave behind one moiety of phlegm or thereabouts. So shall you

have a most pure and strong spirit of wine.

A Hot Still



A. Shows the bottom which ought to be of copper.

B. The head.

C. The barrel filled with cold water to refrigerate and condense the water and oil that run through the pipe or worm that is put through it.

D. A pipe of brass or pewter, or rather a worm of tin running through the barrel.

E. The alembic set in the furnace with the fire under it.

HOW TO MAKE AQUA VITAE OUT OF BEER

Take the stale strong beer or rather the grounds thereof and put it into a copper still with a worm. Distill it gently (or otherwise it will make the head of the still fly up) and there will come forth a weak spirit, which is called low wine, of which when you have a good quantity you may distill it again of itself, and there will come forth a good aqua vitae. And if you distill it two or three times more, you shall have as strong a spirit as out of wine and, indeed, between which and the spirit of wine you shall perceive none or very little difference.

HOW TO RECTIFY SPIRIT OF WINE OR AQUA VITAE

Distill it in Balneum until the last drop that comes off be hot and full of spirit .

Note that every time there will remain in the bottom a quantity as weak as water .

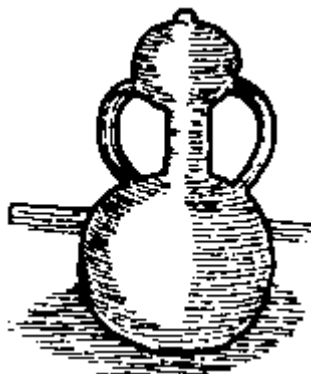
Note also that every time you distill it, when you perceive that a very weak water comes over, you shall then end that distillation.

TO MAKE THE MAGISTERY OF WINE WHICH WILL BE ONE OF THE GREATEST CORDIALS AND MOST ODORIFEROUS LIQUOR IN THE WORLD

Take good old rich canary wine, put it into a glass vessel that it may fill the third part thereof, and nip it up and set it in a continual heat of horse dung for the space of four months. Then in frosty weather set it forth into the coldest

place of the air you can for the space of a month that it may be congealed. And so the cold will drive in the true spirit of the wine into the center thereof and separate it perfectly from its phlegm. That which is congealed cast away. But that which is not congealed esteem as the true spirit of wine. Circulate this in a pelican with a moderate heat for the space of a month, and you will have the true magistery or spirit of wine which, as it is most cordial, so also most balsamical, exceeding all balsams for the cure of wounds.

The form of a Pelican.



The matter must be put in at the top which afterwards must be closed up.

TO MAKE ANOTHER MAGISTERY OF WINE THAT A FEW DROPS THEREOF SHALL TURN WATER INTO PERFECT WINE

Take the best canary wine as much as you please, let it stand in putrefaction forty days, then distill it in Balneum and there will come forth a spirit, and at last an oil. Separate the one from the other and rectify the spirit. Set the oil again in putrefaction forty days and then distill it. The feces that are left after the first distillation will yield a volatile salt which must be extracted without calcination, with the phlegm of the spirit. Purify it well, then impregnate the salt with its spirit, and digest them. Then add the oil and digest them together until they become a red powder, which you may use as it is, or else set it in a cellar until it be dissolved into a liquor, and a few drops thereof will do as abovesaid.

TO MAKE AN OIL OF WINE

Take weak spirit of wine and distill it in a vessel of a long neck. Then pour on this spirit again upon the phlegm, and distill it again. Do this several times and you shall see the oil of the wine swim on the phlegm, which phlegm you must separate from the oil by a tunnel.

If this oil be afterward circulated for a month, it will thereby become most odoriferous, and of a singular virtue, and good being both very cordial and balsamical.

TO EXTRACT THE SPIRIT OUT OF WINE BY THE SPIRIT OF WINE

Put spirit of wine well rectified upon Canary or Rhenish wine, so cautiously that it may not mix with, but swim upon the wine. Let them stand without stirring for the space of 48 hours. Then will the spirit that is in the wine rise up and join itself to the spirit that swims on the top, which you shall perceive by the weakness of the phlegm, and which you must let run out at a tap. This must be made in the bottom of the vessel for that purpose, and so be separated from the spirit.

TO MAKE A VERY SUBTLE SPIRIT OF WINE AT THE FIRST DISTILLING

Take white or wheaten bread as soon as it comes forth from the oven, break it in the middle, the upper side from the lower side, and hang it hot in a glass vessel over canary wine, but so that it touches not the wine. Then cover the vessel and let it so stand until the bread swells and is sufficiently impregnated with the spirit of wine which it will attract from the wine. Then take out that bread and put in more until you have a considerable quantity of bread thus

moistened. Then put this bread into a glass body, distill it in Balneum, and you shall have a very subtle spirit which you may yet rectify by circulation.

By furnaces and vessels made after this insuing figure may be made four rectifications of any spirit at once.



These vessels may either stand in ashes or in Balneum.

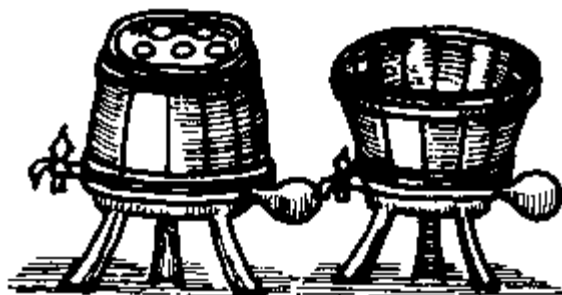
The manner of distilling in wooden vessels.



- A. Signifies the vessel wherein the copper vessel lies.
- B. The copper vessel, part of which is in the furnace and part is in the vessel of wood.
- C The vessel of wood wherein the matter must be that is distilled.
- D The cooling vessel with the worm.
- E. The receiver.
- F. The trivet whereon the vessel stands.

Note that the greater the copper vessel is, and the less the wooden one is, the sooner will the liquor boil. This furnace shows how to draw forth spirits and waters out of vegetables and animals with little cost and short time.

A balneum and a boiling vessel made of wood.



Note that on the right hand these vessels have a copper vessel hanging forth which must be set into a furnace as is above shown. And on the left hand is a cock or tap to let out the water. The vessel on the left hand is for a balneum. The holes in the cover thereof are either to set in vessels over the fume of the water or for the necks of the glasses set in the balneum to pass through. The vessel on your right hand is to boil water in for any use, also to brew in.

THE SPIRIT OF ANY VEGETABLE IS MADE THUS

Take of what vegetable you please, two pounds, macerate it in six gallons of aqua vitae or low wines, or sack, for the space of 24 hours. Then let them be distilled by an alembic, or hot still, putting to every pound of the spirit two ounces of most pure sugar.

Note that the two first pints may be called the stronger spirit, and the rest the weaker spirit or, indeed, the water. But if they be both mixed together, they will make an excellent middling spirit, for the former has more of the spirit of wine, and the latter more of the virtue and odor of the vegetable.

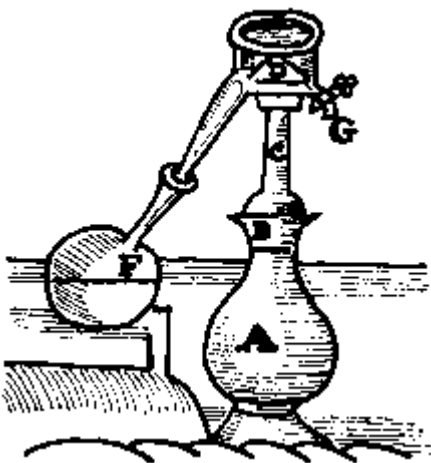
After this manner may be made the spirit of herbs, flowers, roots of vegetables, the seeds of vegetables, berries, barks, rinds, and spices.

Note that the herbs and flowers must be cut small, and bruised.

If you would make it stronger, then take all the foresaid spirit and as much more sack or low wines and put them upon the same quantity of fresh vegetables and distill them. Repeat this three or four times if you please

Note also that the vegetable must be dried, because else the spirit will not be so good, as if otherwise.

The form of an alembic.



- A. Signifies the vessel which must be of copper, in which the matter is contained, and which must be set over a naked fire.
- B. Signifies the belly that is fastened to the neck, that the neck may the more commodiously be applied to the large mouth of the vessel. But it may be so ordered that the mouth of the upper vessel and lower vessel may be so fitted that they shall not need this belly.
- C. The long neck of the upper vessel where by the spirit or water is somewhat cooled.
- D. The head.
- E. The vessel that compasses the head into which cold water is continually poured after the heating.
- F. The long receiver.
- G. The top or cock letting out the water when it is hot.

THE SPIRIT OF ANY VEGETABLE MAY SUDDENLY AT ANY TIME OF THE YEAR BE MADE THUS

Take of what herb, flower, seeds, or roots you please. Fill the head of the still therewith and then cover the mouth thereof with a coarse canvas and set it on the still, having first put into it sack or low wines. Then give it fire.

If at any time you would have the spirit be of the color of its vegetable, then put of the flowers thereof dried a good quantity in the nose of the still.

TO MAKE ANY VEGETABLE YIELD ITS SPIRIT QUICKLY

Take of what vegetables you please, whether it be the seed, flower, root, fruit, or leaves thereof. Cut or bruise them small and then put them into warm water. Put yeast or berm to them, and cover them warm and let them work three days, as does beer. Then distill them and they will yield their spirit easily.

TO REDUCE THE WHOLE HERB INTO A LIQUOR WHICH MAY WELL BE CALLED THE ESSENCE THEREOF

Take the whole herb with flowers and roots and make it very clean. Then bruise it in a stone mortar and put it into a large glass vessel so two parts of three may be empty. Cover it exceeding close and let it stand in putrefaction in a moderate heat the space of half a year, and it will all be turned into a water.

TO MAKE AN ESSENCE OF ANY HERB, WHICH BEING PUT INTO A GLASS AND HELD OVER A GENTLE FIRE, THE LIVELY FORM AND IDEA OF THE HERB WILL APPEAR IN THE GLASS

Take the foregoing water and distill it in a gourd glass (the joints being well closed) in ashes, and there will come forth a water and an oil and in the upper part of the vessel will hang a volatile salt. Separate the oil from the water and keep it by itself. With the water purify the volatile salt by dissolving, filtering, and coagulating. The salt being thus purified, imbibe with the said oil until it will imbibe no more. Digest them well together for a month in a vessel hermetically sealed. And by this means you shall have a most subtle essence, which being held over a gentle heat will fly up into the glass and represent the perfect idea of that vegetable whereof it is the essence.

THE TRUE ESSENCE OR RATHER QUINTESSENCE OF ANY HERB IS MADE THUS

When you have made the water and oil of any vegetable first calcine or burn to ashes the remainder of the herb. With the ashes make a lye by pouring its own water thereon. When you have drawn out all the strength of the ashes, then take all the lye, being first filtered, and vapor it away and at the bottom you shall find a black salt which you must take and put into a crucible and melt it in a strong fire (covering the crucible all the time it is melting). After it is melted let it boil half an hour or more. Then take it out and beat it small and set it in a cellar on a marble stone or in a broad glass and it will all be resolved into a liquor. This liquor filter and vapor away the humidity until it be very dry and as white as snow. Then let this salt imbibe as much of the oil of the same vegetable as it can, but no more, lest you labor in vain. Then digest them together until the oil will not rise from the salt, but both become a fixed powder melting with an easy heat.

TO EXTRACT THE QUINTESSENCE OF ALL VEGETABLES

Take of what spices, flowers, seeds, herbs, woods you please and put them into rectified spirit of wine. Let the spirit extract in digestion until no more feces fall to the bottom but all their essence is gone into the spirit of wine. Upon being thus impregnated, pour a strong spirit of salt and digest it in Balneum until an oil swims above which separate with a tunnel or draw of the spirit of wine in balneum. The oil will remain clear at the bottom, but before the spirit of wine is abstracted, the oil is blood red and a true quintessence.

AN EXCELLENT ESSENCE OF ANY VEGETABLE MAY BE MADE THUS

Take of the distilled oil of any vegetable and imbibe with it the best manna, being very well depurated, until it will imbibe no more. Then digest them a month, and you shall have the true balsam and excellent essence of any vegetable.

This has the virtues of the vegetable whereof it was made but in a more eminent manner. The depuration of manna for this use is a great secret.

WATER OR SPIRIT OF MANNA IS MADE THUS

Take of the best manna one part, of nitre two parts. Put them into an ox bladder and, tying it close, put it into warm water to be dissolved. Distill this water in an alembic, and there will come forth an insipid water, sudorific and laxative.

THE CHEMICAL OIL OF THE HERB OR FLOWER OF ANY VEGETABLE IS MADE THUS

Take of the herb or flower dried one pound, of spring water twenty four pints, and distill them in a great alembic with its cooler or copper still with a worm passing through a vessel of cold water. Let the oil that is drawn with the water be separated with a tunnel or separating glass, and let the water that is separated be kept for a new distillation. Note that if this water be used two or three times in the drawing of the oil, it will be an excellent water of that vegetable from which it is distilled, and as good as most that shall be drawn any other way.

After the same manner are made oil of the dry rinds of oranges, citrons, and lemons.

But note that these rinds must be fresh and (the inward whiteness being separated) be bruised.

THE OIL COMMONLY CALLED THE SPIRIT OF ROSES

Take of damask or red roses, being fresh, as many as you please. Infuse them in as much warm water as is sufficient for the space of 24 hours. Then strain and press them and repeat the infusion several times with pressing until the liquor becomes fully impregnated, which then must be distilled in an alembic with a refrigeratory or copper still with a worm. Let the spirit which swims on the water be separated, and the water kept for a new infusion.

This kind of spirit may be made by bruising the roses with salt, or laying a lane of roses and another of salt, and so keeping them half a year or more, which then must be distilled in as much common water or rose water as is sufficient.

OILS ARE MADE OUT OF SEEDS THUS

Take of what seeds you please, bruised, two pounds. Of spring water take twenty pints, let them be macerated for the space of 24 hours, and then be distilled in a copper still with a worm or alembic with its refrigerating. The oil extracted with the water, being separated with a tunnel, keep the water for a new distillation.

This water after three or four distillations is a very excellent water and better than is drawn any way out of that vegetable whereof these are seeds; I mean for virtue though not always for smell.

After the same manner are made oils of spices and aromatical woods.

OILS ARE MADE OUT OF BERRIES THUS

Take of what berries you please, being fresh, 25 pounds. Bruise them and put them into a wooden vessel with 12 pinte of spring water and and a pound of the strongest leaven. Let them be put in a cellar (the vessel being close stopped) for the space of three months. Then let them be distilled in an alembic or copper still with their refrigeratory with as much spring water as is sufficient. After the separation of the oil, let the water be kept for a new distillation. Note that the water being used in two or three distillations is a very excellent water and full of the virtue of the berries.

OIL IS MADE OUT OF ANY SOLID WOOD THUS

Take of what wood you please, made into gross powder, as much as you will. Let it be put into a retort and distilled in sand. The oil which first distills, as being the thinner and sweeter, must be kept apart which, with rectifying with much water, may yet be made more pleasant. The acid water or spirit which in distilling comes first forth, being separated, which also (being rectified from the phlegm with the heat of a balneum) may be kept for use, being full of the virtue of the wood.

After the same manner are made the oil and spirit of tartar, but thus much note, that both are more pure and pleasant being made out of the crystals than out of the crude tartar.

TO MAKE A MOST EXCELLENT OIL OUT OF ANY WOOD OR GUMS IN A SHORT TIME WITHOUT MUCH COST

Take of what wood you please or gum bruised small. Put it into a vessel fit for it. Then pour on so much of spirit of salt as will cover your matter. Then set it in sand with an alembic. Make the spirit boil so all the oil flies over with a

little phlegm, for the spirit of salt by its sharpness frees the oil so that it flies over very easily. The spirit of salt being rectified may serve again.

TO MAKE VEGETABLES YIELD THEIR OIL EASILY

Distill them, being first bruised, in salt water, for salt frees the oil from its body. Let them first be macerated three or four days in the said water.

OIL OR SPIRIT OF TURPENTINE IS MADE THUS

Take of Venice turpentine as much as you please, and of spring water four times as much. Let them be put into an alembic or copper still with its refrigeratory. Then put fire under it. So there will distill a thin white oil like water, and in the bottom of the vessel will remain a hard gum called Colophonia, which is called boiled turpentine. That white oil may be better and freer from the smell of the fire if it be drawn in balneum with a gourd and glass-head. Common oil of olive may be distilled after this manner and be made very pleasant and sweet, also most unctious things, as spermaceti, storax liquid, and also many gums.

OIL OF GUMS, RESINS, FAT AND OILY THINGS MAY BE DRAWN THUS

Take of either of these which you please, being melted, a pound, and mix it with three pounds of the powder of tiles or unslaked lime. Put them into a retort and extract an oil which with plenty of water may be rectified. Note that the water from whence the oil is separated is of excellent virtue, according to the nature of the matter from whence it is drawn.

OIL OF CAMPHOR IS MADE THUS

Take of camphor sliced thin as much as you please and put it into a double quantity of aqua fortis or spirit of wine. Let the glass, having a narrow neck, be set by the fire or on sand or ashes the space of five or six hours, shaking the glass every half hour, and the camphor will all be dissolved and swim on the aqua fortis or spirit of wine like an oil. Note that if you separate it, it will all be hard again presently, but not otherwise.

ANOTHER WAY TO MAKE OIL OF CAMPHOR THAT IT SHALL NOT BE REDUCED AGAIN

Take of camphor powdered as much as you please and put it into a glass like a urinal. Put upon it another urinal-glass inverted, the joints being close shut. Sublime it in ashes, inverting those urinals so often until the camphor be turned into an oil. Then circulate it for the space of a month, and it will be so subtle that it will all presently vapor away in the air, if the glass be open.

ANOTHER WAY TO MAKE OIL OF CAMPHOR

Take two ounces of camphor and dissolve it in four ounces of pure oil of olive. Then put them into four pints of fair water and distill them all together in a glass gourd, either in ashes or balneum, and there will distill both water and oil, which separate and keep by itself.

All these kinds of oil of camphor are very good against putrefaction, fits of the mother, passions of the heart, etc. A few drops thereof may be taken in any liquor, or the breast be annointed therewith. Also, the fume thereof may be taken in at the mouth

A TRUE OIL OF SUGAR

Take of the best white sugar candy and imbibe it with the best spirit of wine ten times, after every time drying it again. Then hang it in a white silken bag in a moist cellar over a glass vessel that it may dissolve and drop into it. Evaporate the water in balneum, and in the bottom will the oil remain. This is very excellent in all distempers of the lungs.

OIL OF AMBER IS MADE THUS

Take of yellow amber one part, of the powder of flints calcined, or the powder of tiles two parts. Mingle them, put them into a retort, and distill them in sand. The oil which is white and clear that first distilled off, keep by itself, continuing the distillation as long as any oil distills off. Then let both oils be rectified apart in a good quantity of

water.

The salt of amber, which adheres to the neck of the retort withinside, being gathered, let be purified by solution, filtration, and coagulation according to art, and kept for use.

After this manner may be made oils out of any gums which may be powdered.

OIL OF MYRRH IS MADE THUS

Take of myrrh bruised or bay-salt, of each six pounds. Let them be dissolved in sixty pints of spring water and be distilled in an alembic or copper still according to art.

OIL OF MYRRH PER DELIQUIUM OR BY DISSOLUTION IS MADE THUS

Take hen eggs hard boiled and cut in the middle lengthways. Take out the yolks, then fill up the hollow half way with powder of myrrh, and join the parts together again, binding them with a thread. Set them upon a grate between two platters in a cold moist place, so the liquor of the myrrh dissolved will distill into the lower platter.

OIL OF TARTAR PER DELIQUIUM, BY DISSOLUTION

Take of the best tartar calcined white according to art. Put it into a cotton bag, and hang it in the cellar or some moist place, putting under it a receiver.

OILS OF EXPRESSION ARE MADE THUS

Take of what things you please, such as will afford an oil by expression. Bruise them, then put them into a bag, and press them strongly, putting a vessel under to receive the oil.

Note that they must stand in the press some hours, because the oil drops by little and little.

Note also that if you warm them before you put them into the press, they will yield more oil, but then it will not keep so long as otherwise.

After this manner are made oils of nutmegs, mace, almonds, linseed, and such like.

A VOMITING & PURGING OIL MADE BY EXPRESSION

Take of the berries of ebulus or dwarf elder, as many as you please. Let them be dried but not over much. Then bruise them, and in bruising them, moisten them with the best spirit of wine until they begin to be oily. Then warm them by the fire, and press forth the oil, and set it in the sun putrefied.

Ten drops of this oil taken inwardly works upward and downward, and is very good against the dropsy and all waterish diseases.

The belly being therewith anointed is made thereby soluble.

Any part that is much pained with the gout or any such grief is presently eased by being anointed with this oil.

OIL OF JASMINE IS MADE THUS

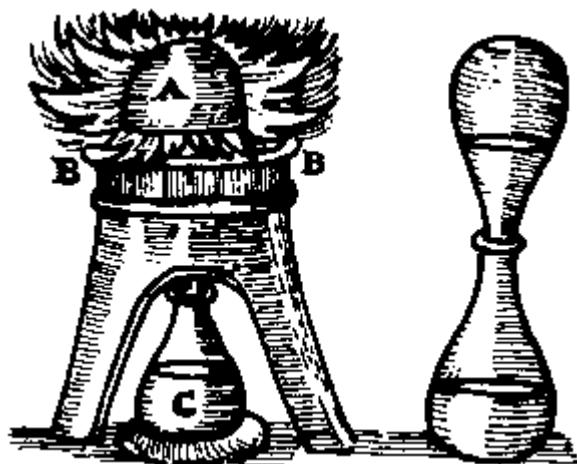
Take of flowers of jasmine as many as you please, and put them into as much sweet mature oil as you please. Put them into a glass close stopped, and set them into the sun to be infused for the space of 20 days. Then take them out and strain the oil from the flowers and, if you would have the oil yet stronger, put in new flowers and do as before. This is a pleasant perfume and being mixed with oils and ointments gives them a grateful smell. It is also used in the perfuming of leather.

After this manner may be made oil of any flowers. But because I shall keep myself to the art of distillation only, I shall not so far digress as to speak of these kinds of oils, only I thought it good to set down the oil of jasmine because by reason of its fragrancly it has some analogy with chemical oils that are made by distillation.

TO MAKE ANY OIL OR WATER PER DESCENSUM

Take an earthen gourd and fill it full with wood or herbs, or what you please, being cut small. Then invert it, set it in a furnace, and lute it well "hereunto. Then set another gourd of earth under it with a wider mouth that the uppermost may go into it. Before you put the one into the other, you must have a little vessel or instrument of tin with brims around about on the top, by which it must hang into the lower gourd, the body thereof being two or three inches deep and full of holes, so that the oil or water may drop through and not the vegetable itself. Into this instrument, being first set into the lower gourd, put the mouth of the upper gourd. Then make your fire on the top and keep it burning as long as any liquor will drop.

The figure of the furnace is thus.



- A. Signifies the gourd containing the matter to be distilled.
- B. The furnace containing the coals, so that they surround the upper gourd.
- C. The lower gourd or recipient set upon straw rings.
- D. The vessel of tin with holes and brims which must be set in the recipient.

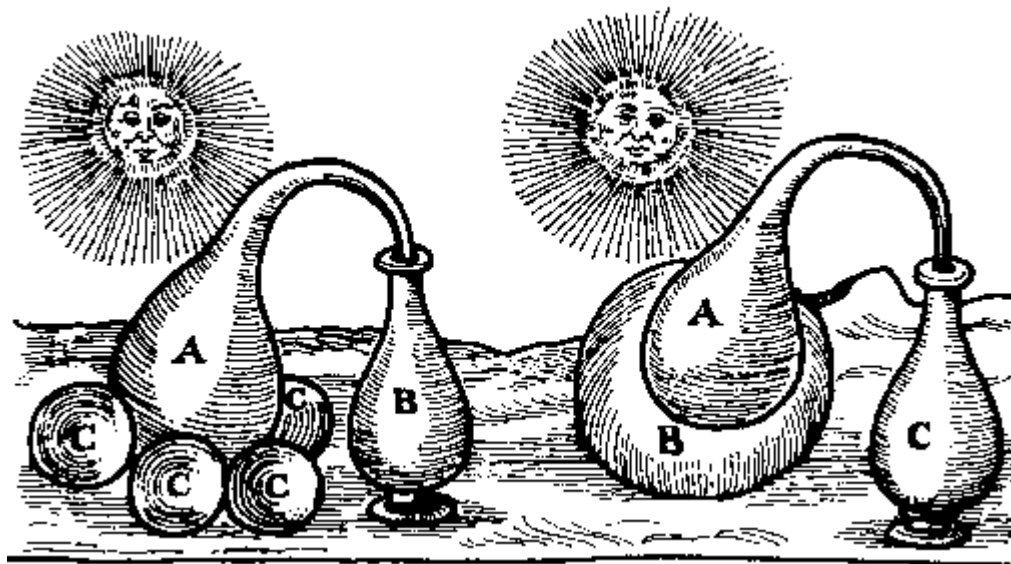
HOW TO MAKE AN OIL AND WATER OUT OF SOOT

This may be distilled per descensum or by retort as thus, viz., take of the best soot (which shines like jet) and fill with it a glass retort coated or earthen retort to the neck. Distill it with a strong fire by degrees into a large receiver, and there will come forth a yellowish spirit with a black oil which you may separate and digest.

HOW TO RECTIFY SPIRITS

You must set them in the sun in glasses well stopped, and half filled, being set in sand to the third part of their height that the water waxing hot by the heat of the sun may separate itself from the phlegm mixed therewith which will be performed in 12 or 15 days. There is another better way to do this which is to distill them again in balneum with a gentle fire, or if you will put them into a retort furnished with its receiver and set them upon crystal or iron bowls, or in an iron mortar directly opposite the beams of the sun, as you may learn by these ensuing signs.

A retort with its receiver standing upon crystal bowls just opposite to the sun beams.



- A. Shows the retort.
- B. Shows the receiver.
- C. The crystal bowls.

Another retort with its receiver standing in a marble or iron mortar directly opposite the sun.

- A. Shows the retort.
- B. The marble or iron mortar
- C. The receiver.

HOW TO RECTIFY ALL STINKING THICK BLACK OILS THAT ARE MADE BY A RETORT AND TO TAKE AWAY THEIR STINK

Take oil of amber, or any such stinking oil, put it into a glass retort, the fourth part only being full, pour on it drop by drop the spirit of salt (or any other acid spirit) and they will boil together. When so much of the spirit is poured on that it boils no more, then cease and distill it. First comes over a stinking water, then a clear white, well smelling oil, and after that a yellow oil which is indifferent good. But the spirit of salt has lost its sharpness. The volatile salt of the oil remains coagulated with the spirit of salt and is black and tastes like sal ammoniac, and has no smell being sublimed from it. Now the reason of all this is, because the volatile salt of the oil, which is the cause of the stink thereof, is fixed by the acid spirit of the salt; for acid spirits and volatile salts are contrary the one to the other, and spirit of urine or any volatile salt will precipitate any metal as well as salt of tartar.

These oils will remain clear and have far more virtue than the ordinary sort of oils have.

As for common ordinary distilled oils, they need not, if they be well separated from the water with which they were distilled, any rectifying at all. If you go about to rectify them, you will lose a good part of them and make that which remains not at all the better. But if there be any better than another for rectifying of them it is by digestion, by which you may separate afterwards, and by this means you shall lose none of the oils.

John French - The Art of Distillation - Book II

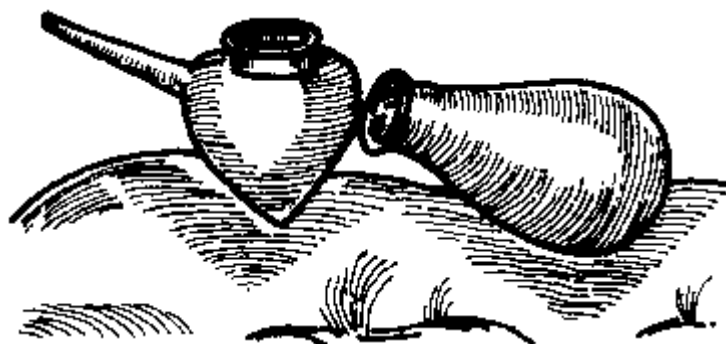
BOOK II

OF COMPOUND WATERS AND SPIRITS

A DISSOLVING MENSTRUUM

Take cyprus, turpentine, and the best spirit of wine, of each two pounds. Distill them in a glass gourd either in balneum or ashes. Separate the oil from the spirit with a tunnel or separating glass. Distill the spirit again and so often until it favors no more of the oil of turpentine, and then it is sufficiently prepared. This menstruum dissolves any hard stones presently, and extracts the tincture of coral.

A glass gourd with its head.



ANOTHER DISSOLVING MENSTRUUM OR ACETUM PHILOSOPHICUM

Take honey, salt melted, of each one pound, and of the strongest spirit of vinegar two pounds. Digest them for the space of a fortnight or more. Then distill them in ashes, cohobate the liquor upon the feces three or four times, and then rectify the spirit.

Note that they must be done in a large glass gourd.

This is of the same virtue as the former, if not more powerful.

ANOTHER DISSOLVING MENSTRUUM

Take of the best rectified spirit of wine with which imbibe the strongest unslaked lime until they be made into a paste. Then put them into a glass gourd and distill off the spirit in ashes. This spirit pour on more fresh lime, and do as before. Do this three or four times and you will have a very subtle spirit able to dissolve most things and to extract the virtue out of them.

PARACELsus HIS ELIXIR SUBTILITATIS

Take oil of olive, honey, rectified spirit of wine, of each a pint. Distill them all together in ashes. Then separate all the phlegm from the oils which will be distinguished by many colors. Put all these colors into a pelican, and add to them the third part of the essence of balm and sallendine, and digest them for the space of a month. Then keep it for use. The liquor is so subtle that it penetrates everything.

USQUE - BATH OR IRISH AQUA VITAE IS MADE THUS

Take a gallon of small aqua vitae and put it into a glass vessel. Put thereto a quart of canary sack, two pounds of raisins of the sun stoned, but not washed, two ounces of dates stoned, and the white skins thereof pulled out, two ounces of cinnamon grossly bruised, four good nutmegs bruised, an ounce of the best english licorice sliced and

bruised. Stop the vessels very close and let them infuse in a cold place six or eight days. Then let the liquor run through a bag called Manica Hippocratis made of white cotton.
This liquor is commonly used in surfeits, being a good stomach water.

AQUA CELESTIS IS MADE THUS

Take of cinnamon, cloves, ginger, nutmegs, zedoary, galangal, long pepper, citron pill, spikenard, lignum aloes, cububs, cardamum, calamus aromaticus, germander, ground pine, mace, white frankincense, tormentil, hermodactyls, the pith of dwarf elder, juniper berries, bay berries, the seeds and flowers of motherwort, the seeds of smallage, the seeds of fennel, seeds of anise, the leaves of sorrel, the leaves of sage, the leaves of felwort, rosemary, marJoram, mints, pennyroyal, stechados, the flowers of elder, the flowers of red roses, the flowers of white roses, of the leaves of scabious, rue, the lesser moonwort, agrimony, centory, fumitory, pimpernel, sow thistle, eyebright, maidenhair, endive, red launders, aloes - of each two ounces, pure amber, the best rhubarb - of each two drams, dried figs, raisins of the sun, stoned dates, sweet almonds, grains of the pine - of each an ounce.

Of the best aqua vitae to the quantity of them all, of the best hard sugar a pound, of white honey half a pound. Then add the root of gentian, flowers of rosemary, pepperwort, the root of briony, sow bread, wormwood - of each half an ounce.

Now before these are distilled, quench gold being made red hot, oftentimes in the aforesaid water, put therein oriental pearls beaten small an ounce, and then distill it after 24 hours infusion.

This is a very cordial water, good against faintings and infection.

AQUA IMPERIALIS IS MADE THUS

Take of the rind of citrons dried, oranges, nutmeg, cloves, cinnamon - of each two ounces; of each half a pound of the roots of flowers-de-luce, the roots of cyprus, the roots of calamus aromaticus, the roots of zedoary, the roots of galangal, the roots of ginger; two handful each of the tops of lavender, the tops of rosemary; of the leaves of the bay tree, of the leaves of marjoram, of the leaves of balm, of the leaves of mint, of the leaves of sage, of the leaves of thyme, flowers of white roses, flowers of damask roses, of each half a handful; rose water, four pints; the best white wine, a gallon.

Bruise what must be bruised. Then infuse them all 24 hours, after which distill them.

This is of the same virtue as the former.

AQUA MIRABILIS IS MADE THUS

Take a dram each of cloves, galangal, cububs, mace, cardamum, nutmeg, and ginger; half a pint of the juice of sallendine; a pint of the spirit of wine; three pints of white wine. Infuse all these 24 hours, and then distill off two pints by alembic. This water is very good against wind in the stomach and head.

DR. STEPHEN'S WATER IS MADE THUS

Take a gallon of gascoigne wine; a dram each of ginger, galganal, cinnamon, nutmeg, grains, aniseed, fennel seeds, caraway seeds; a handful each of sage, red mints, red roses, thyme, pellitory, rosemary, wild thyme, chamomile, and lavender.

Beat the spices small and bruise the herbs, letting them macerate 12 hours, stirring them now and then. Distill them by an alembic or copper still with its refrigeratory. Keep the first pint by itself, and the second by itself.

Note that the first pint will be hotter, but the second the stronger of the ingredients.

This water is well known to comfort all the principal parts.

A FAMOUS SURFEIT WATER

Take of red poppy cakes (after the water has been distilled from them in a cold still) not over dried two pounds. Pour upon them of the water of red poppy a gallon and a half, canary wine three pints. Add to them of coriander seeds bruised four ounces, of dill seed bruised two ounces, of cloves bruised half an ounce, of nutmeg sliced an ounce, of rosemary a handful, three oranges cut in the middle. Distill them in a hot still. To the water put the juice of six oranges and hang in it half an ounce of nutmeg sliced and as much cinnamon bruised, two drams of cloves, a handful of rosemary cut small, sweet fennel seeds bruised an ounce, of raisins of the sun stoned half a pound, being all put into a bag, which may be hung in the water (the vessel being close stopped) the space of a month, and then be taken out and cast away, the liquor thereof being first pressed out into the foresaid water.

This water is of wonderful virtue in surfeits and pleurisies, composes the spirits, causes rest, helps digestion if two or three or four ounces thereof be drunk, and the patient composes himself to rest.

A PECTORAL WATER

Distill green hysop in a cold still until you have a gallon and a half of the water. To this put four handfuls of dried hysop, a handful of rue, as much of rosemary, and horehound, elecampane root, bruised, and of horse-radish root, bruised, of each four ounces, of tobacco in the leaf three ounces, aniseed bruised two ounces, two quarts of canary wine. Let them all stand in digestion two days and then distill them. In the water that is distilled put half a pound of raisins of the sun stoned, of licorice two ounces, sweet fennel seeds bruised two ounces and a half, ginger sliced an ounce and a half. Let them be infused in frigidum the space of ten days. Then take them out.

This water sweetened with sugar candy and drunk to the quantity of three or four ounces twice in a day is very good for those that are pitisical. It strengthens the lungs, attenuates thick phlegm, opens obstructions, and is very good to comfort the stomach.

A VERY EXCELLENT WATER AGAINST THE WORMS

Take of worm seed eight ounces, the shavings of harts-horn two ounces, of peach flowers dried an ounce, of aloes bruised half an ounce. Pour on these the water of tansy, rue, peach flowers, and of wormwood, of each a pint and a half. Let them, being put into a glass vessel be digested the space of three days. Then distill them. Cohobate this water three times.

This water is very excellent against the worms. It may be given from half an ounce to 3 ounces, according to the age of the patient.

A WATER AGAINST THE CONVULSIONS

Take of ros vitriol (which is that water that is distilled from vitriol in the calcining thereof) two quarts. In this put of rue a handful, juniper berries bruised an ounce, of bay berries bruised half an ounce, piony berries bruised six drams, camphor two drams, rhubarb sliced an ounce. Digest these four days in a temperate balneum. Then distill them in a glass vessel in ashes, and there will come over a water of no small virtue.

It cures convulsions in children, especially. It helps also the vertigo, the hysterical passion, and epilepsy. It is very excellent against all offensive vapors and wind that annoys the head and stomach.

It may be taken from two drams to two ounces.

A HYDROPICAL WATER

Take of wormwood, broom blossoms, of each a like quantity. Bruise them and mix with them some leaven and let them stand in fermentation in a cold place the space of a week. Then distill them in a cold still until they be very dry. Take a gallon of this water and half a gallon of the spirit of urine. Pour them upon two pounds of dried broom blossoms, half a pound of horse-radish roots dried, three ounces of the best rhubarb sliced, two ounces of sweet fennel seed bruised, and an ounce and a half of nutmeg. Let them digest a week, being put into a glass vessel in a temperate balneum. Then press the liquor hard from the feces. Put this liquor in the said vessel again and to it put three ounces of sweet fennel seeds bruised, licorice sliced two ounces. Digest them in a gentle heat for the space of a week. Then pour it off from the feces and keep it close stopped.

This water being drunk from the quantity of an ounce to four ounces every morning, and at four of the clock in the afternoon, does seldom fail in curing the dropsie. It strengthens also the liver, is very good against gravel in the back, stone, cures the scurvy, gout, and such diseases as proceed from the weakness and obstructions of the liver.

A WATER AGAINST THE COLIC

Take of aniseed 3 ounces, cumin seed 3 drams, cinnamon half an ounce, mace, cloves, nutmeg, of each a dram, galangal, 3 drams, calamus aromaticus, dried, half an ounce, the dried rind of oranges, 2 ounces, bayberries, half an ounce.

Let all these, being bruised, be macerated in six pints of mallago wine, and then be distilled in balneum until all be dry.

This water being drunk to the quantity of an ounce or two at a time does ease the gripings of the belly and stomach very much.

A WATER AGAINST THE VERTIGO AND CONVULSIONS

Take of black cherries bruised with their kernels, a gallon; of the flowers of lavender, 3 handfuls; half an ounce of white mustard seed bruised. Mix these together and then put some ferment to them and let them stand close covered the space of a week. Then distill them in balneum until all be dry.

The water being drunk to the quantity of an ounce or two or three does much relieve the weakness of the head and helps the vertigo thereof, as also strengthens the sinews, and expels windiness out of the head and stomach.

A COMPOUND WATER OF BURRE ROOT CAUSING SWEAT

Take the root of the great burre fresh, the root of the swallow wort fresh, and the middle rind of the root of the ash tree; of each two pounds.

Cut them small and infuse them 24 hours in the best white wine and rue vinegar, of each five pints. Then distill them in balneum until all be dry. Put to the water as much of the spirit of sulphur per campanam as will give it a pleasant acidity, and to every pint of the water put a scruple and a half of camphor cut small and tied up in a bag which may continually hang in the water.

This was a famous water in Germany against the plague, pestilential and epidemical diseases. It causes sweat wonderful if two or three ounces thereof be drunk and the patient composes himself to sweat.

ANOTHER EXCELLENT SUDORIFIC AND PLAGUE WATER

Take of the best spirit of wine, a gallon; andromachus-treacle, six ounces; myrrh, two ounces; the roots of colts foot, three ounces; spermaceti, terra sigillata, of each half an ounce; the root of swallow wort, an ounce; dittany, pimprenell, valerian root, of each two drams; camphor a dram.

Mix all these together in a glass vessel, and let them stand close stopped the space of 8 days in the sun.

Let the patient drink of this a spoonful or two and compose himself to sweat.

DR. BURGES, HIS PLAGUE WATER

Take three pints of muscadine and boil in it sage and rue, of each a handful, until a pint be wasted. Then strain it and set it over the fire again. Put thereto a dram of long pepper, ginger, and nutmeg, of each half an ounce, being all bruised together. Then boil them a little and put thereto half an ounce of andromachus-treacle, and three drams of mithridate, and a quarter of a pint of the best angelica water.

This water (which, as says the author, must be kept as your life, and above all earthly treasure) must be taken to the quantity of a spoonful or two morning and evening, if you be already infected, and sweat thereupon. If you be not infected, a spoonful is sufficient, half in the morning and half at night. All the plague time under God (says the author) trust to this, for there was never man, woman, or child that failed of their expectation in taking it. This is also of the same efficacy, not only against the plague, but pox, measles, surfeits, etc.

CROLLIUS, HIS TREACLE WATER CAMPHORATED

Take of andromachus, his treacle, five ounces; the best myrrh, two ounces and a half; the best saffron, half an ounce; camphor, two drams.

Mix them together. Then pour upon them ten ounces of the best spirit of wine, and let them stand 24 hours in a warm place. Then distill them in balneum with a gradual fire. Cohobate the spirit three times.

This spirit causes sweat wonderfully and resists all manner of infection.

It may be taken from a dram to an ounce in some appropriate liquor.

A DISTILLED TREACLE VINEGAR

Take of the roots of bistort, gentian, angelica, tormentil, pimprenel, of each 10 drams; bay berries, juniper berries, of each an ounce; nutmeg, five drams; the shavings of sassafras, two ounces; zedoary, half a dram; white sanders, three drams; the leaves of rue, wormwood, scordium, of each half a handful; the flowers of wall flower, bugloss, of each a handful and a half; andromachus treacle, mithridate, of each six drams.

Infuse them all in three pints of the best white wine vinegar for the space of 8 days in frigidum in glass vessels. Then distill them in balneum.

The spirit is very good to prevent them that are free from infection, and those that are already infected, from the danger thereof, if two or three spoonfuls thereof be taken once a day, with sweating after, for those that are infected, but without sweating for others.

AN EXCELLENT WATER AGAINST THE STONE IN THE KIDNEYS

Take of the middle rind of the root of ash, bruised, 2 pounds; juniper berries, bruised, 3 pounds; venice turpentine that is very pure, 2 pounds and a half.

Put these into 12 pints of spring water in a glass vessel well closed, and there let them putrify in horse dung for the

space of three months. Then distill them in ashes and there will come forth an oil and a water. Separate the one from the other.

Ten or twelve drops of this oil being taken every morning in four or six spoonfuls of the said water dissolves the gravel and stone in the kidneys most wonderfully.

ANOTHER WATER FOR THE SAME USE

Take the juice of radishes and lemons, of each a pound and a half; waters of betony, tansy, saxifrage, and vervain, of each a pint; hydromel and malmefey, of each two pounds. In these liquors mixed together, infuse for the space of 4 or 5 days in a gentle balneum, juniper berries, ripe and newly gathered, being bruised, 3 ounces; the seed of gromwell, burdock, radish, saxifrage, nettles, onions, anise, and fennel, of each an ounce and a half; the four cold seeds, the seed of great mallows, of each six drams; the calx of egg shells, cinnamon, of each three drams; of camphor two drams. Let all be well strained and distilled in ashes.

Two ounces of this water taken every morning does wonderfully cleanse the kidneys, provoke urine, and expel the stone, especially if you calcine the feces and extract the salt thereof with the said water.

TO MAKE AN EXCELLENT WOUND WATER

Take plantain, rib wort, bone wort, wild angelica, red mints, betony, agrimony, sanicle, blue bottles, white bottles, scabious, dandelion, evens, honeysuckle leaves, bramble buds, hawthorne buds and leaves, mugwort, daisy roots, leaves and flowers, wormwood, southern wood, of each one handful. Boil all these in a bottle of white wine and as much spring water, until one half be wasted. When it is thus boiled, strain it from the herbs and put to it half a pound of honey and let it boil a little after. Then put into bottles and keep it for your use.

Note that these herbs must be gathered in May only, but you may keep them dry and make your water at any time. This water is very famous in many countries, and it has done such cures in curing outward and inward wounds, impostumes, and ulcers that you would scarce believe it if I should recite them to you. Also it is very good to heal a sore mouth.

The patient must take three or four spoonfuls thereof morning and evening, and in a short time he shall find ease and indeed a cure, unless he be so far declined as nothing almost can recover him.

If the wound be outward, it must be washed therewith, and the linen clothes wet in the same be applied thereto.

DR. MATHIAS, HIS PALSY WATER IS MADE THUS

Take of lavender flowers a gallon and pour upon them of the best spirit of wine, three gallons. The vessel being close stopped, let them be macerated together in the sun for the space of six days. Then distill them in alembic with its refrigeratory. Then take the flowers of sage, rosemary, betony, of each a handful; borage, bugloss, lillies of the valley, cowslips, of each two handfuls.

Let the flowers be fresh, and seasonably gathered, and macerated in a gallon of the best spirits of wine and mixed with the aforesaid spirit of lavender. Then add the leaves of balm, motherwort, orange tree newly gathered, the flowers of stechados, oranges, bayberries, of each an ounce.

After a convenient digestion let them be distilled again. Then add the outward rinds of citrons, the seed of peony husked, of each six drams; cinnamon, nutmeg, mace, cardamum, cububs, of yellow sanders, of each half an ounce; lignum aloes, one dram; the best jujube, the kernels taken out, half a pound.

Let them be digested for the space of six weeks. Then strain and filter the liquor to which add of prepared pearl two drams; prepared emerald, a scruple; ambergris, musk, saffron, red roses, launders, of each an ounce; yellow sanders, rinds of citrons dried, of each a dram.

Let all these species be tied in a silken bag and hung in the foresaid spirit.

A SCORBUTICAL WATEROR A COMPOUND WATER OF HORSERADISH IS MADE THUS

Take the leaves of both scurvy grass, being made very clean, of each six pounds. Let these be bruised and the juice pressed forth, to which add the juice of brook lime, watercress, of each half a pound; of the best white wine, eight pints; twelve whole lemons cut; of the fresh roots of briony, four pounds; horseradish, two pounds; of nutmeg, four ounces.

Let them be macerated three days and distilled.

Three or four spoonfuls of this water taken twice in a day cures the scurvy presently.

SPIRIT OF CASTOR IS MADE THUS

Take of fresh castoreum, two ounces; flowers of lavender, fresh, half an ounce; sage, rosemary, of each two drams; cinnamon, three drams; mace, cloves, of each a dram; the best rectified spirit of wine, three pints.

Let them be digested in a glass (two parts of three being empty) stopped close with a bladder, and cork two days in warm ashes. Then distill the spirit in balneum, and keep it in a glass close stopped. If you would make it stronger, take a pint of this spirit and an ounce of the powder of castoreum. Put them into a glass and digest them into a cold place for space of ten days, and then strain out the spirit.

This spirit is very good against fits of the mother, passions of the heart which arise from vapors, etc.

BEZEARD WATER IS MADE THUS

Take of the leaves of the greater sallandine together with the roots thereof, three handfuls and a half; of rue, two handfuls; scordium, four handfuls; dittany of Crete, Carduus, of each a handful and a half; root of zedoary, angelica, of each three drams; the outward rind of citrons, lemons, of each six drams; the flower of wall gilly flower, an ounce and a half; red roses, the lesser centory, of each two drams; cinnamon, cloves, of each three drams; andromachus, his treacle, three ounces; mithridate, an ounce and a half; camphor, two scruples; trochisces of vipers, two ounces; mace, two drams; lignum aloes, half an ounce; yellow sanders, a dram and a half; the seeds of carduus, an ounce; citron, six drams.

Cut those things that are to be cut, and let them be macerated three days in the best spirit of wine and muscadine, of each three pints and a half; vinegar of wall gilly flowers and the juice of lemons, of each a pint. Let them be distilled in a glazed vessel in balneum.

After half the liquor is distilled off, let that which remains in the vessel be strained through a linen cloth and vaped away to the thickness of honey which may be called a Bezeard extract.

This water is a great cordial and good against any infection.

TO MAKE A SPECIFICAL SUDORIFIC

Take of ginger a pound; long pepper and black pepper, of each half an ounce; of cardamums, three drams; of grains, an ounce. Powder them and put them into a glass with half an ounce of the best camphor; distilled vinegar, two pounds; digest them a month and then separate the vinegar by expression which must putrefy a month and then be circulated for the space of a week. Then filter it and you have as powerful a sudorific as ever was or can be made. The dose is from a dram to half an ounce, and to be drunk in a draught of posset drink.

TREACLE WATER IS MADE THUS

Take the juice of the green shells of walnuts four pounds, the juice of rue three pints, carduus, marigold, balm, of each two pints. The root of butter burr fresh, a pound and a half, burr, angelica, master wort fresh, of each half a pound. The leaves of scordium, four handfuls. Old andromachus treacle, mithridate, of each eight ounces, the best canarie, twelve pints, the sharpest vinegar, six pints. the juice of lemons, two pints.

Digest them two days in horse dung, the vessel being close stopped.

Then distill them in sand.

AQUA MARIAE IS MADE THUS

Take of sugar candid, one pound; canarie wine, six ounces; rose water, four ounces. Make of these a syrup and boil it well, to which add of aqua imperialis, two pints; ambergris, musk, of each eighteen grains; yellow sanders, infused in aqua imperialis, two drams.

THE MOTHER WATER COMMONLY CALLED HYSTERICAL WATER IS MADE THUS

Take of the juice of the root of briony four pounds.

Leaves of rue, mugwort, of each two pounds. savin dried, three handfuls. motherwort, nippe, pennyroyal, of each two handfuls. garden basil, dittany of Crete, of each a handful and a half. The rind of yellow oranges, fresh, four ounces. myrrh, two ounces. castoreum, an ounce. best canarie wine, twelve pints.

Let them be distilled four days in a fit vessel. Then distill them in balneum.

A VOMITING WATER IS MADE THUS

Take of the best tobacco in leaves, cut small, four ounces; squils, two ounces; nutmeg sliced, half an ounce. Put these into three pints of spring water, a pint of white wine vinegar. Distill them in a hot still or alembic. If you would have it stronger, you must put this water on fresh ingredients and distill it again. A little quantity of this water is a most safe and effectual vomit, and may be taken from the eldest to the youngest, if so be you proportion the quantity to the strength of the patient. You may dulcify it with sugar or syrup if you please.

A VOMITING WATER MADE BY PLATEAUS

Take of green walnuts gathered about midsummer, radish root, of each bruised, two parts; of distilled wine vinegar, four parts. Digest them five days, then distill them in balneum. This being taken to the quantity of two spoonfuls, or three, causes easy vomiting.

A DISTILLED WATER THAT PURGES WITHOUT ANY PAIN OR GRIPING

Take of scammony an ounce; hermodactyles, two ounces; the seeds of broom, of the lesser spurge, of dwarf elder, of each half an ounce; the juice of dwarf elder, of wild asses cucumber, of black hellebore, the fresh flower of elder, of each an ounce and a half; polypodium, six ounces; of sene, three ounces; red sugar, eight ounces; common distilled water, six pints. Let all these be bruised and infused in the water 24 hours, then be distilled in balneum. This water may be given from two drams to three ounces, and it purges all manner of humors, opens all obstructions, and is pleasant to be taken. Those whose stomachs loathe all other physics may take this without any offence. After it is distilled there may be a little bag of spices in it, as also it may be sweetened with sugar or any opening syrup.

A SPECIFIC LIQUOR AGAINST THE TOOTHACHE

Take of oil of cloves well rectified half an ounce. In it dissolve half a dram of camphor. Add to them of the spirit of turpentine, four times rectified in which half a dram of opium has been infused, half an ounce. A drop or two of this liquor put into a hollow tooth with some lint eases the toothache presently.

John French - The Art of Distillation - Book III

BOOK III

OF MINERALS

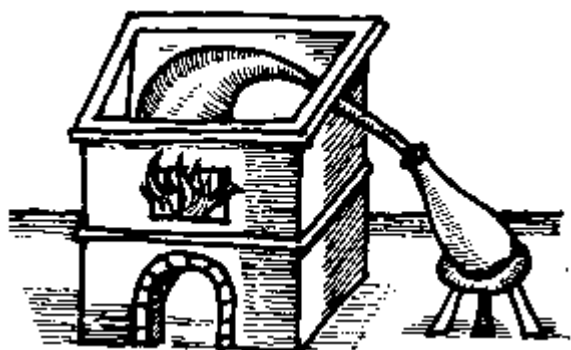
SPIRIT OF SALT IS MADE THUS

Take of the best bay salt as much as you please. Let it be dissolved in spring water and filtered. Mix this with brine in a copper vessel, of the powder of bricks or tiles, twice or thrice as much as the salt before its dissolution was in weight; let the water vapor away over the fire (continually stirring of it) until it be dry. Then put this powder into a glass retort well luted, or an earthen retort, and put it into a furnace (a large receiver joined to it according to art). Then give fire to it by degrees until it will bear an open fire, for the space of 12 hours. You shall have a very acid oil or spirit in the receiver. That liquor, being put into a little retort in sand, may be rectified by the vaporizing away of the phlegm. Then keep it for use in a glass very well stopped that no air goes in. Spirit of salt is very good in fevers putrid, as in hydriopical diseases.

A retort and its receiver before they be set on work.



A retort with its receiver set on work.



OIL OR SPIRIT OF SALT MAY ALSO BE MADE AFTER THIS MANNER

Take one part of salt and three parts of powder of bricks or tiles, mix them together, and put them into a retort either of glass or earth, to which put fire as before.

After this manner you may make oil or spirit of nitre, salt gem, alum.

Note that these salts must first be calcined which is done by exhaling their phlegm.

TO TURN SALTPETRE INTO A WATER BY A MERE DIGESTION

Take of saltpetre powdered very small and with it fill the fourth part of a bolt head. Close it well and let it stand in the heat of ashes or sand the space of six weeks, and you shall see a good part of it turned into water. Continue it in the said heat until it be all dissolved.

This is of incomparable use in fevers and against worms or any putrefaction in the body, and is indeed a most rare secret.

SPIRIT OF SALT ARMONIAC

Dissolve sal ammoniac in distilled spirit of urine over a moderate heat. In this spirit let bricks beaten into small pieces and made red hot be quenched until they have imbibed all the water. Then make distillation in a retort in sand or in a naked fire.

This spirit is of greater strength than that of other salts.

OIL OR SPIRIT OF VITRIOL IS MADE THUS

Take of hungarian, or the best english vitriol, as much as you please. Let it be melted in an earthen vessel glazed, with a soft fire, that all the moisture may exhale, continually stirring of it, until it be brought into a yellow powder which must be put into a glass retort well luted or an earthen retort that will endure the fire. Fit a large receiver to the retort and close the joints well together. Then give it fire by degrees until the second day. Then make the strongest heat you can until the receiver which before was dark with fumes be clear again. Let the liquor that is distilled off be

put into a little retort, and the phlegm be drawn off in sand. So will the oil be rectified which is most strong and ponderous, and must be kept by itself.

Many call that phlegm which is drawn off in rectifying, the spirit of vitriol.

This oil or spirit is very excellent in putrid fevers, resisting putrefaction. Also, it opens all obstructions and is very diuretical.

A RED AND HEAVY OIL OF VITRIOL

Take of calcined vitriol one part, flints grossly powdered, two parts. Of these with spirit of wine make a paste. Distill it in a retort and there will come forth a red heavy oil.

This is to be used rather about metals than in the body. Only if the scurfe on the head be anointed therewith two or three times in a week, it will fall off and the head be cured.

TO DULCIFY THE SPIRIT OF VITRIOL AND OF SALT

Take the spirit of vitriol, or of salt, and the best spirit of wine, of each half a pound. Distill them in a retort together three or four-times, and they will be united inseparably and become sweet.

Some put eight eight ounces of the best sugar candy to these spirits before they be thus distilled.

Ten or twenty drops of this compound spirit being taken in any appropriate liquor is very good in any putrid or epidemical disease.

GILLA THEOPHRASTI OR A MOST DELICATE VOMITING LIQUOR MADE OF VITRIOL

Take of crystals made out of copper or iron. Dissolve them in the acid phlegm that first comes forth in the distilling of common vitriol. Circulate them eight days.

This liquor must be taken in wine. It causes vomiting instantly, and is most excellent to cleanse and strengthen the stomach and to cure all such distempers that arise from thence, as salt defluxions, fevers, worms, headache, vertigo, the hysterical passion, and such like.

The dose is from a scruple to two scruples.

OIL OF SULPHUR PER CAMPANUM

Take a large iron vessel like a platter. Over it hang a glass bell that has a nose like the head of a cold still. Fill the lower vessel, being narrower than the compass of the bell or head, with brimstone or sulphur. In flame it, so will the fume which arises from thence be condensed in the bell into a liquor which will drop down through the nose into the receiver.

Note that the bell must hang at such a distance from the other vessel that the flame of the sulphur touches it not, according to this following example.



If instead of this broad vessel, you take a large crucible and melt in it saltpetre and cast sulphur upon it thus melted, you shall make a great deal quicker dispatch.

This spirit is of the same nature, and has the same operations, as oil of vitriol.

THE OIL OF SULPHUR IS MADE AFTER A MORE PHILOSOPHICAL MANNER THUS

Take of crude sulphur as much as you please. Put it into a melting vessel to be dissolved over the fire. Being dissolved, pour it forth into seething hot water (this do ten or more times, remembering that the water must be always seething hot) and you shall see that the sulphur will be like butter. Then put it into a retort, pouring on it the best spirit of wine. Distill it with a soft fire, and there will come forth an oil of a golden color, of a good taste and smell which is the true balsam of sulphur. The oil that swims on the spirit must be separated.

This oil for the cure of all distempers of the lungs, for all fevers whether putrid or pentalential, and the cure of wounds and ulcers, is scarce to be equalled.

THE ESSENCE OF SULPHUR

Take of sulphur vivum as much as you please. Dissolve it as well as you can in aqua fortis (made of vitriol and saltpetre). Then evaporate the aqua fortis, and then reverberate the matter until it becomes very red. Extract the tincture with spirit of wine, and then digest them until the essence be separated from the spirit like an oil and sink to the bottom.

This essence also is of wonderful virtue against all putrefaction both inward and outward, a great preservative against the plague, and is wonderful balsamical, and cures all sores both old and new, even to admiration.

THE OIL OF ARSENIC IS MADE THUS

Take of crystalline arsenic (being first sublimed with colcothar alone) as much as you please. Mix it with an equal weight of the salt of tartar, and saltpetre. Let them be between two little pots or crucibles (whereof the upper has a hole) calcined until no fume ascends. The matter being thus calcined dissolve in warm water that you may draw a salt from thence. The powder which falls to the bottom imbibe with the liquor of tartar, and dry it by the fire. This you must do three times. Then dissolve the matter in warm water that you may draw out the salt thereof, and there will remain a most white powder, and fixed, which in a moist place will be dissolved into a liquid matter like oil or butter.

AQUA FORTIS OR A STRONG SPIRIT (THAT WILL DISSOLVE SILVER AND BASER METALS) IS MADE THUS

Take of vitriol calcined two parts and of nitre one part. Grind and mix them well together and put them into a glass retort coated or earthen retort that will endure the fire. Set them into the furnace in an open fire and then, having fitted a large receiver, distill it by degrees the space of 24 hours. Then rectify the water or spirit in sand.

AQUA REGIA OR STYGIA OR A STRONG SPIRIT THAT WILL DISSOLVE GOLD IS MADE THUS

Take of nitre two parts, salt armoniac one part, and the powder of flints three parts. Put them into a glass retort coated or earthen retort that will endure the fire. Distill them by degrees over a naked fire for the space of 24 hours. Take it out and rectify it. This water will dissolve gold.

ANOTHER AQUA REGIA IS MADE THUS

Take of spirit of nitre as much as you please. Put a dram of crude nitre to every ounce of it, and it will be as strong as any aqua regia.

This water will dissolve gold.

TO MAKE A MOST STRONG AND VEHEMENT AQUA FORTIS

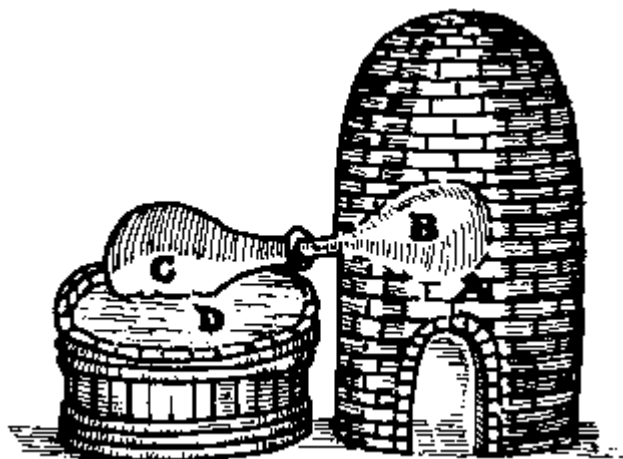
Take of the strongest aqua fortis that you can get and well rectified a pound, of mercury sublimed four ounces, and sal ammoniac two ounces. Mix all these together.

OIL OR BUTTER OF ANTIMONY IS MADE THUS

Take of crude antimony as much as you please and of sublimed mercury a like quantity. Make them both into a very fine powder and mix them and put them into a glass retort, the neck whereof must be large. Give fire by degrees in a close reverberatory, or let the distillation be made in sand. There will distill into the receiver a fatness; part whereof, sticking to the neck of the retort, will melt by a light fire being put to it. That fatness may be rectified in a retort and either be kept by itself as it is, or set in a cellar or moist place and be resolved into a liquor.

This oil must be washed in good store of water, and then there will settle to the bottom a white powder which, being washed often in fair water until all the sharpness is gone, is then called mercurius vitae, six or seven grains whereof is an excellent vomiting medicine.

A furnace for a close reverberation furnished with its retort and receiver.



- A. Shows the furnace.
- B. The retort.
- C. The receiver.
- D. The vessel filled with cold water.

HOW TO MAKE A WATER OUT OF ANTIMONY WHEREOF A FEW DROPS SHALL PURGE OR SWEAT AND WHICH HAS NEITHER SMELL OR SCARCE ANY TASTE

Take flowers of antimony and sublime them with sal ammoniac six or seven times. Then wash away the salt with warm water and dry the powder, which then lay thin on a marble in a cellar until it be dissolved (which will be in six weeks time). This water, if it be taken to the quantity of twenty drops, will purge. If in a lesser quantity, it will sweat.

TO MAKE AN OIL OR QUINTESSENCE OF METALS

Dissolve what metal or mineral you please in a strong spirit of salt (except silver which must be dissolved in aqua fortis). Draw off the phlegm in balneum, pour on rectified spirit of wine, and digest them so long until a red oil swims above which is the quintessence of metals and minerals, and is a very great secret.

THE TRUE SPIRIT OF ANTIMONY IS MADE THUS

Take of the subtle powder of the regulus of antimony as much as you please. Sublime it of itself until it will sublime no more (still putting what is sublimed to that which remains at the bottom) or with sal ammoniac six or seven times (remembering that then you must dulcify it with warm water by dissolving therewith the salt, and dry the precipitate afterwards). Set this fixed powder in a cellar, laying it very thin upon a marble stone, and in about six weeks or two months it will all be dissolved into water which must be filtered. Then evaporate part of this water, and let it stand two or three days in the cellar to crystallize. These crystals purify and dry. Mix them with three times the quantity of

the gross powder of tiles, distill them in a retort, and there will come forth first a white spirit, and then a red, which you may rectify in balneum.

THE TRUE OIL OR ESSENCE OF ANTIMONY IS MADE THUS

Take of the foresaid crystals. Dissolve them in good rectified spirit of wine. Digest them two months in balneum or horse dung. Then evaporate the spirit of wine and there will remain in the bottom the true oil or essence of antimony.

Then take new crystals of antimony and let them imbibe either this oil or the foresaid spirit until they will imbibe no more. Then digest them two months in sand, and they will become a flowing fixed salt, and of excellent virtue.

The aforesaid spirit, this oil, and essence of antimony may be equalized to aurum potabile to all intents and purposes, according to a medicinal use, especially the fixed essence. The dose is five or six grains.

A BURNING SPIRIT MADE OUT OF LEAD MOST FRAGRANT AND BALSAMICAL

Take the calx of saturn, or else minium, and pour upon it so much spirit of vinegar that may cover it four fingers breadth. Digest them in a warm place the space of 24 hours, often stirring them that the matter settle not too thick in the bottom. Then decant the menstruum and pour on more. Digest it as before and this do so often until all the saltiness be extracted. Filter and clarify all the menstruum being put together. Then evaporate it half away and set the other part in a cold place until it crystallizes. These crystals dissolve again in fresh spirit of vinegar. Filter and coagulate the liquor again into crystals, and this do often until they be sufficiently impregnated with the sal ammoniac of the vinegar as their proper ferment. Digest them in a temperate balneum that they may be resolved into a liquor like oil. Then distill this liquor in sand in a retort with a large receiver annexed to it, and well closed that no spirits evaporate, together with the observation of the degrees of the fire. Then there will distill forth a spirit of such a fragrant smell that the fragrant of all flowers and compounded perfumes are not to be compared to it. After distillation when all things are cold, take out and cast away the black feces which is of no use. Then separate the yellow oil which swims on the top of the spirit and the blood red oil which sinks to the bottom of it. Separate the phlegm from the spirit in balneum. You shall by this means have a most fragrant spirit that even ravishes the senses, and so balsamical that it cures all old and new sores inward and outward, and so cordial that the dying are with admiration revived with it.

They that have this medicine need scarce use any other either for inward or outward griefs.

HOW TO TURN QUICKSILVER INTO A WATER WITHOUT MIXING ANYTHING WITH IT AND TO MAKE THEREOF A GOOD PURGATIVE AND DIAPHORETIC MEDICINE

Take an ounce of quicksilver, not purified. Put it into a bolt head of glass which you must nip up. Set it over a strong fire in sand for the space of two months, and the quicksilver will be turned into a red sparkling precipitate. Take this powder and lay it thin on a marble in a cellar for the space of two months, and it will be turned into a water which may be safely taken inwardly. It will work a little upward and downward, but chiefly by sweat.

Note that you may set diverse glasses with the same matter in the same furnace, so that you may make the greater quantity at the time.

I suppose it is the sulphur which is in the quicksilver, and makes it so black, that being stirred up by the heat of the fire fixes the mercury.

A FRAGRANT OIL OF MERCURY

Take of mercury seven times sublimed, and as often revived with unslaked lime, as much as you please. Dissolve it in spirit of nitre in a moderate heat. Then abstract the spirit of salt and edulcorate it very well by boiling it in spirit of vinegar. Then abstract the spirit of vinegar, and wash it again with distilled rain water. Dry it and digest it two months in a like quantity of the best rectified spirit of wine you can get.

Distill them by retort, making your fire moderate at the beginning, and afterwards increasing it. Then evaporate the spirit of wine in balneum, and there will remain in the bottom a most fragrant oil of mercury.

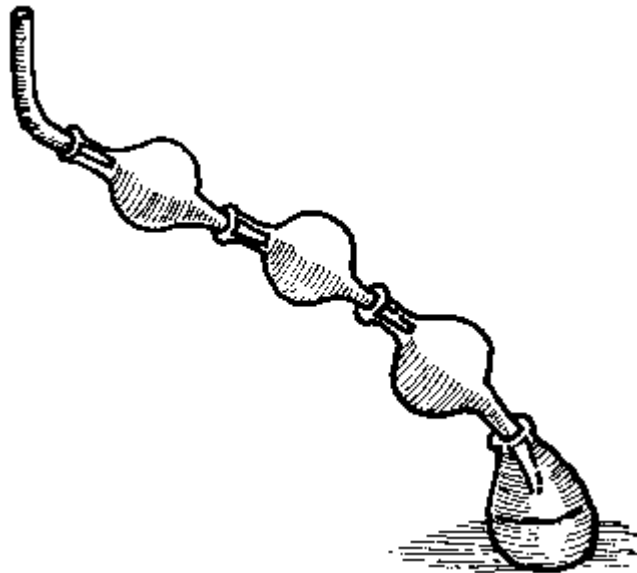
This oil so purifies the blood by sweat and urine that it cures all distempers that arise from the impurity thereof, as the venereal disease, etc.

The truth is, they that have this medicine well made need but few other medicines. The dose is four or five drops.

TO TURN MERCURY INTO A WATER BY ITSELF

Set this following vessel being made of iron into a furnace so that the three bowls thereof be within the furnace, and the pipe and receiver be without. Make your furnace so as that there be a great hole left open at the top where you must put in your coals, shutting it afterwards with a cover of stone made fit "hereunto. On top also must be holes to let in air.

The vessel for this operation.



First make your iron vessel as red hot as possibly it can be made (or else you do nothing) having first annexed an earthen well glazed receiver to the bottom of it. Then put half an ounce of quicksilver at a time in at the top (which presently stop with clay) and presently the mercury will come over, part in a sharp liquor and part as crude a mercury as before, which you may put in again until it be all turned to water.

Note that unless the quicksilver gives a great crack presently after it is put in, it is a sign that the vessel is not hot enough.

This operation being well prosecuted may produce a medicine with which none under the Philosophers Elixir may compare.

How to distill spirits and oils out of minerals, vegetables, bones, horns and faster and in a greater quantity in one hour than in the common way in twenty-four.

This must be done in such a furnace as this.



- A. Signifies the furnace with its iron or earthen distilling vessel walled in, to which a very large recipient is joined.
- B. The distiller who with his left hand takes off the cover and with his right casts in his prepared matter with an iron ladel.
- C. The form of the distilling vessel.
- D. The same as it appears inward.
- E. The form of the vessel not walled in but standing on the coals for other uses.

This furnace must be twice so high, as wide, and the pipe must be a foot long out of the furnace.

The vessel walled in must be of earth for the distilling of antimony, sulphur, and such things as will corrode iron; but for other things, iron is most convenient.

Before you make any distillation, let the vessel which is walled in be red hot. Then little by little cast in your matter which must be cut or powdered small, and clap down the cover into the false bottom above which is full of molten lead and, therefore, suffers no fume to go forth.

When you see the fumes in the receiver (which must be of glass) to cease and condensed into a liquor, then put in more matter.

By this way you may make a far greater dispatch and distill a greater quantity out of the same proportion of matter than by the common way.

By this way there is no danger of breaking your receiver, and you may end and begin when you please, and try diverse experiments in one hour. You cannot make the fire too strong, and may make the spirits of such things as can hardly or not so well be made by a retort, as the spirits of salt, of tartar, harts horn, antimony, etc., etc.

Salt and such things as will flow must have bole or powder of brick mixed with them before they be cast into the vessel. Or, if you please, you may first dissolve what salt you please and with red hot gross powder of brick, imbibe

the water. Then cast in this powder by little and little into the distilling vessel, and the salt by this means will yield its spirit quickly and in abundance. By either of these two ways you may make a pound of the spirit of nitre in an hour, and of salt in two hours.

Now, whereas some things yield a spirit and a thick and heavy oil, they may be rectified thus: viz., by putting them into a retort and distilling them in sand or ashes with a gradual heat. There will come forth the phlegm of some liquors first and then the spirit, and of other some the spirit, and then the phlegm, but of all these the heavy thick oil at last which, by distilling off, becomes far clearer than before. This may again be rectified by spirit of salt as I have showed before and, therefore, need not here repeat it.

TO MAKE AN OIL OF LAPIS CALAMINARIS

Take of lapis calaminaris powdered as much as you please. Pour on it five or six times as much of rectified spirit of salt. Shake them together continually or else it will be congealed into a hard mass which can hardly be mollified again. When no more will dissolve in frigido, put it in warm sand so long until the spirit of salt be of a high yellow color. Then pour it off and put on more until all be dissolved that will. Cast away the feces, put the solution into a glass body, and distill it in sand. About the third part of the spirit of salt comes over as insipid as common water, though the spirit were well rectified before, for the dryness of the lapis calaminaris (which is the driest of all minerals and metals except zinc) retains the spirit. After the phlegm is come over, let the glass cool, and you shall find at the bottom a thick red oil, very fat, even as olive oil, and not very corrosive. Keep it from the air, or else it turns into water.

It is of wonderful virtue for inward and outward griefs, for it has in it a pure golden sulphur.

Common sulphur mixed with this oil, and melted in a strong fire, swims like water above and is transparent.

This oil distilled in a retort with pure sand in a strong fire, yields a spirit like fire scarce to be contained in any vessel and dissolves all metals except silver, and reduces pure spirit of wine into an oil within a few days.

TO MAKE OIL OF TALC

Take of the best talc reduced into very thin flakes. Make them red hot and then quench them in the strongest lixivium that soap boilers use. Do this fifteen times and it will become as white as snow. Then powder it very small and calcine it by fumigation, by the fume of some very sharp spirit as of aqua fortis or the like. When it has been calcined for the space of a fortnight, it will become somewhat mucilaginous. Then set it in any heat of putrefaction as it is (for it has imbibed enough of the sharp spirit to moisten and ferment it) for the space of two months in a bolt head nipped up. Then evaporate the acid spirit and dulcify it with distilled rain water. After this extract what you can out of it with the best rectified spirit of wine. Pour off the solution and evaporate the spirit of wine, and at the bottom will be a most beautiful oil.

The oil is the most glorious fucus or paint in the world.

TO MAKE OIL OF TALC ANOTHER WAY

Take of the foresaid powder of talc after it has been putrified and again dulcified as much as you please. Put four times as much of the best circulated oil of camphor to it. Digest them in horse dung until all the powder be dissolved, and the oil becomes mucilaginous which will be with in two months.

This is for the same use as the former.

There is required a great deal of pains, and care, and no small cost in the preparation of these oils.

OIL IS MADE OF BOLE AMMONIAC TERRA SIGILLATA AND SUCH KIND OF CLAY EARTHS THUS

Take of either of those earths as much as you please. Break it into small pieces and put it into a retort over a naked fire for the space of 12 hours, and there will distill into the receiver (which must be large) the phlegm, then white spirits in a little quantity, yet of a grateful taste and smell.

OIL OUT OF THESE KINDS OF EARTH IIS MADE BETTER THUS

Take of either of these earths which you please, as much as you will. Pour upon it distilled rain water. Set it in some warm place for a month or more and the oiliness will separate from its body of its own accord and swim upon the water. Separate the water by a tunnel, and distill the oil with five parts of the spirit of wine well rectified. There will come forth an oil of a golden color, swimming on the spirit, which is a most excellent balsam.

SPIRIT OF UNSLAKED LIME IS MADE THUS

Take of unslaked lime as much as you please. Reduce it into a subtle powder. Imbibe it with spirit of wine most highly rectified (which must be pure from all its phlegm, or else you labor in vain) as much as it can imbibe. Draw off the spirit of wine with a gentle heat, cohobate it eight or ten times, so will the fiery virtue of the lime be fortified. Take of this levigated lime ten ounces, pure salt of tartar one ounce, the feces of tartar after the salt is extracted eleven ounces. Mix these well together and put them into a glass retort coated. See that two parts of three be empty, distill them into two receivers, the phlegm into one, the spirit into the other which must have a little of rectified spirit of wine in it to receive the spirit.

If you will separate the spirit of wine, then put fire to it, and the spirit of wine will burn away, and the spirit of the lime stay behind which is a kind of a fixed spirit.

This is a very secret for the consuming of the stone in the bladder and the curing of the gout.

OIL MADE OUT OF TILE STONES CALLED THE OIL OF PHILOSOPHERS

Take of bricks or tiles as many as you please. Break them into small pieces, make them red fire hot, and then quench them in pure old oil of olive (in which let them lie until they be cold). Then take them out and grind them very small. Let the powder be put into a glass retort, coated, a fit receiver being put thereto, and distill off the oil in a naked fire by degrees which, being distilled off, keep in a vial, close stopped.

This oil is wonderful penetrating and is good against all cold distempers whatsoever.

THE LIQUOR OR WATER OF CORAL IS MADE THUS

Take sal ammoniac well purified by sublimation, of red coral finely powdered, of each a like quantity. Sublime them so often until the coral will no more rise up. Then take the calx of coral that remains in the bottom of the sublimatory, and put it on a marble or glass in the cellar to be dissolved. That which will not be dissolved, sublime again, and do as before until all be dissolved. So you have the liquor of coral.

Note that if you will have the true tincture of coral, evaporate the humidity of the foresaid liquor. Then extract the tincture out of the powder with spirit of wine, which spirit evaporate to the consistency of honey. And you have a most rare medicine.

This medicine strengthens all the parts in the body and cures all distempers that arise from the weakness thereof.

TO MAKE A WATER OUT OF LAPIS ARMENUS THAT SHALL HAVE NEITHER TASTE NOR SMELL A FEW DROPS WHEREOF SHALL PURGE

Take of lapis armenus powdered small and calcined as much as you please. Sublime it with sal ammoniac until it will sublime no more, but remain in the bottom of the sublimatory. Then take it out and lay it very thin upon a marble in a cellar, and there let it lay two months, and it will be almost all dissolved into a liquor.

Or thus:- Take of lapis armenus powdered small and calcined as much as you please. Pour upon it of distilled vinegar as much as will cover it four fingers breadth. Then set it over a gentle heat, stirring of it two or three times in an hour, for the space of six hours or thereabouts. Then the spirit being tinged very blue with the powder, filter off from the feces. Then pour more spirit of vinegar on the feces and do as before until the spirit be tinged no more.

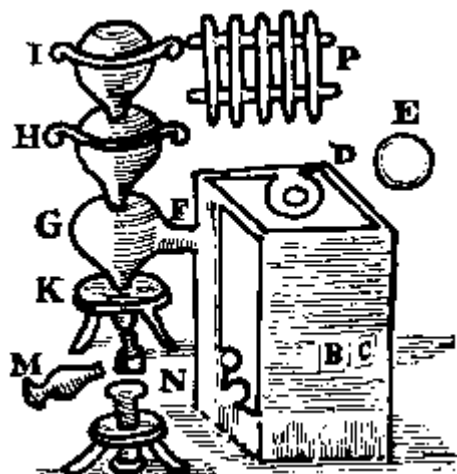
Then take all the blue spirit and vapor it away, and at the bottom you shall have a salt which you must put into a calcining pot and calcine so long in the fire until no more vapor will arise and it becomes a dark red powder. Then put it upon a marble in the cellar for the space of two months and it will be dissolved into a liquor, a few drops whereof put into a glass of beer will purge delicately.

HOW TO MAKE A FURNACE THAT SHALL OF ITSELF WITHOUT ANY VESSELS WHICH SHOULD CONTAIN THE MATTER BEING PUT INTO IT SUBLIME MINERALS AND DISTILL ALL MANNER OF OILS AND SPIRITS OUT OF MINERALS, VEGETABLES, AND ANIMALS AND THAT IN A VERY GREAT QUANTITY IN A VERY SHORT TIME AND WITH SMALL COST

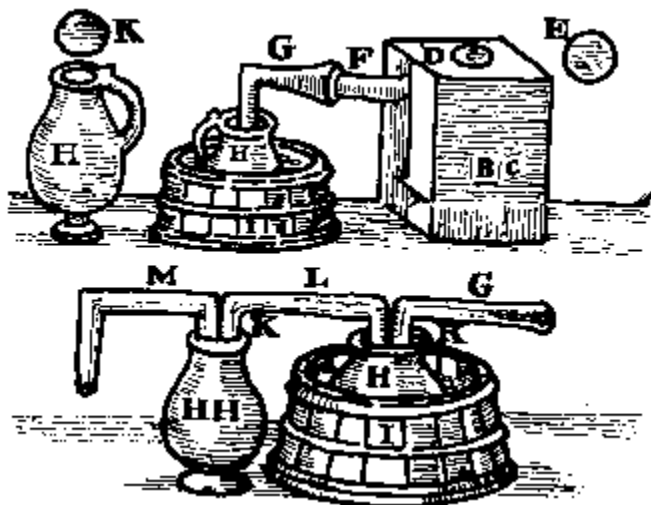
The furnace is made as follows. It may be made of one piece by a potter or of brick, round or four-square, greater or lesser as you please. If the inside be one span broad in the middle, it must be high, one for the ash hole, another above the grate to the middle coal hole and two above the pipe. This pipe, being made of earth or iron, must be a span long between the furnace and the receiver, and a third part as wide as the furnace within.

The recipients must be made of glass or very good earth well luted together, the greater the better.

The First Figure



The Second Figure



A. Signifies the ash hole which must be as wide as the furnace and always open that the fire may burn the stronger.
 B The middle hole of the furnace for the putting in of coals.

- C. The stopple made of stone.
- D. The upper hole of the furnace with a false bottom wherein sand lies which is there lain that the cover may lie the closer and keep in the fumes the better.
- E. The cover which must be presently clapped on as soon as the matter to be distilled is put in.
- F. The pipe which goes out of the furnace and to which the receiver is fitted.
- G. The first recipient for flowers.
- H. The second.
- I. The third.
- K. A stool whereon the first recipient rests, in the midst whereof is a hole, through which goes the neck of the recipient to which another glass is fitted.
- L. The glass fitted to the recipient for the uniting the spirits that drop down.
- M. Another recipient united to the former glass and into which the united spirits do run.
- N. A stool through the middle of which goes a screw for the raising of that glass, which is set under the first recipient, higher or lower.
- P. The grate with two thick iron bars which lie fast, upon which four or five thinner are laid which may be stirred when the furnace is made clean.

Thus far the first of the figures is explained, by which you may see how sublimation and distillation are made at one time, viz., of those things which will yield both flowers and spirits (the flowers sticking in the three upper recipients and the spirits dropping down into the lower).

Now follows the explanations of the second figure which is the same with the former in respect to the furnace itself, but differing in respect of the recipients which serve for the receiving of the spirits and oils of such things as yield no flowers. Therefore I shall begin with the explanation of the receivers.

- G. The first crooked pipe as it is fitted to the pipe that comes out of the furnace.
 - H. The recipient with its cover in which is one hole for one crooked pipe to go through, as you may see in the first H, and two holes for two pipes to go through, as you may see in the second H, and in HH.
- Note that these pipes may either be fastened to the cover, being all of one piece, or they must be well luted, that no vapors may pass through. Now you must conceive that in the lower receivers the vapor that goes out of the first pipe goes first into the receiver, then out of that into the next pipe and so forward until it comes into the last receiver, by which means it is much cooled (for indeed such vapors that come out of the furnace, especially when some materials are distilled, if there were not some such art to cool them would break all recipients).
- I. A tub of water wherein the recipient stands to cool the vapors and condense them.
 - K. The first crooked pipe as it goes into the recipient.
 - L. The second crooked pipe, whereof one end goes into one receiver, and another end into another.
 - M. The last crooked pipe to which you must annex a receiver.

Now the manner of distilling is thus. Let the furnace be full of coals well kindled, then cast on your matter, and stop your furnace close. This furnace needs no retort or other vessels to be set into it. Neither can you do any hurt by too much or too little fire, and you may finish your operation when you please and in one hour try diverse experiments. It saves very much time and cost, and in one hour will do as much as can be done in another furnace in twenty-four. In one hour you may make a pound of spirit of salt with four or five pounds of coals, and as much flowers of antimony in a like space of time, and with as few coals.

If your materials be vegetables, or horn, or bones, cut them small. If hard minerals, let them be powdered very small. If salts, let them be first dissolved in water, which water must be imbibed with red hot coals until all the liquor be imbibed. Then cast in those coals into the furnace.

If you would by this means procure the spirit of hard minerals, as of antimony, and you must take them as they come from the mine, before they have passed the fire.

By this furnace you may make the spirits of such things which will not yield them in any other way.

Note that such oils and spirits as are drawn by this furnace must be rectified in spirit of salt, as I have shown.

ROS VITRIOLI IS MADE THUS

Take of the best Dansick vitriol, as much as you please, uncalcined. Put it into a glass gourd and distill it in the sand, and there will come over a water somewhat sharpish.

This water, or ros, is of greater use than the spirit or oil thereof.

It helps all inward inflammations, as of the liver, kidneys, stomach, helps the ebullition of blood, and all distempers

that come from thence.

This is that phlegm which most vapor away, but it is because they know not the virtues thereof.

A SWEET GREEN OIL OF VITRIOL IS MADE THUS

Take as many copporas stones as you please. Beat them small and lay them in a cool cellar. In twenty or thirty days they will attract the air and look black, and after fourteen days become whitish and sweetish. Then dissolve them in distilled rain water, then filter and evaporate the water, and they will shoot into green crystals which you may dissolve in a cellar per deliquium, being first beaten small and lain on a marble stone.

This liquor is that famous medicine of Paracelsus for the falling sickness, a few drops thereof being taken in any appropriate liquor.

Take heed that it comes at no strong fire, for then, says Paracelsus, it loses its greeness and, as much as it loses of that, so much also of its virtue.

A spirit may be drawn from hence by an ingenious artist that will smell like musk or amber.

THE SULPHUR OF VITRIOL MAY WITH SPIRIT OF WINE BE EXTRACTED THUS

Take of the best Dansick vitriol half a pound and dry it by a gentle fire until it be whitish. Then pour on it of the best rectified spirit of wine thirty ounces (note that there must come to it no other moisture than the spirit of wine, and the glass also must be very dry, else you labor in vain). Then digest it in horse dung the space of a month. Then decant from the feces the spirit of wine without any troubling of it. Then in balneum evaporate the spirit, and at the bottom you will have a yellow liquor of a most wonderful slipticity.

This liquor is a famous anodynum, suppressing all noxious vapors whatsoever and causing rest.

A few drops thereof may be taken in any specifical liquor.

A SUDORIFIC WATER TO BE USED OUTWARDLY

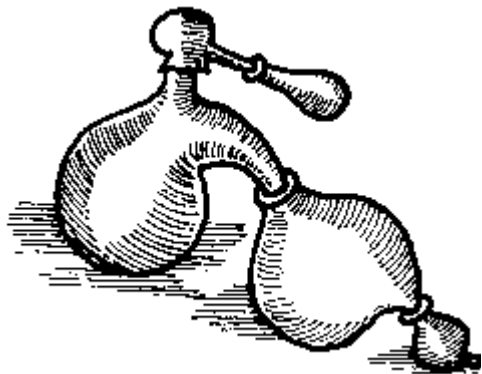
Take of sublimed mercury very finely powdered an ounce and a half, of euphorbium powdered a scruple, spirit of wine well rectified, and rose water, of each a pound. Digest them two or three hours in a gentle balneum, the neck of the vessel which must be very long being well stopped. Then let them boil a quarter of an hour. When the liquor is cold, pour it from the feces and keep it in a glass.

If the backbone be bathed with the water, or the wrist of those that be weak, it causes sweat presently, if it be done in the bed. By which means diseases that require sweat may be cured. Also, any pained place by being bathed with this water is in a little time eased.

Note that you must not bathe any place above three or four times with it, for by being too often used it contracts the skin.

HOW TO RECTIFY OILS AND SPIRITS OF MINERALS

Put the liquor that is distilled from minerals into the retort to which give fire by degrees. The spirit will rise up into the upper receiver and the heavy oil will go into the middle receiver which is the biggest of all. Into the little receiver, annexed to the end of the middle, will pass some of the spirit which, though it passes into the middle receiver, will not stay there, but goes beyond it because it finds vent.



John French - The Art of Distillation - Book IV

BOOK IV

OF ANIMALS

WATERS, SPIRITS, AND OILS, SIMPLE AND COMPOUND OUT OF ANIMALS

OIL AND WATER OUT OF BLOOD IS MADE THUS

Take of blood as much as you please. Let it stand in putrefaction in a glass vessel close covered the space of forty days. Then distill it in ashes, and there will come forth a water and oil. Extract the salt out of the feces with the said water. Calcine the salt in a crucible and then dissolve it in the said water. Then distill off the water (which will be a good rectifying of the water) and dry the salt very well, which then mix with the foresaid oil being first rectified, and digest them both together for the space of a month.

TO MAKE THE MAGISTERY OF BLOOD

Take of the purest blood as much as you please. Put it into a pelican, so that three parts of four may be empty, and then digest it a month in horse dung (in which time it will swell and become as much more as it was when it was put in). Then distill off the phlegm in balneum, and in the bottom will remain the magistery of blood which must be distilled and cohobated nine times in a retort in ashes, and then it is perfected.

This magistery is of excellent virtue which, being taken inwardly, and applied outwardly cures most diseases and eases pain, being very balsamical.

ELIXIR OF MUMMY IS MADE THUS

Take of mummy (viz., of man's flesh hardened), cut small four ounces, spirit of wine terebinthinated ten ounces, and put them into a glazed vessel (three parts of four being empty) which set in horse dung to digest for the space of a month. Then take it out and express it, and let the expression be circulated a month. Then let it run through manica hippocratis, and then evaporate the spirit until that which remains in the bottom be like an oil which is the true elixir of mummy.

This elixir is a wonderful preservative against all infections, also very balsamical.

THE ESSENCE OF MAN'S BRAINS

Take the brains of a young man that has died a violent death, together with the membranes, arteries, veins, nerves, all the pith of the back, and bruise these in a stone mortar until they become a kind of pap. Then put as much of the spirit of wine as will cover it three or four fingers breadth. Then put it into a large glass so that three parts of four be empty, being hermetically closed. Then digest it half a year in horse dung. Then take it out and distill it in balneum and cohobate the water until the greatest part of the brains be distilled off.

A scruple or two of this essence taken in some specific water once in a day is a most infallible medicine against the falling sickness.

A FAMOUS SPIRIT MADE OUT OF CRANIUM HUMANUM

Take of cranium humanum as much as you please. Break it into small pieces, which put into a glass retort well luted, with a large receiver well luted. Then put a strong fire to it by degrees, continuing of it until you see no more fumes come forth, and you shall have a yellowish spirit, a red oil, and a volatile salt.

Take this salt and the yellow spirit, and digest them by circulation two or three months in balneum, and you shall

have a most excellent spirit.

This spirit is of affinity with, if not the same as, that famous spirit of Dr. Goddards in Holborne. It helps the falling sickness, gout, dropsie, infirm stomach, and indeed strengthens all weak parts, and opens all obstructions, and is a kind of panacea.

ANOTHER EXCELLENT SPIRIT MADE OUT OF CRANIUM, HARTS HORN, OR IVORY

Take of either of these. (If you take cranium, it need not be bruised at all, only broken into little pieces; if harts horn or ivory, you must cut them in thin pieces). Lay it piece by piece upon a net spread upon any vessel, being most full of water. Cover this net with another vessel very close. Then make the water boil, and keep it boiling three days and three nights, and in that time the bones or horns will be as soft as cheese. Then pound them, and to every pound thereof, put half a pound of hungarian vitriol uncalcined, and as much spirit of wine as will make them into a thin paste. This paste digest in a vessel hermetically sealed the space of a month in balneum. Then distill it in a retort in sand until all be dry, and you shall have a most excellent spirit.

This spirit is of wonderful use in the epilepsy convulsions, all fevers putrid or pestilential, passions of the heart, and is a very excellent sudorific.

This spirit may be taken from the quantity of half an ounce to an ounce in some specifical liquor.

A WATER AND OIL MADE OUT OF HAIR

Fill an earthen retort with hair cut small. Set it over the fire and fit a receiver to it. There will come over a very stinking water and oil.

This water and oil is used in Germany to be sprinkled upon fences and hedges to keep wild and hurtful cattle from coming to do harm in any place, for such is the stink of this liquor that it does frighten them from coming to any place near it.

WATER OF MILK IS MADE THUS

Take of what milk you please a gallon. In it dissolve half a pound of salt, and put to it two handfuls of plantain, and an ounce of licorice sliced. Then distill it in a hot still with a gentle fire.

This water is of excellent use in hot distempers of the lungs and kidneys.

You may put in other ingredients according to the use you would have it for.

AN EXCELLENT COMPOUND WATER OF MILK FOR ANY INFLAMMATIONS IN THE EYES

Take of woman's milk a pint, of white copperas a pound, and distill them in ashes. Note that as soon as you perceive any sharp spirit to come off, then cease.

Let inflamed eyes be washed three or four times in a day with this water, and it helps them wonderfully.

SPIRIT OF URINE IS MADE THUS

Take of the urine of a young man drinking much wine, as much as you please. Let it stand in glass vessels in putrefaction forty days. Then pouring it from its feces, distill it in a glass gourd in sand until all be dry. Then cohobate the said spirit on the caput mortuary three times. Then distill it in a gourd of a long neck and there will ascend, besides the spirit, a crystalline salt which you may either keep by itself, being called the volatile salt of urine, or mix it with its spirit which will thereby become very penetrating if they be digested for some days together.

Note that the pipe of the head must be wide or else the volatile salt will soon stop it.

Note that this salt is so penetrating that it penetrates the body of the glass.

This spirit by rectification may be made so pure and subtle that it will burn as fire and dissolve gold and precious stones.

This being often applied to any place pained with the gout eases it presently. It also quickens any part that is benumbed.

The salt volatile is Helmont's famous medicine for the jaundice.

A COMPOUND SPIRIT OF URINE

Take of hungarian vitriol a pound, and the urine of a boy that is healthy four pounds. Put these into a glass vessel well closed so that three parts of four may be empty. Digest them in balneum for the space of a month and then distill them in ashes until all be dry.

This spirit is of great virtue in the epilepsy, gout, dropsy, convulsions, being taken from two drams to half an ounce in some specifical liquor.

TO MAKE A SPIRIT OF HONEY

Take good strong stale mead, otherwise called metheglin, as much as you please, distill it in a copper still or alembic, with its refrigeratory, and it will yield a spirit like aqua vitae.

THE QUINTESSENCE OF HONEY IS MADE THUS

Take of the purest honey two pounds, and of fountain water one pound. Boil these together until the water be boiled away, taking off the scum that rises. Then take the honey and put it into a glass, four parts of five being empty. Close it well and set it in digestion a whole year and you shall have the essence of honey swimming on the top in form of an oil, being of as fragrant smell as anything in the world. The phlegm will be in the middle, and the feculent matter in the bottom, of a dark color and stinking smell.

SOME MAKE THE QUINTESSENCE OF HONEY AFTER THIS MANNER

Take as much honey as you please, of the best, and put it into a glass. First distill off the phlegm in balneum, and then extract the tincture out of what remains with the said water. Then calcine the remaining feces and extract from thence the salt with the foresaid water being distilled off from the tincture. Calcine the salt and melt it in a crucible. Then let it dissolve in a cellar, and then again evaporate it away. You shall have a most white salt which let imbibe as much of the tincture as it will. Digest them for three months, and you shall have an essence of honey.

AN ESSENCE OF HONEY MAY BE MADE THUS

Take of honey well despumated as much as you please. Pour upon it as much of the best rectified spirit of wine as will cover it five or six fingers breadth. Digest them in a glass vessel well closed (the fourth part only being full) in a temperate balneum the space of a fortnight or until the spirit be very well tinged. Then decant off the spirit and put on more until all the tincture be extracted. Put all these tinctures together, and evaporate the spirit until what remains begins to be thickish at the bottom and of a golden color

This is a very excellent essence of honey and is of so pleasant an odor that scarce anything is like to it. It is so cordial that it even revives the dying if two or three drops thereof be taken in some cordial water.

A MOST STRONG SPIRIT OF THE VINEGAR OF HONEY

Take a pound of honey and put to it of the best white wine vinegar six pints, an ounce of white pepper bruised small, of the strongest mustard seed bruised three ounces. Put these into a glass vessel so that three parts of four be empty.

Digest them in a temperate balneum, or set the vessel in the sun for the space of a fortnight. Then distill them in balneum and you shall have a spirit far sharper than the common spirit of vinegar.

This spirit is stronger and better than any common distilled vinegar for the dissolving of hard things and extracting of the tinctures out of things.

OIL OR QUINTESSENCE OF WAX

Take of the best wax a pound and as much of pure sand well washed from all its impurity and again dried. First, melt the wax, and then mix the sand with it very exactly. Then put them into a glass retort well coated. Fit a strong receiver to it and set it in sand. Give it fire by degrees, continuing it four days, which at last must be very strong. There will come off a spiritous oil which must be rectified seven times in a glass retort, every time changing the retort, and you shall have a subtle oil of a golden color.

This oil extracts the virtues of all flowers presently, being set in the sun. It is wonderful balsamical for the cure of wounds or ulcers both inward and outward. Being applied outwardly, it also eases all pains, quickens any deadened member, as in the palsy.

WATER IS MADE OUT OF FLESH THUS

Take what flesh you please, the bloodiest part thereof, unwashed, being cut very small, and then bruised (or if it be a feathered fowl, take it being chased up and down until it be wearied, and then suddenly strangled, the feathers being plucked off without putting of it into water, and thus being plucked bare and the bowels taken out, cut the flesh, bones, gizzard, liver, heart). Pour upon it as much water as will be sufficient, with what spices and herbs you please. Then set it over a gentle fire in an earthen vessel, glazed, the space of 24 hours. Put the head upon it and lute it close, and there will distill off a comfortable restorative water.

WATER OR LIQUOR IS MADE OUT OF FLESH THUS

Take of what flesh you please, or feathered fowl prepared as before. Bruise it small, and put it into a copper vessel tinned within side, without any water being put to it. Put a cover to it and lute it close. Set it in balneum or over the vapor of seething water. If the flesh be tender, it will be turned into a clear liquor the space of twelve hours, if harder it will require a longer time. You may put in what spices or herbs you please to give it a good relish and odor. After all is done you may strain it and keep it for use, being very restorative and good for weak stomachs that cannot concoct hard meat.

If this be digested in a pelican or bolt-head a fortnight, it will be far better.

After this manner may be prepared snails, worms, and such like which are very medicinal.

A VERY EXCELLENT RESTORATIVE LIQUOR

Take of the heart, lungs, and liver of a calf, the seine parts of a fox new killed, cut them small, and put to them a quart of shell snails well scoured with salt water. Let these be put into a copper vessel tinned within side and covered close that no vapor comes forth. Set this vessel over the vapor of seething water, and in 24 hours or thereabouts they will be for the most part of them turned into a liquor of themselves. Then take out this liquor and put it into a large pelican or bolt-head, putting to them a quart of old Mallago wine, rosemary flowers, betony flowers, marigold flowers, marsh wallow flowers, of each a handful; half a pound of raisins of the sun stoned, mace, and nutmeg, of each two drams; then pour off that which is clear from the feces and sweeten it with sugar or syrup of gilly flowers. Let the patient take thereof five or six spoonfuls, three or four times a day.

This liquor recovers the decaying strength wonderfully. They that by reason of their weakness can neither eat nor digest any manner of common meat will, in a short time, be sensibly strengthened if they drink a quarter of a pint of this morning and evening.

A BALSAM MADE OF BEAR'S FAT

Take of bear's fat a pound, distill it in a retort, and rectify it three or four times. To this, thus rectified, put the tincture of rosemary and made with spirit of wine, of each three ounces. Mix them well together. In these infuse cloves, cinnamon, saffron, nutmeg, of each three drams, in warm ashes the space of a night. Then strain them and put to the oil four ounces of the best wax melted and mingled well together.

This is a most incomparable balsam for the gout and palsy.

THE OIL OF SNAKES AND ADDERS

Take snakes or adders when they are fat which will be in June or July. Cut off their heads, take off their skins, and unbowel them. Put them into a glass gourd, and pour on so much of the pure spirit of wine well rectified that it may cover them four or five fingers breadth. Stop the glass well and set it in balneum until all their substance be turned into an oil, which keep well stopped for your use.

This oil does wonderful cures in recovering hearing in those that be deaf, if a few drops thereof be put warm into the ears.

A nobleman of Germany that was famous for curing the deaf used this as his chiefest medicine, by which they say he cured those that were born deaf.

THE QUINTESSENCE OF SNAKES, ADDERS, OR VIPERS

Take of the biggest and fattest snakes, adders, or vipers which you can get in June or July. Cut off their heads, take off their skins, and unbowel them. Then cut them into small pieces and put them into a glass of a wide mouth. Set them in a warm balneum so that they may be well dried which will be in three or four days. Then take them out, and put them into a bolthead. Pour on them of the best alcolized wine, as much as will cover them six or eight fingers breadth. Stop the glass hermetically, and digest them fifteen days in balneum, or so long until the wine be

sufficiently covered, which pour forth. Then pour on more of the foresaid spirit of wine until all the quintessence be extracted. Then put all the tinged spirits together, and draw off the spirit in a gentle balneum, until it be thick at the bottom. On this pour spirit of wine caryophyllated, stir them well together, and digest them in a circulatory ten days.

Then abstract the spirit of wine, and the quintessence remains at the bottom perfect.

This quintessence is of extraordinary virtue for the purifying of the blood, flesh, and skin and, consequently, of all diseases therein. It cures also the falling sickness, and strengthens the brain, sight, and hearing, and preserves from grey hairs, renews youth, preserves women from abortion, cures the gout, consumption, causes sweat, and is very good in and against pestilential infections.

VIPER WINE IS MADE THUS

Take of the best fat vipers, cut off their heads, take off their skins, and unbowel them. Then put them into the best canary sack, four or six according to their bigness into a gallon. Let them stand two or three months. Then draw off you wine as you drink it.

Some put them alive into the wine, and there suffocate them, and afterwards take them out, and cut off their heads, take off their skins, and unbowel them, and then put them into the same wine again, and do as before.

This wine has the same virtues as the foregoing quintessence. It also provokes to venery, cures the leprosy and such like corruptions of the blood.

KUNRATH'S FAMOUS WATER CALLED AQUA MAGNANIMITATIS

Take of pismires or ants (the biggest that have a sourish smell are the best) two handfuls, spirit of wine a gallon. Digest them in a glass vessel close shut the space of a month in which time they will be dissolved into a liquor. Then distill them in balneum until all be dry. Then put the same quantity of ants as before. Digest and distill them in the said liquor as before. Do this three times, and then aromatize the spirit with some cinnamon.

Note that upon the spirit will float an oil which must be separated.

This spirit is of excellent use to stir up the animal spirit - in so much that John Casmire, Palse-grave of the Rhene and Seyfrie of Collen, General against the Turks, did always drink of it when they went to fight, to increase magnanimity and courage which it did even to admiration.

This spirit does also wonderfully irritate them that are slothful to venery.

It also provokes urine even to admiration.

It does also wonderfully irritate the spirits that are dulled and deeded with any cold distemper.

This oil does the same effects, and indeed more powerfully.

This oil does, besides what is spoken of the spirit, help deafness exceedingly, two or three drops being dropped into the ear, after it is well syringed, once in a day for a week together.

It helps also the eyes that have any film growing on them, being now and then dropped into them.

ANOTHER AQUA MAGNANIMITATIS IS MADE THUS

Take of ants or pismires a handful, of their eggs two hundred, of millepedes or woodlice one hundred, and of bees one hundred and fifty. Digest all these in two pints of spirit of wine, being very well impregnated with the brightest soot. Digest them together the space of a month, then pour off the clear spirit and keep it safe.

This water, or spirit, is of the same virtue as the former.

WATER OF DUNG IS MADE THUS

Take of any dung as much as you please. While it is still fresh, put it into a common cold still and with a soft fire distill it off. It will be best if the bottom of the still be set over a vapor. If you would have it be stronger, cohobate the said water over its feces several times; for we see there is great virtue in dung. It makes ground fertile, and many sorts thereof are very medicinal.

A WATER OF DOVES' DUNG IS MADE THUS

Take of doves' dung as much as you please. To every pound put a pint of Rhenish wine, in which let it steep all night in a gentle balneum. Then distill it in a glass gourd in ashes. Cohobate this liquor three times. If there be any volatile salt, mix it with the water.

This water is very excellent against all obstructions of the kidneys, bladder, it helps the jaundice presently, two or three spoonfuls thereof being drunk once every morning and evening.

A WATER MADE OF HORSE DUNG

Take of the dung of a horse that is fed in the stable as much as you please. Let it stand two days out of the sun and out of the wet. To every pound of this pour a pint of white wine. Let them stand in a warm balneum a fortnight. Then distill them in a glass gourd in sand. Cohobate this three or four times. If there be any volatile salt, mix it with the water.

This water is very excellent against the bastard pleurisy, stitches, wind, obstruction of the reins, bladder, very good in a dropsy, jaundice, scurvy, etc. If three or four spoonfuls be taken every morning in the water of juniper berries, it also causes sweat.

A WATER SMELLING LIKE AMBER MADE BY PARACELSUS OUT OF COW DUNG

Take of cow dung and distill it in balneum, and the water thereof will have the smell of ambergris.

This water is very excellent in all inward inflammations.

AN EXCELLENT SUDORIFIC MADE OF THE YOUNG BUDS OF HARTSHORN

Take of the young buds of hartshorn, while they are full of blood and moist. Bruise them into a paste. Then mix as much canary wine as will make a very thin paste. Distill them in ashes until they be very dry.

This is an excellent sudorific in all burning fevers and epidemical diseases. If a spoonful be taken by itself or in any appropriated liquor.

OIL OUT OF BONES AND HORNS IS MADE THUS

Take of what bones you please. Reduce them to a gross powder, and put them into a retort, putting a strong fire by degrees "hereunto. There will come forth an oil and volatile salt, both which you may mix together and digest them into an essence, the oil being first rectified with spirit of wine.

THE WATER OF SWALLOWS AGAINST THE FALLING SICKNESS

Take of swallows, cut into small pieces without separating anything from them six ounces, of castoreum cut small an ounce. Mix them together, and infuse them twelve hours in half a pint of canary wine. Then put them into a glass gourd and distill them in sand until all be dry. Then cohobate the liquor three times.

This water, being drunk to the quantity of two spoonfuls every morning, cures them that have the falling sickness.

OIL OF EGGS IS MADE THUS

Take of the yolks of eggs boiled very hard. Rub them in pieces with your fingers. Then fry them in a pan over a gentle fire, continually stirring them with a spoon until they become red, and the oil be resolved and flow from them. Then put them into a hair cloth, and so press forth the oil.

This oil cleans the skin from any filthiness contracted by heat. It cures pustules, chaps, excoriations, ring worm, and especially all burnings.

A WATER OF THE WHITES OF EGGS THAT WILL CURE A WOUND WITHOUT ANY VISIBLE SCAR

Take as many eggs as you please and boil them very hard. Then cut them in the middle and take out the yolks, filling up the cavities with some of those whites, being first bruised into a paste. Then put both sides of the eggs together as before, tie them together with a thread, and with a string hang them in the middle of a gourd glass, so that they touch not the sides. Stop this glass very close and set it in balneum. You shall see those whites which were bruised drop down into a liquor which you must gather up out of the bottom of the glass and keep.

You will have very little of this liquor.

This liquor applied to any green wound with a feather cures it presently, wheresoever it be, without any visible scar. It cures most wonderfully all wounds in the eyes.

A WATER OF CRABS IS MADE THUS

Take of crabs or crawfish, as many as you please. Break them to pieces and macerate them in water of sengreen for the space of a day. Then distill them and cohobate the water three times.

This water is of singular virtue in all manner of inflammations inward and outward.

AN OIL OR LIQUOR IS MADE OUT OF CRAB EYES THUS

Take of crabs' eyes very finely powdered five parts, oil of tartar per deliquium six parts (this oil of tartar must be made of salt of tartar after it has flowed in the fire). Digest them in horse dung the space of a month. Then coagulate the liquor and make an extraction with the best rectified spirit of wine that can be made (or else you lose your labor).

Then evaporate the spirit of wine, and there remains an oil at the bottom.

This oil is of wonderful virtue in all putrid fevers and such like distempers, and also in all obstructions, especially, of the kidneys.

WATER OF SPAWN OF FROGS IS MADE THUS

Take of the spawn of frogs gathered in March, as much as you please. Put a handful of salt to every quart, and put them into a common cold still. With a gentle fire distill off the water until no more will distill.

A COMPOUND WATER OF THE SPERM OF FROGS

Take of the sperm of frogs gathered in March about the new of the moon four pounds, of cow dung fresh six pounds.

Mix them well together and let them stand the space of a day. Then distill them in ashes.

This water allays all hot pains both inward and outward, especially of the gout.

ANOTHER COMPOUND WATER OF THE SPERM OF FROGS

Take of the sperm of frogs gathered in March two pounds and a half, the urine of a young man three pints, new treacle two ounces and a half, white vitriol, salt, alum, of each four ounces. Then distill them and put to the water an ounce and a half of the salt of vitriol, camphor, and saffron, of each an ounce.

This water being applied outwardly helps all pains, especially of the gout, and such like, and also allays hot or cold swellings. It also stanches bleeding.

John French - The Art of Distillation - Book

V

BOOK V

A MISCELLANY OF SPAGYRICAL EXPERIMENTS AND CURIOSITIES

THE SPAGYRICAL ANATOMY OF WATER

Water seems to be a body so very homogeneous, as if neither nature nor art could discover any heterogeneity in the parts thereof. Thus indeed it seems to the eye of the vulgar, but to that of a philosopher far otherwise, as I shall endeavor to make credible by presenting to your consideration a twofold process of the discovering of the dissimilarity of parts thereof, whereof the one is natural only, and the other artificial. But before I speak of either, it must be premised that in the element of water there is great plenty of the spirit of the world which is more predominant in it than in any other element, for the use and benefit of universal nature, and that this spirit has three

distinct substances, viz. salt, sulphur, and mercury. Now, by salt we must understand a substance very dry, vital, and radical, having in it the beginning of corporification, as I may call it. By sulphur, a substance full of light and vital heat, or vivifying fire, containing in itself the beginning of motion, and by mercury we must understand a substance abounding with radical moisture, with which the sulphur of life, or vital fire, is cherished and preserved. Now, these substances which are in the spirit of the world make all fountains and waters, but with some difference, according to the predominancy of either. This several predominancy therefore is the ground of the variety of productions. I say "of productions" because all things are produced out of water. For water is both the sperm and the menstruum of the world; the former, because it includes the seed of everything; the latter, because the sperm of nature is putrefied in it, so that the seed included in it should be actuated and take upon it the diverse forms of things, and because by it the seed itself, and all things produced of seed, grow and are increased. Now, this being premised, I shall show you what the natural process is which I shall make plain by instancing in three several productions. viz. of the spawn of frogs, of stones and of vegetables.

The spawn of frogs is produced after this manner, viz. the sulphur which is in the water, being by the heat of the sun resolved and dissolved, is greedily and with delight conceived by the element of water, even as the sperm of a male is by the matrix of the female, and that upon this account. The water wants siccidity which the sulphur has and, therefore exceedingly desiring it, does greedily attract it to itself. Sulphur also wants humidity and, therefore, attracts the humidity of the water. Moreover, the humidity of the water has the humidity of the salt laid up occultly in it. Also, the sulphur cherishes the humidity of the fire and desires nothing more than the humidity of the salt that is in the water. Sulphur also contains the siccidity of the salt, whence it is that salt requires a siccidity from the sulphur. And thus do these attractive virtues mutually act upon each other's subject. Now, by this means there is a conception made in the water which now begins to be turgid, puffed up, and troubled, as also to be grosser and more slimy, until out of the spermatic vessels the sperms be cast upward, in which sperms after a while appear black specks which are the seed of the frogs and by the heat of the sun are in a short time turned into the same, by which it appears there are dissimilar parts in water.

Stones are produced out of water that has a mucilaginous mercury which the salt, with which it abounds, fixes into stones. This you may see clearly by putting stones into water, for they will after a time contract a mucilaginous slimy matter which, being taken out of the water and set in the sun, becomes to be of a stony nature. And whence come those stones, gravel, and sand which we see in springs? They are not washed down out of the mountains and hills (as some think) from whence the waters spring. Neither were they in the earth before the springs broke forth (as some imagine) and now appear by washing away of the earth from them. For if you dig around the springs, even beyond the heads of them, you shall find no stones at all in the earth, only in the veins thereof through which the water runs. Now, the reason of the smallness of the stones is the continual motion of the water which hinders them from being united into a continued bigness. I shall make a further confirmation of this in the artificial process of manifesting the heterogeneity of water. I shall here only add the assertion of Helmont, saying that with his alkalest all stones and, indeed, all things may be turned into water. If so, then you know what the maxim is, viz., all things may be resolved into that from whence they had their beginning.

Vegetables are produced out of water, as you may clearly see by the waters sending forth plants that have no roots fixed in the bottom, of which sort is the herb called "duckweed" which puts forth a little string into the water which is as it were the root thereof. For the confirmation of this, that this herb may be produced out of mere water, there is a gentleman at this time in the city, of no small worth, that says he had fair water standing in a glass diverse years, and at last a plant sprang out of it. Also, if you put some plants, as water mint, etc., into a glass of fair water, it will germinate and shoot out into a great length, and also take root in the water, which root will in a short time be so increased and extended as to fill up the glass; but you must remember that you put fresh water into the glass once in two or three days. Hereunto, also, may be added the experiment of Helmont concerning the growth of a tree. For (says he) I took two hundred pound weight of earth dried in an oven and put it into a vessel, in which I set a willow tree which weighed five pounds which, by the addition of water to the earth, did in five years time grow to such a bigness as that it weighed 169 pounds, at which time I also dried and weighed the earth, and within two ounces it retained its former weight. Besides, the ancients have observed that some herbs have grown out of snow, being putrefied. And do not we see that all vegetables are nourished and increased with an insipid water, for what else is their juice? If you cut a vine in the month of March, it will drop diverse gallons of insipid water which water if it had remained in the trunk of the vine would in a little time have been digested into leaves, stalks, and grapes, which grapes also by a further maturation would have yielded a wine, out of which you might have extracted a burning spirit. Now, I say, although this insipid water be by the specifical sulphur and salt of the vine fixed into the stalks, leaves, and grapes of the vine, yet these give it not a corporificative matter, for that it had before, and an aptitude and potentiality to become what afterwards it proves to be. For indeed stalks, leaves, and grapes were potentially in it before, all which now it becomes to be actually by virtue of the sun and of the aforesaid sulphur and salt, whereof

as I said could not add any bulk to them.

Moreover, do not we see that when things are burned and putrefied, they ascend up into the air by way of vapor and fume and then descend by way of insipid dew or rain? Now, what do all these signify but that from water are all things produced, and in it are dissimilar parts?

The artificial process is this: take of what water you please, whether well water, fountain, river, or rain water, as much as you please. Let it settle three or four hours until the slime thereof separates itself. Then digest it the space of a month, after which time evaporate the fourth part by a very gentle heat and cast it away, being but the phlegm. Then distill off the remainder of the water until the feces only be left, which feces will be a slimy saltish substance. This middle substance distill again as before, casting away every time the fourth part, as phlegm, and keeping the feces by themselves for a further use, and this do seven times. Note that after the fourth or fifth distillation the water will distill over like milk, coloring the head of your still so that it can hardly be washed or scoured off. This pure water after the seventh distillation will leave no feces behind, and if you digest it three months it will be coagulated into stones and crystals which some magnify very much for the cure of inward and outward putrefactions, out of which also may be made a dissolving spirit. Note that as this water stands in digestion you may see diverse curious colors. Now, as for the feces which I spoke of (which indeed all waters, even the sweetest, leave at the bottom) being as I said a saltish slime and in taste, as it were, a medium between salt and nitre, take them and distill them in a retort in sand. There will first come forth a white fume which, being condensed, descends in a straight line to the bottom. Next will come over a red oil of great efficacy, exceeding the virtues of the spirit of salt or nitre. For confirmation of part of this process, take May dew gathered in the morning (when it has not rained the night before) and put it into a glass vessel, covered with a parchment pricked full of holes, and set it in the heat of the sun for the space of four months. There will store of green feces fall to the bottom, the residue of the water being white and clear. Now by all this you may conclude what manner of dissimilarity there is in the parts of water. I shall add but one observation more, and so conclude this subject.

Take a flint out of river water and put it into a gourd glass. Pour upon it as much river water as will fill the glass. Evaporate this water until the flint be dry. Then pour on more fresh water. Do this so long until the flint will fill up the glass (for in a little time it will fill it up and become to be of the form or figure of the glass) for it attracts to itself the mucilaginousness of the water which, indeed, is a slimy saltish matter and the true matter of stones. And thus you shall have that done by art in few days which nature would have been perfecting many years and, indeed, just such a flint as is produced in the rivers. Anyone that should see this flint in the glass would wonder how it should come in there. You may break your glass and take out your flint.

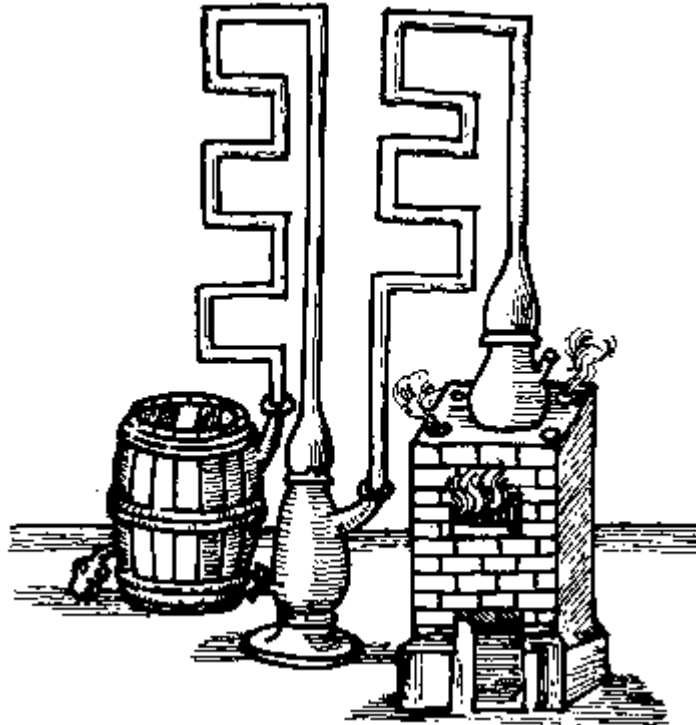
There are diverse such processes which may be used but, in effect, they may demonstrate but little more concerning the potential heterogeneity of water and, therefore, to avoid tediousness, I shall here end with the anatomy of water, concerning which if anyone can make a further illustration, let him be candid and impart it and I shall be glad to learn of him and, in the meantime, let him accept of these, my endeavors.

THE SPAGYRICAL ANATOMY OF WINE

I shall not speak here of the juice of grapes as being naturally divided into wine, tartar, and lees, but of wine as artificially divided into pure spirit, phlegm, and feces.

The spirit is that hot, subtle, pure, clear, cordial, and balsamical substance which arises with a small heat after four or five distillations, being indeed but the twentieth part of the wine. This spirit is not that inebriating substance of the wine as most think, for a man may drink the spirit that is extracted out of ten pints of wine without distempering of his brain at all when, as perhaps, he would be distempered with drinking a pint or two of the wine.

Now, this spirit contains in it a subtle ammoniac and essential sulphur inseparably conjoined which, indeed, are the life of the spirit, and may be separated from the mercurial or watery part thereof which, after separation of them, remains insipid, but yet of wonderful subtilty. They may be separated thus: first, rectify the spirit as high as you can the ordinary way. Then rectify it once or twice in these following vessels.



Note that if there be any phlegm remaining in the spirit, it will go no further than the middle receiver, especially the second time. By this means you have so subtle a spirit that unless it is kept close stopped it will fly away in the air.

Then take of this spirit two ounces, and pour it upon six ounces of calcined tartar before the salt be extracted, and mingle them together. Then distill it in balneum, and there will come over an insipid water which, as I said before, is very subtle. Then put on a like quantity of the said spirit as before, and distill it off. This do so long until the water that comes over is not insipid, but the spirit comes over again hot as it was poured on. For by this time the fixed matter is glutted with the sal ammoniac and sulphur of the spirit. Then put this dried matter into a glass sublimatory, and put fire to it, and there will sublime a salt from thence, even as camphor is sublimed. This salt is the true essence of wine, indeed, and its virtues are wonderful, for there is no disease, whether inward or outward, that can withstand it. This is that essence of wine of the philosophers which is so penetrating, oh wonderful cordial and balsamical, which if you do once obtain, you shall need but few other medicines.

Now, this spirit or aqua vitae is in all vegetables as you may see in malt and vegetables that are putrefied before they are distilled which then yield a burning spirit. Yet it is in wine more than in any other liquors. I say liquors, for if you take eight gallons of sack and as much wheat, which is a solid body, and the wheat being malted will yield more aqua vitae than the sack.

The phlegm is that which remains after the spirit is distilled off, and is a putrid, insipid, cold, narcotic, and inebriating liquor, debilitating the stomach and offending the head. A few spoonfuls of this will presently make a man drunk, when as two pints of wine itself would hardly do it. Nay, the phlegm of half a pint of wine will make a man drunk. Whence you may collect what a great corrector of malignant spirits and vapors the spirit of wine is which, while it is mixed with the phlegm before distillation, does temper and correct this inebriating quality thereof, and as it does this, so also being given (I mean the pure dephlegmated spirit) to them that are already inebriated, does much allay their distemper. This phlegm therefore being of so narcotic a quality is the cause of palsies and such like distempers.

Moreover, it is to be observed that when this phlegm is distilled off there remains at the bottom a viscous corrosive matter which by reason of its viscosity is the cause of obstructions, and by reason of its corrosiveness the cause of the gout, colic, stone, etc.

This feces, being distilled, yields a sharp spirit and fetid oil which leave behind them a saltish substance out of which, when the salt is extracted, there remains an insipid earth.

Now, if any shall object against what I have asserted and say that aqua vitae or spirit of wine are inebriating, the causes of palsy, gout, stone, colic, weak stomachs, and such like, as we see by daily experience in those that are

given to the drinking of these liquors, to which I answer it is true. But then I must distinguish of aqua vitae and the spirit of wine, for there is a common aqua vitae and spirit of wine, of which also they make anise seed water by putting a few anise seeds "hereunto, and other such like waters, as clove, angelica, lemon, etc., with which this nation is most abominably cheated, and their health impaired. But these are not rectified thoroughly, but three parts of four of them are an insipid narcotic phlegm, containing in it the feces I spoke of, all which I can in a day separate from the true pure spirit, which spirit rather prevents than causes such distempers And the truth is, all the goodness of the wine is from this pure spirit.

THE FAMOUS ARCANUM OR RESTORATIVE MEDICAMENT OF PARACELSD CALLED HIS HOMUNCULUS

First we must understand that there are three acceptions of the word "Homunculus" in Paracelsus, which are these.

1. Homunculus is a superstitious image made in the place, or name of anyone, that it may contain an astral and invisible man, wherefore it was made for a superstitious use.
2. Homunculus is taken for an artificial man, made of sperma humanum masculinum digested into the shape of a man, and then nourished and increased with the essence of man's blood; and this is not repugnant to the possibility of nature and art. But is one of the greatest wonders of God which He ever did suffer mortal man to know. I shall not here set down the full process because I think it unfit to be done, at least to be divulged. Besides neither this nor the former is for my present purpose.
3. Homunculus is taken for a most excellent arcanum or medicament extracted by the spagyric art from the chiefest staff of the natural line in man, and according to this acception I shall here speak of it. But before I show you this process, I shall give you an account why this medicament is called homunculus, and it is this
No wise man will deny that the staff of life is the nutriment thereof, and that the chiefest nutriment is bread and wine, being ordained by God, and nature above all other things for the sustentation thereof. Besides Paracelsus preferred this nutriment for the generation of the blood and spirits, and the forming thence the sperm of his homunculus. Now, by a suitable allusion the nutriment is taken for the life of man and, especially, because it is transmuted into life. And again the life is taken for the man, but unless a man be alive he is not a man, but the carcass only of a man, and the basest part thereof which cannot perfectly be taken for the whole man, as the noblest part may. Inasmuch, therefore, as the nutriment or aliment of life may be called the life of man, and the life of man be called man, this nutriment extracted out of bread and wine, and being by digestion exalted into the highest purity of a nutritive substance, and consequently becoming the life of man, being so potentially, may metaphorically be called homunculus.

The process which in part shall be set down allegorically is thus.

Take the best wheat and the best wine, of each a like quantity. Put them into a glass which you must hermetically seal. Then let them putrefy in horse dung three days, or until the wheat begins to germinate or to sprout forth, which then must be taken forth and bruised in a mortar and be pressed through a linen cloth. There will come forth a white juice like milk. You must cast away the feces. Let this juice be put into a glass which must not be above half full. Stop it close and set it in horse dung as before for the space of fifty days. If the heat be temperate, and not exceeding the natural heat of man, the matter will be turned into a spagyric blood and flesh, like an embryo. This is the principal and next matter out of which is generated a two-fold sperm, viz., of the father and mother generating the homunculus, without which there can be made no generation, whether human or animal.

From the blood and flesh of this embryo let the water be separated in balneum, and the air in ashes, and both be kept by themselves. Then to the feces of the latter distillation, let the water of the former distillation be added, both which must (the glass being close stopped) putrefy in balneum the space of ten days. After this, distill the water a second time (which is then the vehiculum of the fire) together with the fire, in ashes. Then distill off this water in a gentle balneum, and in the bottom remains the fire which must be distilled in ashes. Keep both these apart. And thus you have the four elements separated from the chaos of the embryo.

The feculent earth is to be reverberated in a close vessel for the space of four days. In the interim, distill off the fourth part of the first distillation in balneum and cast it away. The other three parts distill in ashes, and pour it upon the reverberated earth, and distill it in a strong fire. Cohobate it four times, and so you shall have a very clear water which you must keep by itself. Then pour the air on the same earth, and distill it in a strong fire. There will come over a clear, splendid, odoriferous water which must be kept apart. After this pour the fire upon the first water, and putrefy them together in balneum the space of three days. Then put them into a retort and distill them in sand, and there will come over a water tasting of the fire. Let this water be distilled in balneum. What distills off, keep by itself, as also what remains in the bottom which is the fire, and keep by itself. This last distilled water pour again upon its earth, and let them be macerated together in balneum for the space of three days. Then let all the water be

distilled in sand, and let what will arise be separated in balneum, and the residence remaining in the bottom be reserved with the former residence. Let the water be again poured upon the earth, be abstracted and separated as before until nothing remains in the bottom which is not separated in balneum. This being done, let the water which was last separated be mixed with the residue of its fire, and be macerated in balneum three or four days, and all be distilled in balneum that can ascend with that heat. Let what remains be distilled in ashes from the fire, and what shall be elevated is aerial. And what remains in the bottom is fiery. These two last liquors are ascribed to the two first principles, the former to mercury and the latter to sulphur. They are accounted by Paracelsus not as elements but their vital parts being, as it were, the natural spirits and soul which are in them by nature. Now, both are to be rectified and reflected into their center with a circular motion, so that this mercury may be prepared with its water being kept clear and odoriferous in the upper place, but the sulphur by itself.

Now, it remains that we look into the third principle. Let the reverberated earth, being ground upon a marble, imbibe its own water which did above remain after the last separation of the liquors made in balneum, so that this be the fourth part of the weight of its earth and be congealed by the heat of ashes into its earth. Let this be done so often, the proportion being observed, until the earth has drunk up all its water. And lastly, let this earth be sublimed into a white powder, as white as snow, the feces being cast away. This earth, being sublimed and freed from its obscurity, is the true chaos of the elements, for it contains those things occult, seeing it is the salt of nature in which they lie hid being, as it were, reflexed in their center. This is the third principle of Paracelsus, and the salt, which is the matrix, in which the two former sperms, viz., of the man and woman, the parents of the homunculus, viz., of mercury and sulphur are to be put, and to be closed up together in a glazed womb sealed with Hermes' seals for the true generation of the homunculus produced from the spagyric embryo. And this is the homunculus or great arcanum, otherwise called the nutritive medicament of Paracelsus.

This homunculus or nutritive medicament is of such virtue that presently after it is taken into the body it is turned into blood and spirits. If then diseases prove mortal because they destroy the spirits, what mortal disease can withstand such a medicine that does so soon repair and so strongly fortify the spirits as this homunculus, being as the oil to the flame, into which it is immediately turned, thereby renewing the same. By this medicament, therefore, as diseases are overcome and expelled, so also youth is renewed and grey hairs prevented.

AN ARTIFICIAL WAY TO MAKE FLESH

Take of the crumbs of the best wheaten bread as soon as it comes out of the oven, being very hot, as much as you please. Put it into a glass vessel which you must presently hermetically close. Then set it in digestion in a temperate balneum the space of two months, and it will be turned into a fibrous flesh.

If any artist should please to exalt it to a higher perfection according to the rules of art, he may find out how great a nourisher and restorative wheat is, and what an excellent medicine it may make.

Note that there must be no other moisture put into the glass besides what is in the bread itself.

PARACELSUS, HIS WAY FOR THE RAISING OF A DEAD BIRD TO LIFE AND FOR THE GENERATING MANY SERPENTS OF ONE BOTH WHICH ARE PERFORMED BY PURTEFACTION

A bird is restored to life thus. Take a bird and put it alive into a gourd glass and seal it hermetically. Burn it to ashes in the third degree of fire. Then putrefy it in horse dung into a mucilaginous phlegm. So, by a continued digestion that phlegm must be brought to a further maturity (being taken out and put into an oval vessel of a just bigness to hold it) by an exact digestion, and will become a renewed bird which, says Paracelsus, is one of the greatest wonders of nature, and shows the great virtue of putrefaction.

Cut a serpent into small pieces, which put into a gourd glass and hermetically seal. Then putrefy them in horse dung, and the whole serpent will become living again in the glass either in the form of worms or spawn of fishes. Now, if these worms be in a fitting manner brought out of putrefaction and nourished, many hundred serpents will be bred out of one serpent, whereof every one will be as big as the first. And as it is said of the serpent, so also many other living creatures may be raised and restored again.

TO MAKE AN ARTIFICIAL MALLAGO WINE

First, take a wine barrel well trooped and dressed, with one end being open, to which a close cover must be well fitted, which must be to take off and put on at pleasure. Set it in a warm place winter or summer, and fill it full with clear and pure water, to each three gallons. Put six pounds of the best mallago raisins which you must bruise in a stone mortar. Then strong upon the water, upon each twenty gallons of which you must cast a handful of calx vive.

Then cover the vessel close with the cover, and cast clothes upon it to keep it warm. Let it stand four or five days to work as wine or beer do when they be new. Then see if the raisins be risen up to the top of the water. If so, then put them down again and cover it as before. Let them thus stand three weeks or a month together, the raisins being every fourth or fifth day put down in case they rise up. Then put a tap into the vessel three or four fingers above the bottom and try if it be good and taste like wine. If not, let it stand a while longer; but if so, draw it off into another wine vessel, and to every twenty gallons that you have drawn off, put a pint of the best aqua vitae, two new laid hens eggs, and a quart of alligant beaten well together. Let it stand in a cellar as other wine does until it be clear and fit to be drunk.

TO MAKE AN ARTIFICIAL CLARET WINE

Take six gallons of water, two gallons of the best cider, and put "hereunto eight pounds of the best mallago raisins bruised in a mortar. Let them stand close covered in a warm place the space of a fortnight, every two days stirring them well together. Then press out the raisins and put the liquor into the said vessel again, to which add a quart of the juice of raspberries, and a pint of the juice of black cherries. Cover this liquor with bread spread thick with strong mustard, the mustard side being downward, and so let it work by the fireside three or four days. Then turn it up and let it stand a week, and then bottle it up. And it will taste as quick as bottle beer and, indeed, become a very pleasant drink and, indeed, far better and wholesomer than our common claret.

AN ARTIFICIAL MALMESEY

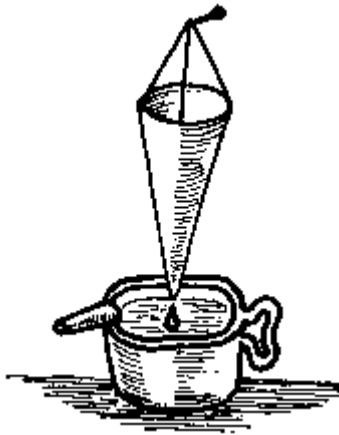
Take two gallons of english honey and put it into eight gallons of the best spring water. Set these in a vessel over a gentle fire. When they have boiled gently an hour take them off, and when they be cold put them into a small barrel or runlet, hanging in the vessel a bag of spices. Set it in the cellar, and in half a year you may drink thereof.

TO MAKE AN EXCELLENT AROMATICAL HYPOCRAS

Take of cinnamon two ounces, ginger an ounce, cloves and nutmeg of each two drams, of white pepper half a dram, of cardamum two drams, and of musk mallowseed three ounces. Let all these be bruised and put into a bag and hung in six gallons of wine. Note that you must put a weight in the bag to make it sink.

Some boil these spices in wine which they then sweeten with sugar, and then let run through a hypocras bag and afterwards bottle it up and use when they please.

A Single Hypocras Bag, or Manica Hippocratis



When you would have this or any other liquor to be very clear, you may use the triple hypocras bag, for what feces pass the first will stay in the second, and what in the second will stay in the last. Note that these bags must be made of white cotton.

A triple hypocras bag is only one hung above another after this manner.



TO MAKE EXCELLENT HYPOCRAS WINE IN AN INSTANT

Take of cinnamon two ounces, nutmeg, ginger, of each half an ounce, cloves two drams. Bruise these small, and then mix them with as much spirit of wine as will make them into a paste. Let them stand close covered in a glass the space of six days in a cold place. Then press out the liquor and keep it in a glass. A few drops of this liquor put into any wine gives it a gallant relish and odor, and makes it as good as any hypocras whatsoever and that in an instant.

Note that if the wine be of itself harsh, it will not be amiss to sweeten it with sugar, for thereby it is made far more grateful.

This also being put into beer will make it very pleasant and aromatical.

ANOTHER WAY TO MAKE HYPOCRAS OR MAKE ANY WINE TO TASTE OF ANY VEGETABLE IN AN INSTANT

Take what wine you please, and according as you would have it taste of this or that spice or any other vegetable, of one or more together, you may drop a few drops of the distilled oil of the said spices or vegetables into the wine, and brew well together and you may make in an instant all sorts of hypocras or other wines. As for example, if you would have wormwood wine, two or three drops of oil of wormwood put into a good Rhenish wine, being well brewed together, will make a wormwood wine exceeding any that you shall meet withall in the Rhenish wine houses.

TO MAKE A GOOD RASPBERRY WINE

Take a gallon of sack in which let two gallons of raspberries stand, steeping the space of 24 hours. Then strain them and put to the liquor three pounds of raisins of the sun stoned. Let them stand together four or five days, being sometimes stirred together. Then pour off the clearest and put it up in bottles and set it in a cold place. If it be not sweet enough you may add some sugar to it.

TWO OTHER WAYS TO MAKE IT ALL THE YEAR AT AN INSTANT

Take of the juice of raspberries and put it into a bottle which you must stop close. Set it in a cellar. It will become clear, and keep all the year, and become very fragrant.

A few spoonfuls of this put into a pint of wine sweetened well with sugar gives it an excellent and full taste of the raspberries.

If you put two or three ounces of the syrup of raspberries to a pint of wine it will do as well, but then you need use no other sugar, for that will sweeten it sufficiently.

TO MAKE MEAD OR METHEGLIN THAT IT SHALL TASTE STALE AND QUICK WITHIN A FORTNIGHT AND BE FIT TO DRINK

To every three gallons of water put one gallon of the purest honey. Put what herbs and spices you please. Boil it and skim it well, now and then putting in some water. When it is sufficiently boiled, take it off, and when it is almost cold, put it into a wooden vessel. Set it by the fireside, and cover it over with bread spread thick with the strongest mustard, the mustard side being downwards. So let it stand three days, and it will work. Only put a cloth over it.

Then turn it up, and after a week draw it forth into bottles and set it into a cellar. After another week you may drink of it, for it will taste as quick as bottle beer that is a fortnight old and, indeed, as stale as other mead will in half a year.

TO MAKE A SPIRIT OF AMBERGRIS THAT A FEW DROPS THEREOF SHALL PERFUME A PINT OF WINE MOST RICHLY

Take of ambergris two drams, and of musk a dram. Cut them small and put them into a pint of the best rectified spirit of wine. Close up the glass hermetically and digest them in a very gentle heat until you perceive they are dissolved. Then you may make use of it.

Two or three drops or more if you please of this spirit, put into a pint of wine. gives it a rich odor.

Or if you put two or three drops around the brim of a glass, it will do as well.

Half a spoonful of it taken either of itself or mixed with some specifical liquor is a most rich cordial.

AN EXCELLENT SWEET WATER

Take a quart of orange flower water, as much rose water, and add thereto of musk-mallow seeds grossly bruised four ounces, of benjamin two ounces, of storax an ounce, of labdanum six drams, of lavender flowers two pugills, of sweet marjoram as much, of calimus aromaticus a dram. Distill all these in a glass still in balneum, the vessels being very well closed so that no vapor breathes forth.

Note that you may make a sweet water in an instant by putting a few drops of some distilled oils together into some rose water and brewing them well together.

TO PURIFY AND TO GIVE AN EXCELLENT SMELL AND TASTE UNTO OIL OF OLIVE THAT THEY THAT LOATHE IT MAY DELIGHT TO EAT IT

Take of a good sort of oil of olive, though not of the best. Put the same into a vessel of earth or copper that has a little hole in the bottom thereof which you may stop with wax or a cork to open at your pleasure. In this vessel, for every quart of oil add four quarts of fair water, and with a wooden spatula or spoon beat them well together for a quarter of an hour's space. When you have so done, open the hole in the bottom and let out the water, for the oil does naturally flee above, as being the lighter body. As soon as the water is passed away, stop the hole, and put in other cold water. Begin a new agitation as before, and work in the like manner diverse times as you did at the first, until in the end the oil be well cleansed and clarified. If the last time you work it with rose water, it will be so much the better. Then hang in the midst of the oil a coarse bag full of nutmeg sliced, cloves bruised, and the rinds of oranges and lemons cut small. Set the vessel in balneum for two or three hours and, I suppose, he that loathes oil will be easily by this means drawn to a liking of it.

ANOTHER WAY

Set oil of olive in the sun in summertime until there settles a good store of soul and gross lees, from the which by declination pour out the clear oil. Keep it until the next winter, and after the same has been congealed with some frosty weather the oil will be most sweet and delectable to taste.

After this manner you may clarify all thick oils and all kinds of grease but, then, you must use warm water instead of cold.

TO PURIFY BUTTER THAT IT SHALL KEEP FRESH AND SWEET A LONG TIME AND BE MOST WONDERFUL SWEET IN TASTE

Dissolve butter in a clean glazed or silver vessel and in a pan or kettle of water with a slow and gentle fire. Then pour the same so dissolved into a basin that has some fair water therein. When it is cold, take away the curds and the whey that remains in the bottom. And if you will be at the charge thereof, you may the second time (for it must be twice dissolved) dissolve the butter in rose water, working them well together. The butter thus clarified will be as sweet in taste as the marrow of any beast, by reason of the great impurity that is removed by this manner of handling, the first part thereof being drosse which makes the butter many times offensive to the stomach.

TO MAKE BUTTER TASTE OF ANY VEGETABLE WITHOUT ALTERING THE COLOR THEREOF

When the butter is taken out of the churn and well worked from the ferous part thereof, mix with the said butter as much of the oil of that vegetable which you like best until the same be strong enough in taste to your liking. Then temper them well together.

If you do in the month of May mix some oil of sage with your butter, it may excuse you from eating sage with your butter.

If you mix the oil with the aforesaid clarified butter, it will be far better and serve for a most dainty dish and, indeed, a great rarity.

TO MAKE CHEESE TASTE STRONG OF ANY VEGETABLE WITHOUT DISCOLORING OF IT

You may mix the distilled oil of what vegetable you would have the cheese taste of with the curd before the whey be pressed out. But be sure you mix them very well that all places may taste alike of it. You may make it taste stronger or weaker of it, as you please, by putting in more or less of the oil.

TO PURIFY AND REFINE SUGAR

Make a strong lixivium of calx vive, wherein dissolve as much coarse sugar as the lixivium will bear. Then put in the white of eggs (of two to every quart of the liquor) being beaten into an oil. Stir them well together and let them boil a little, and there will arise a scum which must be taken off as long as any will arise. Then pour all the liquor through a great woollen cloth bag, and so the feces will remain behind in the bag. Then boil the liquor again so long until some drops of it being put upon a cold plate will, when they be cold, be congealed as hard as salt. Then pour out the liquor into pots or moulds made for that purpose, having a hole in the narrower end thereof which must be stopped for one night after, and after that night be opened. There will a moist substance drop forth which is called molasses or treacle. Then with potters clay cover the ends of the pot, and as the clay sinks down by reason of the sinking of the sugar, fill them up with more clay, repeating the doing thereof until the sugar shrinks no more. Then take it out until it be hard and dried, and then bind it up in papers.

TO MAKE A VEGETABLE GROW AND BECOME MORE GLORIOUS THAN ANY OF ITS SPECIES

Reduce any vegetable into its three first principles. Then join them together again, being well purified, and put the same into a rich earth, and you shall have it produce a vegetable far more glorious than any of its species.

Now, how to make such an essence, look into the first book, and there you shall see the process thereof.

TO MAKE A PLANT GROW IN TWO OR THREE HOURS

Take the ashes of moss and moisten them with the juice of an old dunghill, being first pressed forth and strained. Then dry them a little, and moisten them as before. Do this four or five times. Put this mixture, being neither very dry nor very moist, into some earthen or metal vessel, and in it set the seeds of lettuce, purslain or parsley (because they will grow sooner than other plants) being first impregnated with the essence of a vegetable of its own species (the process thereof you shall find in Book I) until they begin to sprout forth. Then, I say, put them in the said earth with that end upwards which sprouts forth. Then put the vessel into a gentle heat, and when it begins to dry moisten it with some of the said juice of dung.

You may by this means have a salad grow while supper is making ready.

TO MAKE THE IDEA OF ANY PLANT APPEAR IN A GLASS AS IF THE VERY PLANT ITSELF WERE THERE

The process of this you may see in Book I and, therefore, I need not here again repeat it. Only remember that if you put the flame of a candle to the bottom of the glass where the essence is, by which it may be made hot, you will see that thin substance which is like impalpable ashes or salt send forth from the bottom of the glass the manifest form of a vegetable, vegetating and growing by little and little, and putting on so fully the form of stalks, leaves, and flowers in such perfect and natural wise in apparent show that anyone would believe verily the same to be naturally corporeal when as, in truth, it is the spiritual idea, induced with a spiritual essence which serves for no other purpose

but to be matched with its fitting earth, so that it may take unto itself a more solid body. This shadowed figure, as soon as the vessel is taken from the fire, returns to its ashes again and vanishes away, becoming a chaos and confused matter.

TO MAKE FIR TREES APPEAR IN TURPENTINE

Take as much turpentine as you please and put it into a retort. Distill it by degrees. When all is distilled off, keep the retort still in a reasonable heat so that what humidity is still remaining may be evaporated and it become dry. Then take this off from the fire and hold your hand to the bottom of the retort. The turpentine that is dried (which is called colophonia) will crack asunder in several places, and in those cracks or chaps you shall see the perfect effigies of fir trees which will there continue many months.

TO MAKE HARTSHORN SEEMINGLY TO GROW IN A GLASS

Take hartshorn broken into small pieces, and put them into a glass retort to be distilled. You shall see the glass to be seemingly full of horns which will continue there so long until the volatile salt comes over.

TO MAKE GOLDEN MOUNTAINS AS IT WERE APPEAR IN A GLASS

Take of adders eggs half a pound, and put them into a glass retort. Distill them by degrees. When all is dry, you shall see the feces at the bottom turgid and puffed up and seem to be, as it were, golden mountains, being very glorious to behold.

TO MAKE THE REPRESENTATION OF THE WHOLE WORLD IN A GLASS

Take of the purest salt nitre as much as you please, and of tin half as much. Mix them together and calcine them hermetically. Then put them into a retort, to which annex a glass receiver, and lute them well together. Let there be leaves of gold put into the bottom thereof. Then put fire to the retort until vapors arise that will cleave to the gold. Augment the fire until no more fumes ascend. Then take away the receiver and close it hermetically. Make a lamp fire under it, and you will see represented in it the sun, moon, stars, fountains, flowers, trees, fruits and, indeed, even all things which is a glorious sight to behold.

TO MAKE FOUR ELEMENTS APPEAR IN A GLASS

Take of the subtle powder of jeat one ounce and a half, of the oil of tartar made per deliquulum (in which there is not one drop of water besides what the tartar itself contracted) two ounces which you must color with a light green with vardegrease, of the purest spirit of wine tinged with a light blue with indigo, two ounces of the best rectified spirit of turpentine colored with a light red with madder. Put all these into a glass and shake them together. You shall see the jeat which is heavy and black fall to the bottom and represent the earth. Next, the oil of tartar made green representing the element of water falls. Upon that swims the blue spirit of wine which will not mix with the oil of tartar, and represents the element of air, uppermost will swim the subtle red oil of turpentine which represent the element of fire.

It is strange to see how after shaking all these together they will be distinctly separated the one from the other. If it be well done, as it is easy enough to do, it is a most glorious sight.

TO MAKE A PERPETUAL MOTION IN A GLASS

Take seven ounces of quicksilver, as much tin, and grind them well together with fourteen ounces of sublimate dissolved in a cellar upon a marble the space of four days. It will become like oil of olive, which distill in sand. There will sublime a dry substance. Then put the water which distills off back upon the earth in the bottom of the still, and dissolve what you can. Filter it and distill it again. This do four or five times. Then that earth will be so subtle that, being put into a vial, the subtle atoms thereof will move up and down forever.

Note that the vial or glass must be close stopped and kept in a dry place.

TO MAKE A LUMINOUS WATER THAT SHALL GIVE LIGHT BY NIGHT

Take the tails of glowworms, put them into a glass still, and distill them in balneum. Pour the said water upon more fresh tails of glowworms. Do this four or five times and you shall have a most luminous water by which you may

see to read in the darkest night.

Some say this water may be made of the skins of herring, and for ought I know, it may be probable enough. For I have heard that a shoal of herring coming by a ship in the night have given a great light to all the ship. It were worth the while to know the true reason why glowworms and herring and some other such like things should be luminous in the night.

TO MAKE A VAPOR IN A CHAMBER THAT HE THAT ENTERS INTO IT WITH A CANDLE SHALL THINK THE ROOM TO BE ON FIRE

Dissolve camphor in rectified aqua vitae and evaporate them in a very close chamber where no air can get in. He that first enters the chamber with a lighted candle will be much astonished, for the chamber will seem to be full of fire, very subtle, but it will be of little continuance.

You must note that it is the combustible vapor, with which the chamber is filled, that takes the flame from the candle.

Diverse such like experiments as this may be done by putting such a combustible vapor into a box, or cupboard, or such like which will as soon as anyone shall open them, having a candle in his hand, take fire and burn.

TO MAKE POWDER THAT BY SPITTING UPON SHALL BE INFLAMED

Take a loadstone, powder it, and put it into a strong calcining pot. Cover it all over with a powder made of calx vive and colophonia, of each a like quantity, and also put some of this powder under it. When the pot is full, cover it and lute the closures with potters earth. Put them into a furnace and there let them boil. Then take them out and put them into another pot. Set them in the furnace again, and this do until they become a very white and dry calx. Take of this calx one part, of salt nitre very well purified four parts, and as much camphor, sulphur vivum, and the oil of turpentine and tartar. Grind all these to a subtle powder and searse them, and put them into a glass vessel. Then put as much spirit of wine well rectified as will cover them two fingers breadth. Then close them up and set the vessel in horse dung three months, and in that time they will all become a uniform paste. Evaporate all the humidity until the whole mass becomes a very dry stone. Then take it out and powder it, and keep it very dry.

If you take a little of this powder and spit upon it, or pour some water upon it, it will take fire presently, so that you may light a match or any such thing by it.

TO FORTIFY A LOADSTONE THAT IT SHALL BE ABLE TO DRAW A NAIL OUT OF A PIECE OF WOOD

Take a loadstone and heat it very hot in coals, but so that it be not fired. Then presently quench it in the oil of crocus martis, made of the best steel, so that it may imbibe as much as it can.

You shall by this means make the loadstone so very strong and powerful that you may pull out nails from a piece of wood with it, and do such wonderful things with it that the common loadstone can never do.

Now the reason of this (as Paracelsus says) is because the spirit of iron is the life of the loadstone, and this may be extracted from or increased in the loadstone.

TO MAKE QUICKSILVER MALLEABLE IN SEVEN HOURS

Take of the best lead, melt it, and pour it into a hole. When it is almost congealed, make a hole in it, and presently fill up the hole with quicksilver, and it will presently become congelated into a friable substance. Then beat it into a powder, and put it again into a hole of fresh melted lead as before. Do this three or four times. Then boil it, being all in a piece of linseed oil, the space of six hours. Then take it out and it will become malleable.

Note that after this it may, by being melted over the fire, be reduced into quicksilver again.

A thin plate of the said mercury laid upon an inveterate ulcer takes away the malignity of it in a great measure and renders it more curable than before.

A plate of said mercury laid upon tumors would be a great deal better repercussive than plates of lead which surgeons use in such cases.

The powder of the friable substance of mercury before it be boiled in the oil is very good to be strewed upon old ulcers, for it does much to correct the virulency of them.

TO REDUCE GLASS INTO ITS FIRST PRINCIPLES VIZ. SAND AND SALT

Take bits or powder of glass, as much as you please, and as much of the salt which glassmen use in the making of glasses. Melt these together in a strong fire. Then dissolve all the melted mass in warm water. Then pour off the water and you shall see no glass, but only sand in the bottom, which sand is that which was in the glass before.

This confutes the vulgar opinion, namely that the fusion of glass is the last fusion and beyond all reduction.

TO WRITE OR ENGRAVE UPON AN EGG OR PIBBLE WITH WAX OR GREASE

Make what letters or figures you please with wax or grease upon an egg or pibble. Put them into the strongest spirit of vinegar, and there let them lie two or three days. You shall see every place about the letters or figures eaten or consumed away with the said spirit. But the place where the wax or grease was is not at all touched. The reason whereof is because the spirit would not operate upon the said oleaginous matter.

TO MAKE ARTIFICIAL PEARL AS GLORIOUS AS ANY ORIENTAL

Dissolve mother of pearl in spirit of vinegar. Then precipitate it with oil of sulphur per campanum (and not with oil of tartar, for that takes away the splendor of it) which adds a luster to it. When it is thus precipitated, dry it, and mix it with white of eggs, and of this mass you may make pearls of what bigness or fashion you please. Before they be dried, you may make holes through them. When they be dried they will not at all, or very hardly, be discerned from true and natural pearls.

TO MAKE A MINERAL PERFUME

Dissolve antimony or sulphur in the liquor or oil of flints or pebbles, or crystals, or sand. Coagulate the solution into a red mass, pour thereon the spirit of urine, and digest them until the spirit be tinged. Then pour it off and pour more on until all the tincture be extracted. Put all the tinctures together and evaporate the spirit of urine in balneum. There will remain a blood red liquor at the bottom, upon which pour spirit of wine, and you shall extract a purer tincture which smells like garlic. Digest it three or four weeks, and it will smell like balm. Digest it longer and it will smell like musk or ambergris.

Besides the smell that it has, it is an excellent sudorific, and cures all diseases that require sweat: as the plague, putrid fevers, lues venerea, and such like as these.

THE OIL OR LIQUOR OF SAND, FLINTS, PEBBLES, OR CRYSTALS FOR THE AFORESAID PREPARATION IS MADE THUS

Take of the best salt of tartar, being very well purified by two or three dissolutions and coagulations, and powdered in a hot mortar, one part. Of flints, pebbles, or crystals, being powdered, or small sand well washed, the fourth part. Mingle them well together. Put as much of this composition as will fill an eggshell into a crucible. Set in the earthen furnace (described in Book III) and made red hot. Presently there will come over a thick and white spirit. This do until you have enough. Then take out of the crucible while it is glowing hot, and that which is in it is like transparent glass, which keep from the air.

The spirit may be rectified by sand in a glass retort.

This spirit is of excellent use in the gout, stone, ptisick, and indeed in all obstructions. It provokes sweat, urine, and cleanses the stomach and, by consequence, is effectual in most diseases.

It being applied externally clears the skin and makes it look very fair.

Take that which remains at the bottom in the crucible and beat it to powder, and lay it in a moist place so that it dissolves into a thick fat oil. And this is that which is called the oil of sand, of flints, pebbles, or crystals.

This oil is of wonderful use in medicine, as also in the preparation of all sorts of minerals.

This oil, being taken inwardly in some appropriate liquor, dissolves tartarous coagulations in the body, and so opens all obstructions.

It precipitates metals and makes the calx thereof more weighty than oil of tartar does.

It is of a golden nature. It extracts colors from all metals, is fixed in all fires, makes fine crystals and borax, and matures imperfect metals into gold.

If you put it into water, there will precipitate a most fine white earth, of which you may make as clear vessels as are china dishes.

Note that all sand, flints, and pebbles, even the whitest, have in them a golden sulphur or tincture, and if a prepared lead be for a time digested in this oil it will seem, as it were, gilded because of the gold that will hang upon it which may be washed away in water. Gold also is found in sand and flints, etc., and if you put gold into this oil it will become more ponderous thereby.

TO MAKE STEEL GROW IN A GLASS LIKE A TREE

Dissolve steel in a rectified spirit of salt, so shall you have a green and sweet solution which smells like brimstone. Filter it and abstract all the moisture in sand with a gentle heat. There will distill over a liquor as sweet as rain water. Steel, by reason of its dryness, detains the corrosiveness of the spirit of salt which remains in the bottom like a blood red mass which is as hot on the tongue as fire. Dissolve this red mass in oil of flints or of sand, and you shall see it grow up in two or three hours like a tree with stem and branches. Prove this tree at the test, and it shall yield good gold which this tree has drawn from the aforesaid oil of sand or flints which has a golden sulphur in it.

TO MELT A METAL IN ONE'S HAND WITHOUT BURNING OF THE HAND

Take a little calcining pot in your hand. Make in it a lane or course of the powder of any metal. Then upon it lay a lane of sulphur, saltpeter, and saw dust, of each a like quantity, mixed together. Put a coal of fire to it, and forthwith the metal will be melted into a mass.

AN OBSERVATION UPON THE BEAMS OF THE SUN AND HEAT OF THE FIRE HOW THEY ADD WEIGHT TO MINERAL & METAL BODIES

Take of any mineral liquor and set it in an open vessel in the sun for a good space, and it will be augmented in quantity and weight. But some will say that this proceeds from the air, to the which I answer and demand whether the air had not this impregnation from the sun, and what the air has in itself that proceeds not from the sun and stars. Put this liquor in a cold cellar or in a moist air, and you shall find that it increases not in weight, as it does in the sun or in the fire (which has in this respect some analogy with the sun). I do not say but haply it might attract some little moisture which is soon exhaled by any small heat.

Dissolve any sulphurous and imperfect metal, as iron, copper, or zinc, in aqua fortis or any other acid spirit. Then abstract the spirit from it. Make it glowing hot, yet not too hot, so that the spirit may only vapor away. Then weigh this metal calx and set it in a crucible over the fire. But melt it not, only let it darkly glow, let it stand so three or four weeks, and then take it off and weigh it again. You shall find it heavier than before.

Set any sulphurous metal, as iron or copper, with sixteen or eighteen parts of lead on a test made with ashes of wood or bones in a probatory furnace. First weigh the test copper and lead before you put them into the furnace. Let the iron or copper fly away with the lead, yet not with too strong a heat. Then take the test out and weigh it, and you shall find it (though the metals be gone) when it is cold to be heavier than it was when it was put into the furnace with the metals. The question is now whence this heaviness of all the aforesaid minerals and metals proceeded, if that the heat of the sun and fire through the help of the minerals and metals be not fixed into a palpable mineral and metal body?

Set a test with lead or copper in the sun. With a concave glass unite the beams of the sun, and let them fall on the center of the metal. Hold the concave glass in your hand, and let your test never be cold. This will be as well done in the sun as in the fire. But this concave must be two feet in diameter, and not too hollow or deep, but about the eighteenth or twentieth part of the circle, so that it may the better cast its beams forth. It must be very well polished.

Calcine antimony with a burning glass and you shall see it smoke and fume and be made drier than before, yet weigh it and it will be heavier than before.

I shall take in, for the confirmation of all this, a relation of Sir Kenelme Digby concerning the precipitating of the sun beams. I remember (says he) a rare experiment that a nobleman of much sincerity and a singular friend of mine told me he had seen which was, that by means of glasses made in a very particular manner and artificially placed one by another, he had seen the sun beams gathered together and precipitated down to a brownish or purplish red powder. There (says he) could be no fallacy in this operation. For nothing whatsoever was in the glass when they were placed and disposed for this intent. And it must be in the hot time of the year, else the effect would not follow.

Of this magistry he could gather some days nearly two ounces, and it was a strong volatile virtue, and would impress its spiritual quality into gold itself (the heaviest and most fixed body we converse withal!) in a very short time.

I leave it now to the reader to judge whether the beams of the sun and and the heat of the fire add weight to minerals and metals.

TO EXTRACT A WHITE MILKY SUBSTANCE FROM THE RAYS OF THE MOON

Take a concave glass and hold it against the moon when she is at the full in a clear evening. Let the rays thereof being united fall upon a sponge, and the sponge will be full of a cold milky substance which you may press out with your hand and gather more. De-La-Brosse is of the opinion that this substance is of the substance of the moon, but I cannot assent to him in that. Only this I say, if this experiment were well prosecuted, it might produce, for ought I know, such a discovery which might be the key to no small secrets.

TO CONDENSE THE AIR IN THE HEAT OF SUMMER AND IN THE HEAT OF THE DAY INTO WATER

Fill an earthen vessel unglazed, made pointed downward, and fill it with snow water (which must be kept all the year) in which is dissolved as much nitre as the water would dissolve. Let the vessel be close stopped. Hold this vessel against the sun and the air will be so condensed by the coldness of the vessel that it will drop down by the sides thereof.

HOW TWO SORTS OF VOLATILE SALTS WILL BE FIXED BY JOINING THEM TOGETHER

Take a strong lixivium made of unslaked lime, and evaporate it. Whereas you would expect to find a salt at the bottom, there is none, for all the salt in the lixivium is vapored away, and the more the liquor is evaporated the weaker the lixivium becomes, which is contrary to other lixiviums. Also, if you take the spirit of vinegar and evaporate it, you shall find no salt at the bottom. Now, if you take the clear lixivium of lime and spirit of vinegar, of each a like quantity, and mix them together and evaporate the humidity thereof, you shall find a good quantity of salt at the bottom which tastes partly hot and partly acid. This salt, being set in a cold cellar on a marble stone and dissolved into an oil, is as good as any lac virginis to clear and smooth the face and dry up any hot pustules in the skin, as also against the itch and old ulcers to dry them up.

TO MAKE AN UNGUENT THAT A FEW GRAINS THEREOF BEING APPLIED OUTWARDLY WILL CAUSE VOMITING OR LOOSNESS AS YOU PLEASE

Take lapis infernalis and mix therewith of distilled oil of tobacco as much as will make an ointment. Keep it in a dry place.

If you would provoke vomiting, anoint the pit of the stomach with five or six grains thereof, and the party will presently vomit, and as much as with taking of vomit.

If you would provoke to loosness, anoint about the navel therewith, and the patient will presently fall into a loosness.

Note that you must give the patient some warm suppers all the time this medicine is working.

Note also, and that especially, that you let not the ointment lie so long as to cauterize the part to which it is applied.

HOW TO MAKE A MEDICINE THAT HALF A GRAIN THEREOF BEING TAKEN EVERY MORNING WILL KEEP THE BODY SOLUBLE

Take of the distilled oil of tobacco, of which let the essential salt of tobacco imbibe as much as it can. Then with this composition make some lozenges by adding such things as are fitting for such a form of medicine. Note that you put but such a quantity of this oily salt as half a grain only may be in one lozenge.

One of these lozenges being taken every morning or every other morning keeps the body soluble, and is good for them as are apt to be very costive in their bodies.

Note that you may put some aromatical ingredient into the lozenges that may qualify the offensive odor of the oil, if there shall be any.

TO MAKE A CORDIAL STOMACHICAL AND PURGATIVE TINCTURE

Make a tincture of hierapera with spirit of wine well rectified and aromatized with cinnamon or cloves. Two or three spoonfuls of this tincture being taken in a morning twice in a week wonderfully helps those that have weak and foul stomachs. It opens obstructions and purges viscosities of the stomach and bowels, cures all inveterate headaches, kills worms and, indeed, leaves no impurities in the body, and is very cordial. For it exceedingly helps them that are troubled with faintings. There is nothing offensive in this medicine but the bitterness thereof which the other extraordinary virtues will more than balance.

ANOTHER

Dissolve scammony in spirit of wine. Evaporate the one moiety. Then precipitate it by putting rose water to it, and it will become most white, for the black and fetid matter will lie on the top of the precipitated matter which you must wash away with rose water. Then take that white gum, being very well washed, and dry it. (If you please, you may powder it and so use it. For indeed it has neither smell nor taste, and purges without any offence. It may be given to children, or to any that distaste physic, in their milk or broth without any discerning of it and, indeed, it does purge without any manner of grippings. I was wont to make it up into pills with oil of cinnamon or cloves which gave it a gallant smell, and of which I gave a scruple which wrought moderately and without any manner of grippings). Then dissolve it again in spirit of wine, being aromatized with what spices you please, and this keep.

This tincture is so pleasant, so gentle, so noble a purgative that there is scarce the like in the world, for it purges without any offence, is taken without any nauseating, and purges all manner of humors, especially cholera and melancholy, and is very cordial.

It may be given to those that abhor any medicine, as to children or those that are of a nauseous stomach.

The dose is from half a spoonful to two or three.

Note it must be taken of itself, for if it be put into any other liquor the scammony will precipitate and fall to the bottom.

After this manner, you may prepare jollap by extracting the gum therefrom and then dissolving it in spirit of wine. By this means jollap would not be so offensive to the stomach, as usually it is, for it is the gum that is purgative and the earthliness that is so nauseous.

Jollap being thus prepared is a most excellent medicine against all hydropic diseases, for it purges water away without any nausea or griping at all.

TO REDUCE DISTILLED TURPENTINE INTO ITS BODY AGAIN

Take of oil of turpentine and the colophonia thereof (which is that substance which remains in the bottom after distillation) which you must beat to powder. Mix these together and digest them, and you shall have a turpentine of the same consistency as before, but of a fiery subtle nature.

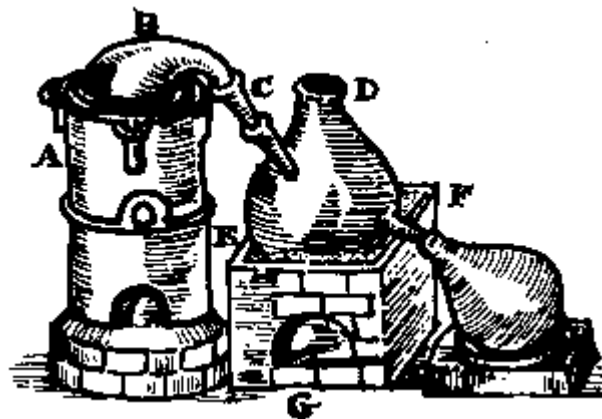
Pills made of this turpentine are of excellent use in obstructions of the breast, kidneys, and the like.

TO MAKE THE DISTILLED OIL OUT OF ANY HERB, SEED, OR FLOWER IN AN INSTANT WITHOUT ANY FURNACE

You must have a long pipe made of tin which must have a bowl in the middle with a hole in it as big as you can put your finger into it, by which you must put your matter that you would have the oil of. Set this matter on fire with a candle or coal of fire. Then put one end of the pipe into a basin of fair water and blow at the other end, and the smoke will come into the water, and there will an oil swim upon the water which you may separate with a tunnel.

TO MAKE WATER AND THE TINCTURE OF ANY VEGETABLE AT THE SAME TIME WHICH IS AN EXCELLENT WAY TO DRAW OUT THE VIRTUE THEREOF

This must be performed by these following vessels.

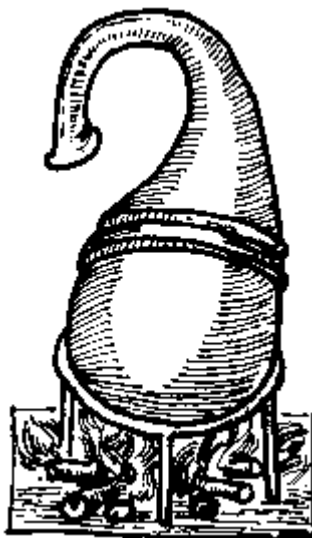


- A. Signifies the furnace itself.
- B. The retort which stands in water or sand, wherein the matter to be distilled is put, instead, whereof if you please you may put a gourd glass with a head to it.
- C. The pipe.
- D. Another vessel where is more fresh matter, out of which the tincture is to be drawn, and which stands upon ashes with a fire under it.
- E. The furnace with a pan of ashes.
- F The receiver.
- G. The hole of the furnace to put in coals to heat the second matter.

A WAY TO SEPARATE FRESH WATER FROM SALT WITHOUT A FURNACE OR MUCH TROUBLE

Take a cauldron with a great and high cover having a beak or nose, set it upon a trivet, and under it put a fire. Let this be filled with salt water, and there will presently distill off a good quantity of fresh water into a receiver which must be joined to the nose of the aforesaid cover.

This is of good use for seamen that want fresh water, for by this means they may distill a good quantity in 24 hours, especially if they have any considerable number of the aforesaid vessels, a figure whereof is this which follows.



A WAY TO PURGE AND PURIFY TROUBLED AND MUDDY WATERS

Fill a great pot with puddled water, and put a soft and gentle fire under it. Lay some bricks across on the pot brims, and upon the sticks lay clean wool or a sponge well washed. Now the wool drinks up the vapors that ascend which you then must wring out and lay on the wool again. This you may do until you have as much clean water as you desire. The manner of this distillation is described thus.

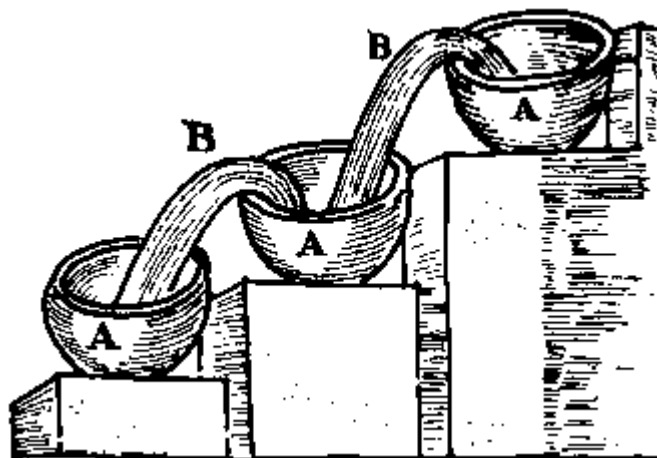


- A. Signifies the pot.
- B. The fire.
- C. The sticks.
- D. The wool.

This is of use for them that can come at no other waters but what are troubled, as it falls out many times in some places.

ANY THICK ANOTHER WAY TO PURIFY MUDDY, OR FECULENT LIQUOR

This is performed by shreds of any white woollen cloth in vessels as you can see hereafter expressed.



- A. Signifies the vessels.

B. The shreds.

Note that the shreds must be first wet in fair water, and the feculent matter be put into the uppermost vessel.

Note also, whereas here be two receivers, that in many cases one may be sufficient.

This way serves for the purifying of decoctions, juices, or dissolutions of salts from their feculency, for that which is distilled by the shreds is as clear as crystal, when what remains is very feculent.

TO KEEP FIRE IN A GLASS THAT WHILE THE GLASS IS SHUT WILL NOT BURN BUT AS SOON AS IT IS OPENED WILL BE INFLAMED

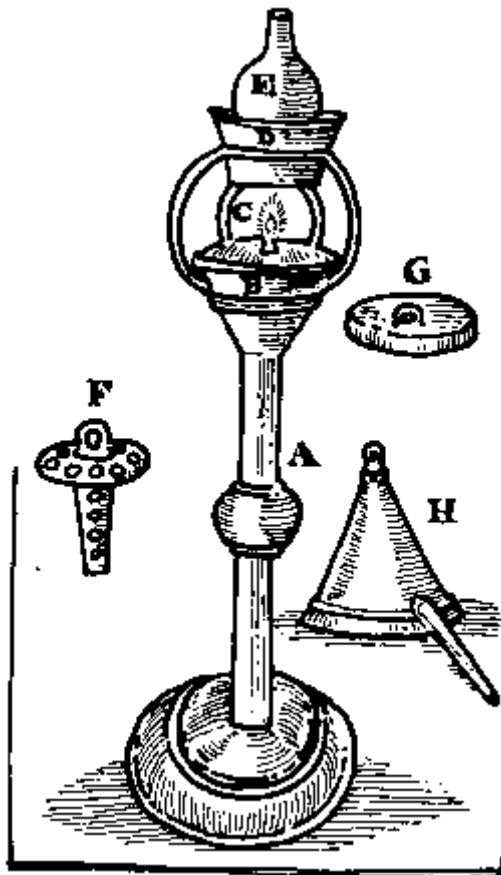
First extract the burning spirit of the salt of tin in a glass retort well coated. When the retort is cold, take it out and break it, and as soon as the matter in it which remains in the bottom thereof after distillation comes into the air, it will presently be inflamed. Put this matter into a glass vial, and keep it close stopped.

This fire will keep many thousand years and not burn unless the glass be opened. But at what time soever that it is opened, it will burn.

It is conceived that such a kind of fire as this was found in vaults when they were opened which many conceived to be a perpetual burning lamp, when as indeed it was inflamed at the opening the vault and the letting in air thereby which before it lacked and, therefore, could not burn. For it is to be conceived that there is no fire burns longer than its matter endures, and there is no combustible matter can endure forever.

There may be many uses of such a fire as this, for any man may carry it about with him and let it burn on a sudden when he has any occasion for fire.

A lamp furnace is made thus.



A. Signifies the candlestick which must be hollow and full of water.

B. The top of the candlestick which must be wide to contain good store of water for to fill up the candlestick as the candle rises up.

C. The candle which must be as long as the candlestick.

D. The vessel that contains either water, sand, or ashes for any vessel to be set into, also to contain any matter itself that is to be distilled or digested.

E. A glass vessel standing in digestion.

F. A narrow-mouthed stopple to be put into the candlestick to keep the candle upright, and that must be made of tin with holes in it.

G. The cover for the vessel D which is to be put upon it when anything is decocted or kept warm in it.

H. A still head to put upon the vessel D when you would distill anything in it.

Note that if you make all these vessels large you may do many considerable things without much labor or trouble. In the vessel D, if it be large, you may stew meat which, if you put in at night and cover it close, you may have it ready for your breakfast in the morning and so, according to the time you put it in, you may have it for dinner or supper. Also, you may keep anything warm in the night and at all times, diverse such uses as these it may be used for.

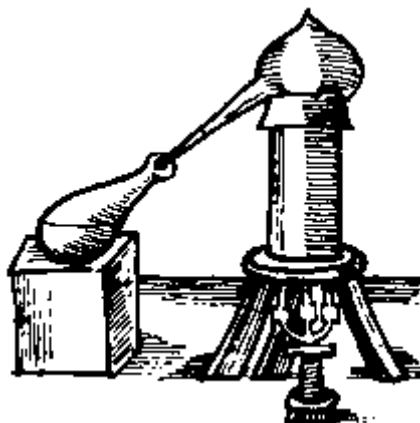
Note that the candle will still rise up until it be quite burned out, and an ordinary candle will last twice as long this way as it will out of the water.

If you would have one candle last a long time, as twelve or twenty hours, you must either make your candlestick very long that it may contain a long candle, or make your candle big and the wick small, or make your candle of such matter as will not presently be consumed.

Note also that if you would have a great heat, your candle must be great, and also the wick thereof great, but if gentle, let your candle be small.

ANOTHER LAMP FURNACE

There is another sort of lamp furnace with three candles after this manner.



The use of this is when you would have a constant fire that should give a stronger heat than one candle in the former furnace. And the truth is that if your candles be big (as you may make them as big as you will) you may have as strong a heat this way as by ashes in an ordinary furnace.

TO MAKE A CANDLE THAT SHALL LAST LONG

Take unslaked lime, powder it and mix it with your tallow, and so make you candle of that. Or else, you may make candles of castile soap which will serve for such uses as these, viz., to burn in such a lamp furnace.

Note that it is the salt that is in the lime and soap that preserves the the tallow from burnig out so fast as otherwise it would.

TO MAKE A LASTING AND DURABLE OIL

Take unslaked lime, bay salt, oil of olive, of each a like quantity, and mix them well together and distill them in sand. Cohobate the oil upon the same quantity of fresh lime and salt, and this do four or five times. By this means will the oil be clear and impregnated with what salt was volatile in the lime and salt.

Now that saline impregnation is that which gives a durableness to the oil.

Note that this oil while it is distilling is of a most fragrant smell. I have some of it which I distilled seven times and

it is as pure, subtle, and odoriferous as many common distilled oils and vegetables.

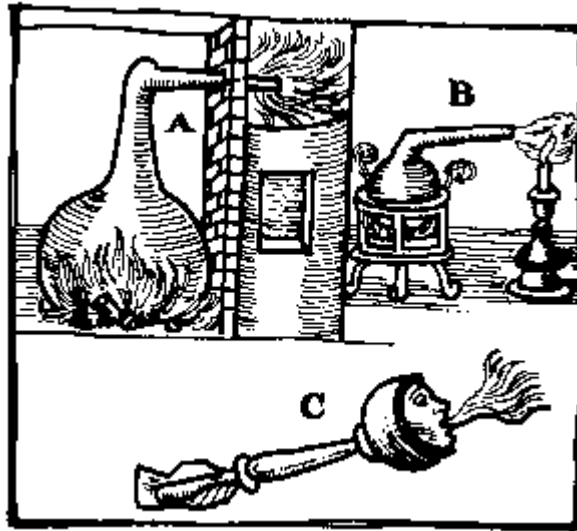
This oil, besides the durability of it, is also good against any inveterate ache in the limbs.

A lamp made with this oil will continue burning six times as long as a lamp made of other oil. Also, it burns very sweet.

There must be a great deal of care used in making of it, or else you will quickly break your glasses. Also, you must take very strong lime, such as the dyers use, and call cauke.

PHILOSOPHICAL BELLOWS

There be here set down three figures of these kinds of instruments which belong to several uses.



A. Signifies that which blows a fire for the melting of any metal or such like operation, and it blows most forcibly with a terrible noise.

B. That which blows a candle to make the flame thereof very strong for the melting of glasses and nipping them up.

C. That which anyone may hold in their hand to blow up the fire strongly upon any occasion.

Now the manner of the using of them is this. You must first heat them very hot. Then put the noses thereof (which must have a very small hole in them, no bigger than that a pin's head may go in) into a vessel of cold water. They will presently suck in the water, of which then being full, turn the noses thereof towards the candle or fire which you would have blown.

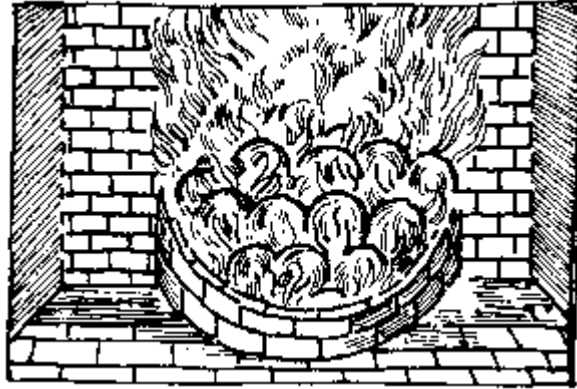
As for the figure C, it must have a mouth drawn up around and hanging out an inch from the face, which mouth (the whole compass of the face being heated first) you must dip in cold water, and it will suck in water as the noses of the former did. This then you must hold close to the fire that it may be heated, and it will blow exceedingly, as otherwise it will not, viz., if it be cold.

If you put sweet water into such a vessel, you may perfume a chamber exceedingly, for a little quantity thereof will be a long time breathing forth.

Note that these kinds of vessels must be made of copper and be exceedingly well closed so that they may have no vent but by their noses.

AN EXCELLENT INVENTION TO MAKE A FIRE

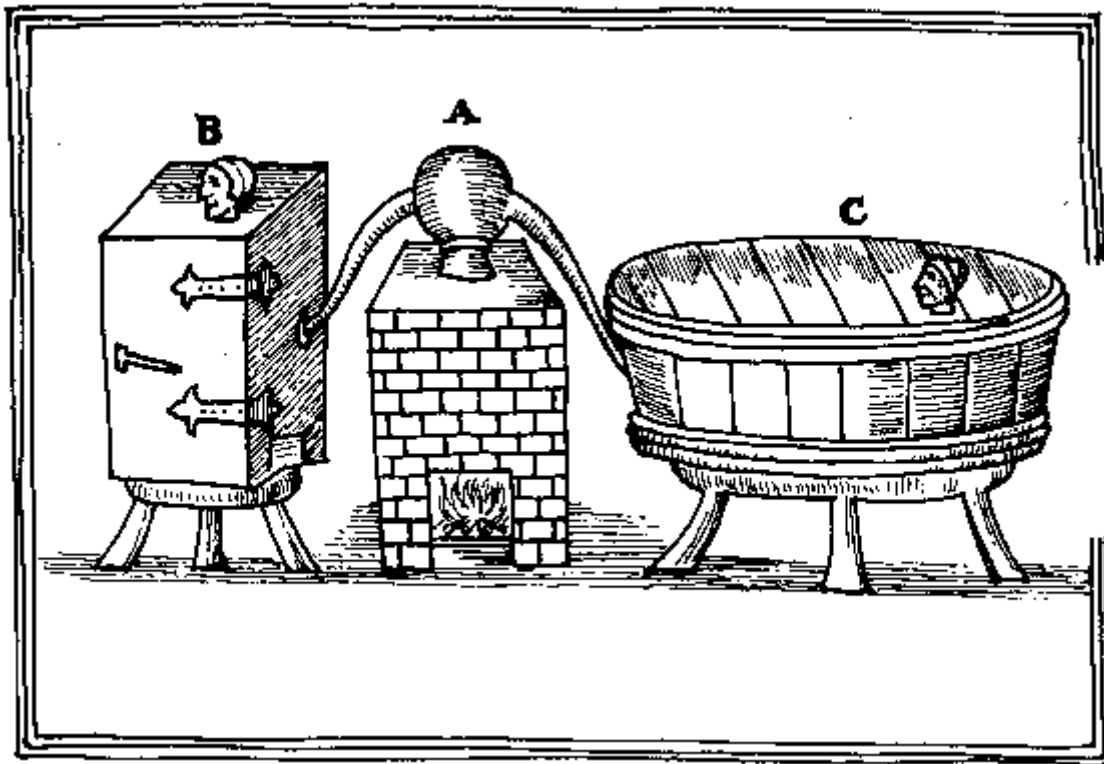
Take three parts of the best Newcastle coals beaten small and one part of loam. Mix these well together into a mass with water. Make thereof balls which you must dry very well.



This fire is durable, sweet, not offensive by reason of the smoke or cinder as other coal fires are. It is beautiful in shape and is not so costly as other fires. It burns as well in a chamber even as charcoal. This fire may either serve for such distillations as require a strong and lasting heat or for ordinary uses either in the kitchen or chambers.

A NEW INVENTION FOR BATHS

Seeing that by bathing and sweating most diseases are cured, especially such as proceed from wind, hot and distempered humors or cold and congealed humors, because all these are rarified and evaporated by transpiration in sweating or bathing, I thought it a thing much conducing to man's health to set down such a way of bathing and sweating that might be very effectual and appropriated to any particular disease or distemper. I shall therefore here commend to you a way of bathing by distillation, the manner of which you may see by these ensuing vessels.



A. Signifies a hot still with two pipes going into two wooden vessels. In this still you may put either herbs, spices, with water or with spirits, and distill them, by which means they that are in the vessels will presently be forced into a

sweat by virtue of the subtlety of the vapors. And this indeed is as good and effectual a way for sweating as any can be invented. You may by this means appropriate your ingredients to the nature of the diseases.

B. A vessel wherein a man sits in the bath. Now this vessel has in it a door for the easier going into it, which fashion is far better and more convenient, than to be open only at the top.

C. A long vessel where a man that is weak, and not able to sit up, lies and is bathed.

Now you must note that these vapors must not be hotter than the patient can bear. Also, if the vapor comes forth too hot upon the body of the patient, he may by putting a pipe upon the end of the pipe that comes into the vessel, divert the hot vapor from his body, and so it will not offend him that way.

Note that the patient, as soon as he begins to be faint, must come forth or else he will suffer more prejudice than good by his bathing. Also, to prevent him from fainting let him take some cordial or cold beer which will revive him and make him endure his bathing longer, as also make him sweat the more.

As soon as the patient comes forth, let him go into a warm bed and sweat as he is able to bear it, and take some posset drink or broth or such like warm suppers, as also some good cordial if he be very faint.

The patient may, according to his strength and his disease, bathe more seldom or oftener.

AN ARTIFICIAL BATH MADE FROM THE SAME PRINCIPLES AS THE NATURAL BATH IS

Before I set down the process of making an artificial hot bath, I shall premise something concerning the true nature and origin of a hot bath. Now the clearest and best account that I ever heard or read of the cause of the heat in baths is that which is given by Monsieur de Rochas, and that in a demonstrative way. His words are these:

"As I was", says he, "with some of my companions wandering in Savoy, I found in the valley of Lucerne between the Alps a hot spring. I began to consider the cause of this heat, and whereas the vulgar opinion is that the heat of fountains is from mountains fired within, I saw reason to think the contrary because I saw snow upon a mountain from whence this hot spring came, unmelted, which could not have been possible, but would have been dissolved by the hot fumes of the mountains had they been fired. Whereupon, being unsatisfied, I with my companions and other

laborers (whom I could hardly persuade to undertake such a business by reason they were afraid that fire would thereupon break forth out of the ground and consume us) got tools and set upon digging to find out the true cause of the heat of this fountain. After we had dug fifteen days (having before perceived the water to be hotter and hotter by degrees as we came nearer to the source) we came to the original of the heat where was a great ebullition. In three

hours more we dug beyond this place of ebullition and perceived the water to be cold, yet in the same continued stream with the other that was hot. Upon this I began to wonder much at the reason of these things. Then I carried to by lodging some of this hot water (which was both saltish and acid) and evaporated it. Of forty ounces I yet further

purified and extracted thence three drams of pure nitrous hermetic salt, the other two ounces being a slimy sulphurous substance. Yet with this I was not satisfied, but with my laborers went again to the place and dug twelve days more. Then we came to a water which was insipid as ordinary fountain water, yet still in a continued stream with the saltish and hot water. At this I wondered much, whereupon I dug up some of the earth where the cold and saltish stream ran and carried it home with me, and out of a hundred weight thereof I extracted a good quantity of nitrous salt which was almost fluxile.

"When I extracted as much as I could, I laid the earth aside, and in 24 hours it was all covered over with salt which I extracted, and out of a hundred weight of this earth, which I call virgin earth, I had four pounds of this kind of salt which it contracted in the aforesaid 24 hours, and so it would do constantly. Now this satisfied me concerning one doubt. For before I was unsatisfied how there could be a constant supply of that salt which made the water saltish, seeing there was but a little distance between the insipid water and the hot water, and the constant stream of water washed away the salt which was in that little space. For I perceived that this kind of earth attracts this universal salt of the world partly from the air in the cavities of the earth and partly from the vapors that constantly pass through the earth. After this I took some of that earth where the ebullition was and carried it home and proved it, and I

perceived it to be a sulphur mine, into which the former acid saltish water penetrating caused an ebullition, as do salt of tartar and spirit of vitriol being mixed together, and also water poured on unslaked lime. After this I began to question how it was that this sulphur mine was not consumed, seeing so much matter pass from it daily. But when I began to understand how all things in the earth did assimilate to themselves whatsoever was of any kind of affinity to them, as as mines convert the tools of miners into their own substance in a little time, and such like experiments of that nature, I was satisfied. And after all this I understood how this universal salt of the world was to be had, and I could at any time mix it with water, and pour that water upon sulphur, and so make an artificial hot bath as good as any natural bath whatsoever. Note that no salt in the world but this nitrous salt will do it, as I often tried. And this salt is to be found in all hot baths, and to be prepared artificially. " Thus far Monsieur de Rochas.

Something like unto this Helmont seems to hold forth, saying that there is a Primum Ens Salium or Femina Salium which are all seated in waters and vapors and give them an acidity, but as yet have no saline taste until they meet with such principles and be received into certain matrixes in the earth which may make them put forth this potential saltiness into act. According to this diversity of places this water or vapor, being impregnated with those seeds of salt, goes through arise the diversity of salts, as alum, sea salt, nitre, etc. Then upon this account the earth, through which the cold, acid, saltish water abovesaid run through, did specificate that potential salt which was both in the water and vapors into a nitrous salt (by which means was that kind of salt in that place). But whether this Primum Ens Salium by so unspecified or Quid Hermaphroditicum as he asserts, or no, it matters not much to my purpose. It suffices if that earth, through which that acid nitrous water runs, attracts and multiplies an acid nitrous salt with which the water, being impregnated and running through a sulphurous mine, causes an ebullition. All this being premised, I shall now endeavor to illustrate how nature may in this be imitated, as that an artificial hot bath may be made by such like principles, as the natural hot bath consists of, being artificially prepared.

Now these principles are the sulphur mine and the acid nitrous salt. The former requires no further preparation (as says Monsieur de Rochas) if it be pure. The latter is to be prepared two manner of ways. Either it is to be extracted, as says the foresaid author, out of the waters of the bath by evaporating them away, or by condensing the nitrous air (for indeed as many judicious philosophers are of opinion, the air is wholly nitrous as it appears by the condensation of it in cold places into nitre) which his virgin earth did do into a salt which was acid and almost fluxile. Now when I say that the nitrous salt is to be thus prepared, I do not say that this is the full preparation thereof, for indeed it is yet further to be prepared, and that is by giving it a greater acidity.

I question much whether or no the salt, being prepared after the aforesaid ways, does retain that acidity which is required for that ebullition I spoke of, and which the nitrous water had before it came to the mine of sulphur. For indeed, the aforesaid author when he affirmed that he could at any time make an artificial hot bath, did not say he used the salt prepared only after the two former ways, viz., by extracting it out of the waters of the bath and making it with his virgin earth which did attract and condense the nitrousness of the air, but withall by making it so acid that it might cause an ebullition when it came to be joined with a sulphur mine.

Now then, how to give this nitre a sufficient acidity is the great question. For the better effecting of this we must consider whence that nitrous water (above mentioned) in the earth had the greatest part of its acidity.

As to that, it must be remembered that the virgin earth through which the acid nitrous water did run, did condense the nitrous air or vapors into a nitrous salt and, withall!, it is to be considered that before this nitrous air or vapor, before it is condensed, even when it is near unto condensation is acid, and part of it before condensation is mixed with the water, and so renders it acid. Now that waters have a great part of their acidity from the acid vapors of acid minerals both Henricus ab Heers and Jordan upon mineral waters affirm. That salts unbodied are far more acid than when they have assumed a body is clearly manifest in this, viz., that spirits of salts which I call salts unbodied, because they have lost their body, are become very acid because unbodied. If so in spirits that have lost their bodies, why not after some proportion in those that have not yet assumed a body, as vapors of nitre, or nitrous air being near to congelation, and bodying, and impregnant with spirits of nitre.

Now, I say that nitrous vapors or nitrous air, being a salt unbodied, are not so acid as spirits of nitre, because they are more phlegmatic and crude, which phlegm they lose by being congealed into a salt. Yet for all this, they are far more acid than the body of salt, and this is that which Helmont understands when he says that the esurine salt, being incorporificated, is far more active in giving taste and odor than when it has received its body by becoming a specificated salt. Furthermore, how nitre shall become sufficiently acid for the aforesaid operation is the great matter to be enquired into. We must therefore consider which way we may unbody nitre (seeing it is scarce possible to get it before it has received its body). That is done two ways, either by forcing of it into a most sharp spirit, which is too acid for our intention, or by digesting the whole substance of nitre into a liquor moderately acid, which indeed serves for our purpose, and the process is this.

Take the purest nitre you can get. Dissolve it in rainwater, so as that the water imbibes as much of it as it can. Then put this nitrous water into a common earthen vessel unglazed which you must set in a cellar. You shall see this vessel in a short time to be white all over on the outside as with a hoarfrost. This whiteness is partly the flowers of the nitre, being the purest part thereof, penetrating the vessel and partly the nitrous air condensed into nitre by the coldness of the vessel, as also assimilated to the nitre that penetrated the vessel. I said by the coldness of the vessel, because such is the coldness of an earthen vessel wherein is nitre, dissolved in water, that it will being set in snow by the fireside be freed.

This nitre you must strike off with a feather and when you have a sufficient quantity thereof, as three or four pounds, put this or the nitrous salt extracted from both waters into a bolt head of glass (a pound in each bolt head) that two parts of three be empty. Nip it up, set it in ashes, and give it a reasonable strong fire, viz., that the upper part of the bowl of the bolt head be as hot as that you can, but well suffer your hand upon it, and you shall see that the nitre will

be dissolved every day a little, and in two or three months time be wholly dissolved and become acid, but not so acid as the spirit thereof. Then put it into a glass gourd with a head and distill it off. In the bottom you shall find an acid nitrous salt almost fluxile, and not unlike that salt which Monsieur de Rochas found in the evaporating of his water.

Then pour the distilled nitre water upon the said salt, and then it is for your use.

The use of these principles or ingredients is this, viz., to make fountain water sufficiently acid with this nitrous liquor. Then pour it upon a sufficient quantity of the best sulphur mine or sulphur vivum in a large wooden vessel where the patient is to be bathed. You will see the water presently heated so hot as the patient is able to bear.

The inward use of these bathwaters is by reason of the nitre in them, to dissolve gross humors, open obstructions, cleanse the kidneys and bladder and, by reason of the sulphur, to dry, mollify, discuss, and glutinate, and to help all uterine effects proceeding from cold and windy humors.

Note that they must be drunk warm and in a good quantity, or else they will do more hurt than good.

The outward use of this is for such ill effects as are in the habit of the body and out of the veins, as of palsies, contractions, rheums, cold humors, effects of the skin and aches, for they resolve, discuss, cleanse, mollify, etc. Now for the manner of bathing I shall not prescribe anything, but leave this to the discretion of the physician who is to give orders and directions for all the circumstances about it. For indeed everyone is not to bathe when and how he pleases, but must apply himself to an able physician and submit himself to his judgment and experience, or else may receive either prejudice or no benefit thereby.

AN ARTIFICIAL TUNBRIDGE AND EPSOM WATER

It is granted by all that tunbridge water proceeds from an iron mine, but how it contracts that acidity and that ironish and vitriolated taste and odor, seeing upon evaporation thereof, there remains little or no vitriol or salt of iron at the bottom, is the great question. Now for the solution of this, we must consider how many ways a subterranean mineral or metal may communicate its acidity to waters and that, says Henricus ab Heers, upon spew waters, it does three ways: one, when the water passing through the mines carries along with it some of the dissoluble parts of the mine, to which is consonant the saying of Aristotle that such are waters, as is the nature of those mines through which they pass, as also of Galen when he says that pure water passing through mineral mines carry with them some of the substance of the mines. The second way is when the vapors arising from fermented minerals and metals are mixed with waters. Now that vapors retain the odor and taste of those things from whence they are raised, Aristotle in his fourth book, Sublimium, affirms, and also Helmont when he says that some parts of the iron mines, being by fermentation turned into a vapor, retain the odor and taste of the mine by virtue of the acid esurine salt and are not presently reduced into a body, and also artificial vapors of the iron mines have more virtue, and active (I mean those parts that are raised by a strong fire in a furnace from the mine of iron) than iron itself when it is melted. The third way is when a great quantity of vapors arising from the aforesaid fermented mines is elevated and by the coldness of the ambient earth is turned into an acid water which, as it passes through the earth, meets with some springs of water and, mixing with them, gives them a pleasant acidity. And this is the best of all acid waters, being clear and very pure.

This being premised, I shall now proceed to the process of making artificial waters like to those of Tunbridge and Epsom.

To make tunbridge water, take of the mine or ore of iron. Beat it very small and put it into the furnace expressed on page 90 and there will come forth an acid spirit and flowers which you must mix together until the acid spirit extracts the salt out of the flowers. Then decant off the clear liquor which will have a strong taste and smell of iron.

A few drops of this liquor put into a glassful of fountain water gives it the odor and taste of tunbridge water and communicates the same operations to it.

It opens all obstructions, purges by urine, cleanses the kidneys and bladder, helps the pissing of blood, the stopping of the urine and difficulty of making water. It allays all sharp humors, cures inward ulcers and impostumes, cleanses and strengthens the stomach and liver, etc.

Note that fountain water being made moderately acid with this acid ironish liquor may be taken from a pint to six pints but, by degrees and after the taking of it, moderate exercise is to be used, and fasting to be observed until all the water be gone out of the body which will be in seven or eight hours.

Epsom water is made artificially thus. Take of the mine of alum or alum stones. Powder it very small and distill it in the furnace expressed on page 90 and there will distill over a certain acid aluminish water which must be mixed with a double quantity of nitre water (the preparation whereof is set down in the process of making the artificial hot bath).

Now you must know that Epsom water has a certain kind of acid taste which is partly aluminous and partly nitrous which proceeds from nitrous air and vapors arising from the fermentation of aluminous mines, being first mixed together and then mixed with the fountains passing through the earth.

If you put a few drops of this liquor into a glassful of fountain water it will give it the odor and taste of Epsom

water, that you shall scarce discern them asunder either by that odor or operation.

This water is purgative and, indeed, purges especially all sharp burning humors, cools an inflamed, and opens an obstructed body, cleanses the kidneys and bladder, cures inward ulcers and impostumes, and is a very good preservative against the consumption, etc.

Fountain water made acid with this liquor may be taken from a pint to six or eight, but by degrees, and after it moderate exercise must be used, and fasting until the water be out of the body. Only some thin warm supplings may be taken to help the working thereof. Some take this water warm.

TO MAKE ARTIFICIAL PRECIOUS STONES OF ALL SORTS OF COLORS

Take crystalline white pebble stones that are very white throughout and have no mixture of any other color which you shall find in fountains and on the sands of the sea. Put them into a crucible and make them glowing hot (covering the crucible). Then cast them into cold water, by which means they will crack and be easily reduced into a powder. Take the powder thereof and put the like quantity of pure salt of tartar thereto, which salt must not be made in any metalling, but glass vessels, so that it may have no mixture of any other color. To this mixture you may add what color you please which must be of a mineral or a metalline nature. Then put them into a very strong crucible which must be but half full and then covered, and there melt them in a strong fire until they become like glass. Note that when this mixture is in melting you must put an iron rod into it and take up some of it, and if there appears no corns of gravel in it, it is enough. If otherwise, you must melt it longer. The especial minerals and metals that give colors are these, viz., copper, iron, silver, gold, wismut, magnesia, and granite.

Common copper makes a sea green; copper made out of iron, a grass green; granite, a smaragdine green; iron, yellow or a hyacinth color; silver, white yellow, green, and granite color; gold, a fine sky color; wismut common blue; magnesia, an amethyst color. And if you will mix two or three of these together, they will give other colors. For copper and silver mixed together give an amethyst color; copper and iron, a pale green; wismut and magnesia, a purple color; silver and magnesia, diverse colors like as an opal. If you would have this mass not to be transparent, but opaque, you may add the calx of tin to it when it is in melting. As if you would make lapis lazuli, then to your mixture colored with wismut add the calx of tin, and this mixture when it is almost ready to congeal cast into a mold where some powder of gold has been scattered and, by this means, it will become full of golden veins very like true lapis lazuli which is very pleasant to behold. You may by these foresaid preparations cast what forms or figures you please, of what color you please.

The metals and minerals for the making of colors ought to be thus prepared as follows.

Plates of copper must be made red hot and then quenched in cold water, of which then take five or six grains, and mix them with an ounce of the aforesaid mixture, and melt them all together and they will color it sea green.

Iron must be made into a crocus in a reverberatory fire, and then eight or ten grains thereof will tinge the mixture into a yellow or hyacinth color.

Silver is to be dissolved in aqua fortis and precipitated with oil of flints, then dulcified with water, and afterward dried. Of this five or six grains give a mingled color.

Gold must be dissolved in aqua regis, precipitated with the liquor of flints, and then sweetened and dried. Five or six grains thereof give the finest sapphire color to an ounce of the mixture.

If gold be melted with regulus martis nitrosus, five or six grains thereof give to an ounce of this mass a most incomparable rubine color.

Magnesia may be powdered only, and then ten or twelve grains thereof make an amethyst color.

Wismut must be dissolved in aqua regis and precipitated with liquor of flints, and then sweetened and dried. Of this four or five grains turn an ounce of the mass into a sapphire color, but not so natural as gold does.

Granite may be powder only, and then ten or fifteen grains thereof tinge an ounce of the mass into a fine green color not unlike to the natural smaragdine.

TO PROVE WHAT KIND OF METAL THERE IS IN ANY ORE ALTHOUGH YOU HAVE BUT A VERY FEW GRAINS THEREOF SO AS THAT YOU CANNOT MAKE PROOF THEREOF THE ORDINARY WAY WITH LEAD

Take two or four grains (if you have no greater quantity) of any ore that you have, and put it to half an ounce of Venice glass. Melt them together in a crucible (the crucible being covered) and according to the tincture that the glass receives from the ore, so may you judge what kind of metal there is in the ore. For if it be a copper ore, then

the glass will be tinged with a sea-green color
If copper and iron, a grass-green.
If iron, a dark yellow.
If tin, a pale yellow.
If silver, a whitish yellow.
If gold, a fine sky color
If gold and silver together, a smaragdine color
If gold, silver, copper, and iron together, an amethyst color

A PRETTY OBSERVATION UPON THE MELTING OF COPPER AND TIN TOGETHER

First, make two bullets of red copper of the same magnitude. Make also two bullets of the purest tin in the same mold as the others were made. Weigh all four bullets and observe the weight well. Then melt the copper bullets first. Upon their being melted, put the two tin bullets and melt them together, but have a care that the tin fume not away. Then cast this molten mixture in the same molds as before, and it will scarce make three bullets, but yet they weigh as heavy as the four did before they were melted together.

I suppose the copper condenses the body of the tin which before was very porous, and which condensation rather adds than diminishes the weight thereof.

A REMARKABLE OBSERVATION UPON THE MELTING OF SALT ARMONIAC AND CALX VIVE TOGETHER

Take salt armoniac and calx vive, of each a like quantity, and mix and melt them together. Note that calx of itself will not melt in less than eight hours with the strongest fire that can be made, but being mixed with this salt melts in half an hour and less like a metal with an indifferent fire.

This mixture being thus melted becomes a hard stone, out of which you may strike fire as out of a flint which, if you dissolve again in water, you shall have the salt armoniac in the same quantity as before, but fixed.

Note that hard things have their congelation from salt armoniac, as horns, bones, and such like, for little fixed salt can be extracted from them, only volatile and armoniac.

An ounce of any of these volatile salts (as of horns, bones, amber, and such like) reduced into an acid liquor by distillation, condenses and endures a pound of oily matter.

AN EASY AND CHEAP POWDER LIKE UNTO AURUM FULMINANS

Take of salt of tartar one part, salt petre three parts, sulphur a third part, and grind these well together and dry them.

A few grains of this powder being fired will give as great a clap as a musket when it is discharged.

TO MAKE THE ANTIMONIAL CUP AND TO CAST DIVERSE FIGURES OF ANTIMONY

Take the best crude antimony, very well powdered, and nitre - of each a pound - and of crude tartar, finely powdered, two pounds. Mix them well together and put them into a crucible. Cover the crucible and melt them. The regulus will fall to the bottom and be like a melted metal. Then pour it forth into a brass mortar, being first smeared over with oil.

Or, take two parts of powdered antimony and four parts of powder of crude tartar. Melt these as aforesaid.

This regulus you may (when you have enough of it) melt again and cast it into what maids you please. You may either make cups or what pictures you please, and of what figures you please. You may cast it into forms of shillings or half crowns, either of which if you put into two or three ounces of wine in an earthen glazed vessel, or glass, and infuse in a moderate heat all night, you may have a liquor in the morning which will induce vomit. The dose is from two drams to two ounces and a half.

Note that in the wine you may put a little cinnamon to correct and give a more grateful relish to it.

It is the custom to fill the antimonial cup with wine and to put as much wine round about between that and the little earthen cup where it stands, and so infuse it all night, and then drink up all that wine. But I fear that so much wine will be too much as being three or four ounces, when as we seldom exceed the quantity of two ounces of the infusion of antimony.

These cups or pictures will last forever and be as effectual after a thousand times infusion as at first. And if they be broken at any time (as easily they may, being as brittle as glass) they may be cast again into what forms you please.

Note that he that casts them must be skillful in making his spawde, as also in scouring of them and making them bright afterwards, for if they be carefully handled they will look even as bright as silver.

John French - The Art of Distillation - Book VI

BOOK VI

THE SPAGYRICAL ANATOMY OF GOLD AND SILVER TOGETHER WITH THE CURIOSITIES THEREIN AND CHIEFEST PREPARATIONS THEREOF

I shall first endeavor to show whence gold had its origin, and what the matter thereof is, as nature (says Sendivogius) is in the will of God, and God created her. So nature made for herself a seed, with her will in the elements. Now she indeed is one, yet she brings forth diverse things, but she operates nothing without a sperm. Whatsoever the sperm will, nature operates, for she is as it were the instrument of any artificers. The sperm therefore of everything is better and more profitable than nature herself. For you shall from nature do as much without a sperm as a goldsmith without fire or a husbandman without grain or feed. Now the sperm of anything is the elixir, the balsam of sulphur, and the same as humidum radicale is in metals. But to proceed to what concerns our purpose. Four elements generate a sperm, by the will of God, and the imagination of nature. For, as the sperm of a man has its canter or the vessel of its seed in the kidneys, so the four elements by their indefinite motion (every one according to its quality) cast forth a sperm into the center of the earth where it is digested and by motion is sent abroad. Now the center of the earth is a certain empty place where nothing can rest. The four elements send forth their qualities into the circumference of the canter. As a male sends forth his seed into the womb of the female which, after it has received a due portion, casts out the rest, so it happens in the center of the earth that the magnetic power of a part of any place attracts something and the rest is cast forth into stones and other excrements. For something has its origin from this fountain, and there is nothing in the world produced but by this fountain. As for example, set upon an even table a vessel of water which may be placed in the middle thereof, and round about it set diverse things, and diverse colors, also salt, etc., everything by itself. Then pour the water into the middle, and you shall then see water to run every way, and when any stream touches the red color, it will be made red by it. If the water touches the salt, it will contract the taste of salt from it, and so of the rest. Now the water does not change the places, but the diversity of places changes the water. In like manner, the seed or sperm, being cast forth by the four elements from the canter of the earth unto the superficies thereof, passes through various places, and according to the nature of the place is anything produced. If it come to a pure place of earth and water, a pure thing is made.

The seed and sperm of all things is but one, and yet it generates diverse things, as it appears by the former example. The sperm while it is in the center is indifferent to all forms, but when it is come into any determinate place, it changes no more its form. The sperm while it is in the center can as easily produce a tree as a metal, and an herb as a stone, and one more precious than another according to the purity of the place. Now this sperm is produced of elements thus. These four are never quiet but, by reason of their contrariety, mutually act one upon another, and every one of itself sends forth its own subtlety, and they agree in the canter. Now in this canter is the Archaeus, the servant of nature which, mixing those sperms together, sends them abroad and by distillation sublimes them by the heat of a continual motion unto the superficies of the earth. For the earth is porous, and the vapor (or wind, as the philosophers call it) is by distilling through the pores of the earth resolved into water, of which all things are produced. Let therefore as I said before, all sons of Art, know that the sperm of metals is not different from the sperm of all things, being a humid vapor. Therefore, in vain do artists endeavor the reduction of metals into their first matter which is only a vapor. Now, says Bernard Trevisan, when philosophers speak of a first matter they did not mean this vapor, but the second matter which is an unctuous water which to us is the first, because we never find the former. Now the specification of this vapor into distinct metals is thus. This vapor passes in its distillation through the earth, through places either cold or hot. If through hot and pure, where the fatness of sulphur sticks to

the sides thereof, then that vapor (which philosophers call the mercury of philosophers) mixes, and joins itself unto that fatness which afterwards it sublimes with itself. Then it becomes, leaving the name of a vapor, an unctuousness, which afterwards coming by sublimation into other places (which the antecedent vapor did purge) where the earth is subtle, pure, and humid, fills the pores thereof and is joined to it, and so it becomes gold. Where it is hot and something impure, it becomes silver. But if that fatness comes to impure places which are cold, it is made lead. If that place be pure and mixed with sulphur, it becomes copper. For by how much the more pure and warm the place is, so much the more excellent does it make the metals.

Now this first matter of metals is a humid, viscous, incombustible, subtle substance, incorporated with an earth subtlety, being equally and strongly mixed per minima in the caverns of the earth. But, as in many things, there is a twofold unctuousness (whereof one is, as it were, internal, retained in the center of the thing lest it should be destroyed by fire which cannot be without the destruction of the substance itself wherein it is; the other is, as it were, external, feculent, and combustible). So in all metals except gold, there is a twofold unctuousness. One is external, sulphurous, and inflammable which is joined to it by accident and does not belong to the total union with the terrestrial parts of the thing. The other is internal, very subtle, and incombustible, because it is of the substantial composition of argent vive and, therefore, cannot be destroyed by fire, unless with the destruction of the whole substance, whence it appears what the cause is that metals are more or less durable in the fire. For those which abound with that internal unctuousness are less consumed, as it appears in silver and, especially, in gold. Hence, Rosarius says the philosophers could never by any means find out anything that could endure the fire, but that unctuous humidity only which is perfect and incombustible. Geber also asserts the same when he says that imperfect bodies have superfluous humidities and sulphureity generating a combustible blackness in them, and corrupting them. They have also an impure, feculent, and combustible terrestriety so gross as that it hinders ingression and fusion. But a perfect metal as gold, has neither this sulphurous nonterrestrial impurity, I mean, when it is fully matured and melted. For while it is in concoction it has both joined to it, as you may see in the golden ore, but then they do not adhere to it so, but that it may be purified from them which other metals cannot, but are both destroyed together if you attempt to separate the one from the other. Besides gold has so little of these corruptible principles mixed with it that the inward sulphur or metalline spirit does sometimes and in some places overcome them of itself, as we may see in the gold which is found very pure sometimes in the superficies of the earth and in the sea sands, and is many times as pure as any refined gold.

Now, this gold which is found in sands and rivers is not generated there, as says Gregorius Agricola in his third book, *De Re Metallica*, but is washed down from the mountains with fountains that run from thence. There is also a flaming gold found (as Paracelsus says) in the tops of mountains which is indeed separated of itself from all impurities and is as pure as any refined gold whatsoever. So that you see, that gold, although it had an extrinsecal sulphur and earth mixed with it, yet it is sometimes separated from it of itself, viz., by that fiery spirit that is in it. Now this pure gold (as says Sendivogius) nature would have perfected into an elixir, but was hindered by the crude air, which crude air is indeed nothing else than that extrinsecal sulphur which it meets with and is joined to in the earth, and which fills with its violence the pores thereof, and hinders the activity thereof. This is that prison which the sulphur (as says the aforesaid author) is locked up in so that it cannot act upon its body, viz., mercury and concoct it into the seed of gold, as otherwise it would do. This is that dark body (as says Penotus) that is interposed between the philosophical sun and moon and keeps off the influences of the one from the other. Now if any skillful philosopher could wittily separate this adventitious impurity from gold while it is yet living, he would set sulphur at liberty, and for this his service he should be gratified with three kingdoms, viz., vegetable, animal, and mineral. I mean he could remove that great obstruction which hinders gold from being digested into the elixir. For, as says Sendivogius, the elixir or tincture of philosophers is nothing else but gold digested into the highest degree. For the gold of the vulgar is as an herb without seed, but when living gold (for common gold never can by reason that the spirits are bound up and, indeed, as good as dead and not possibly to be reduced to that activity which is required for the producing of the sperm of gold) is ripened it gives a seed which multiplies even ad infinitum. Now the reason of this barrenness of gold that it produces not a seed, is the aforesaid crude air, viz., impurities. You may see this illustrated by this example.

We see that orange trees in Polonia do grow like other trees, also in Italy and elsewhere, where their native soil is, and yield fruit, because they have sufficient heat. But in these colder countries they are barren and never yield any fruit, because they are oppressed with cold. If at any time nature be wittily and sweetly helped, then art can perfect what nature could not. After the same manner it is in metals, for gold would yield fruit and seed in which it might multiply itself, if it were helped by the industry of the skillful artist who knows how to promote nature and to separate these sulphurous and earthly impurities from gold. For there is a sufficient heat in living gold which if it were stirred up by extrinsecal heat, to digest it into a seed. By extrinsecal heat I do not mean the heat of the celestial sun, but that heat which is in the earth and stirs up the seed, the living spirit that is in all subterranean sperms to

multiply and, indeed, makes gold become gold.

Now this is a heat of putrefaction occasioned by acid spirits in the earth fermenting, as you may see by this example related by Albertus Magnus, but to which the reason was given by Sendivogius. There was, says the former author, certain grains of gold found between the teeth of a dead man in the grave, wherefore he conceived there was a power in the body of man to make and fix gold. But the reason is far otherwise, as says the latter author. He says argent vive was by some physician conveyed into the body of this man when he was alive, either by unction or by turbith, or some such as was the custom. It is the nature of mercury to ascend to the mouth of the patient and through the excoriation of the mouth to be avoided with the phlegm. Now, then, if in such a cure the sick man died, that mercury not having passage out remained between the teeth in the mouth. That carcass became the natural vessel of mercury, and so for a long time being shut up, was congealed by its proper sulphur into gold by the natural heat of putrefaction, being purified by the corrosive phlegm of the carcass, but if the mineral mercury had not been brought in thither, gold had never been produced there. This is a most true example that as mercury is by the proper sulphur that is in itself, being stirred up and helped by an extrinsical heat, coagulated into gold, unless it be hindered by any accident, or have not a requisite extrinsical heat, or a convenient place, so also nature does in the bowels of earth produce of mercury only gold and silver, and other metals according to the disposition of the place and matrix, which assertion is further cleared by the rule of reduction. For if it be true that all things consist of that which they may be reduced into, then gold consists of mercury, because (as most grant, Paracelsus affirms, and many at this day profess they can do) it may be reduced into it.

There is a way by which the tincture of gold which is the soul thereof, and fixes it, may be so fully extracted that the remaining substance will be sublimed like arsenic and may be as easily reduced into mercury as sublimate. If so, and if all mercury may be reduced into a transparent water, as it may (according to the process set down earlier, and as I know how another better and easier way to turn a pound of mercury of itself into a clear water in half an hour, which is one of the greatest secrets I know or care to know, together with what may be produced thence, and shall crave leave to be silent in) may not that water in some sense, if it be well rectified, be called a kind of living gold out of which you may perhaps make a medicine and a menstruum unfit for the vulgar to know.

It appears now from what is premised that the immediate matter of gold is probably mercury, and not certain salts and I know not what as many dream of, and that the extrinsical heat is from within the earth and not the heat of the sun, as some imagine (because in the hottest countries there is all or almost all gold generated) who if they considered that in cold countries also are and, as in Scotland were gold mines in King James' time, would be of another mind than to think that the celestial sun could penetrate so as to heat the earth so deep as most gold lies. I now having in some measure discovered what the intrinsical and extrinsical heat and the matter of gold is, I shall next endeavor to explain what those three principles are, viz., salt, sulphur, and mercury, of which argent vive and gold consist. Know therefore that after nature had received from the most High God the privilege of all things upon the monarchy of this world, she began to distribute places and provinces to every thing according to its dignity, and in the first place did constitute the four elements to be the princes of the world and, that the will of the Most High (in whose will nature in placed) might be fulfilled, ordained that they should act upon one another incessantly. The fire therefore began to act upon the air and produced sulphur. The air also began to act upon the water and produced mercury. The water also began to act upon the earth and produced salt. Now the earth not having whereon to act produced nothing, but became the subject of what was produced. So then there were produced three principles, but our ancient philosophers, not so strictly considering the matter, described only two acts of the elements and so named but two principles, viz., sulphur and mercury, or else they were willing to be silent in the other, speaking only to the sons of art.

The sulphur, therefore, of philosophers (which indeed is the sulphur of metals and of all things) is not, as many think, that common combustible sulphur which is sold in shops, but is another thing far differing from that, and is combustible, not burning nor heating, but preserving and restoring all things which it is in. It is the calidum innatum of everything, the fire of nature, the created light, and of the nature of the sun, and is called the sun. Thus whatsoever in anything is fiery and airy is sulphur, not that anything is wholly sulphurous, but what in it is most thin and subtle, having the essence of the natural fire and the nature of the created light which indeed is that sulphur which wise philosophers have in all ages with great diligence endeavored to extract, and with its proper mercury to fix, and so to perfect the great magistry of nature. Now of all things in the world there is nothing that has more of this sulphur in it than gold and silver, but especially gold, insomuch that oftentimes it is called sulphur because sulphur is the most predominant and excellent principle in it, and being in it more than in all things besides. Mercury is not here taken for common argent vive, but it is the humidum radicals of everything, that pure aqueous, unctuous, and viscous humidity of the matter. It is of the nature of the moon and it is called the moon and for this reason, viz., because it is humid, as also because it is capable of receiving the influence and light of the sun, viz., sulphur. Salt is that fixed permanent earth which is the center of everything that is incorruptible and unalterable, and

it is the supporter and nurse of the humidum radicale with which it is strongly mixed. Now this salt has in it a seed, viz., its galidum innatum which is sulphur and its humidum radicale, which is mercury, and yet these three are not distinct or to be separated, but are one homogenous thing, having upon a different account diverse names. For in respect of its heat and fiery substance, it is called sulphur. In respect of its humidity it is called mercury, and in respect of its terrestrial siccity it is called salt, all which are in gold perfectly united, depurated, and fixed.

Gold therefore is the most noble and solid of all metals, of a yellow color, compacted of principles digested to the utmost height and, therefore fixed.

Silver is in the next place of dignity to gold and differs from it in digestion chiefly. I said chiefly, because there is some small impurity besides adhering to silver.

Now, having given some small account of the original matter first, and second of the manner of the growth of gold, I shall in the next place set down some curiosities therein and preparation thereof. The preparations are chiefly three, viz., aurum potable which is the mixtion thereof with other liquors; oil of gold which is gold liquid by itself without the mixture of any other liquor; and the tincture which is the extraction of the color thereof.

DR. ANTHONY'S FAMOUS AURUM POTABILE AND OIL OF GOLD

Dissolve pure fine gold in aqua regis according to art (the aqua regis being made of a pound of aqua fortis and four ounces of salt armoniac distilled together by retort in sand) which clear solution put into a large glass of a wide neck and upon it pour drop by drop oil of tartar made per deliquium, until the aqua aegis which before was yellow becomes clear and white, for that is a sign that all calx of gold is settled to the bottom. Then let it stand all night, and in the morning pour off the clear liquor, and wash the calx four or five times with common spring water, being warmed, and dry it with a most gentle heat.

Note, and that well, that if the heat be too great, the calx takes fire presently like gun powder and flies away to your danger and loss. Therefore, it is best to dry it in the sun, or on a stone, stirring it diligently with a wooden spatule. To this calx add half a part of the powder of sulphur. Mix them together, and in an open crucible let the sulphur burn away in the fire, putting a gentle fire to it at the first, and in the end a most strong fire for the space of an hour so that the calx may in some manner be reverberated and become most subtle, which keep in a vial close stopped for your use.

Then make a spirit of urine after this manner. Take the urine of a healthy man drinking wine moderately. Put it into a gourd which you must stop close, and set in horse dung for the space of forty days. Then distill it by alembic in sand into a large receiver until all the humidity be distilled off. Rectify this spirit by cohobation three times so that the spirit only may rise. Then distill it in sand by a glass with a long neck having a large receiver annexed and closed very well to it, and the spirit will be elevated into the top of the vessel like crystal without any aqueous humidity accompanying of it. Let this distillation be continued until all the spirits be risen. These crystals must be dissolved in distilled rain water and be distilled as before. This must be done six times and every time you must take fresh rain water distilled. Then put these crystals into a glass bolt head, close hermetically, and set in the moderate heat of a balneum for the space of fifteen days so that they may be reduced into a most clear liquor. To this liquor add an equal weight of spirit of wine, very well rectified, and let them be digested in balneum the space of twelve days, in which time they will be united.

Then take the calx of gold above said, and pour upon it of these united spirits as much as will cover them three fingers breadth. Digest them in a gentle heat until the liquor be tinged as red as blood. Decant off the tincture and put on more of the aforesaid spirits and do as before until all the tincture be extracted. Then put all the tinted spirits together and digest them ten or twelve days, after which time abstract the spirit with a gentle heat and cohobate it once. And then the calx will remain in the bottom like an oil as red as blood and of a pleasant odor, and which will be dissolved in any liquor. Wherefore this oil may be the succedaneum of true gold. If you distill the same solution by retort in sand there will come over after the first part of the menstruum the tincture with the other part thereof, as red as blood, the earth which is left in the bottom of the vessel being black, dry, spongy, and light. The menstruum must be vapored away and the oil of gold will remain by itself, which must be kept as a great treasure. And this is

Dr. Anthony's Aurum Potabile.

Four or eight grains of this oil taken in what manner soever wonderfully refreshes the spirits, and works several ways, especially by sweat.

THE TRUE OIL OF GOLD

Take an ounce of leaf gold and dissolve it in four ounces of the rectified water of mercury. Digest them in horse dung the space of two months. Then evaporate the mercurial water, and at the bottom you shall have the true oil of gold which is radically dissolved.

A TINCTURE OF GOLD

Dissolve pure gold in aqua regis. Precipitate it with the oil of sand into a yellow powder which you must dulcify with warm water, and then dry it (this will not be fired as aurum fulminans). This powder is twice as heavy as the gold that was put in, the cause of which is the salt of the flints precipitating itself with the gold. Put this yellow powder into a crucible and make it glow a little, and it will be turned into the highest and fairest purple that ever you saw, but if it stands longer it will be brown. Then pour upon it the strongest spirit of salt (for it will dissolve it better than any aqua regis) on which dissolution pour on the best rectified spirit of wine, and digest them together. By a long digestion some part of the gold will fall to the bottom like a white snow and may with borax, tartar, and salt nitre be melted into a white metal as heavy as gold and, afterwards with antimony, may recover its yellow color again. Then evaporate the spirit of salt and of wine, and the gold tincture remains at the bottom and is of great virtue.

ANOTHER TINCTURE OF GOLD

Take of the aforesaid yellow calx of gold precipitated with oil of sand, one part, and three or four parts of the liquor of sand or of crystals. Mix them well together and put them into a crucible in a gentle heat at first, so that the moisture of the oil may vapor away (which it will not do easily because of the dryness of the sand which retains the moisture thereof, so that it flies away like molten alum or borax). When no more will vapor away, increase your fire until the crucible be red hot and the mixture ceases bubbling. Then put it into a wind furnace and cover it so that no ashes fall into it. Make a strong fire about it for the space of an hour, and the mixture will be turned into a transparent ruby. Then take it out, beat it, and extract the tincture with spirit of wine which will become like thin blood, and that which remains undissolved may be melted into a white metal as the former.

ANOTHER TINCTURE OF GOLD

Hang plates of gold over the fume of argent vive, and they will become white, friable, and fluxile as wax. This is called the magnesia of gold, as says Paracelsus, in finding out of which (says he) philosophers as Thomas Aquinas and Rupescissa with their followers took a great deal of pains, but in vain, and it is a memorable secret and indeed very singular for melting of metals that are not easily fluxible. Now, then, gold being thus prepared and melted together with the mercury, is become a brittle substance which must be powdered and out of it a tincture may be drawn for the transmuting of metals.

ANOTHER TINCTURE

Take half an ounce of pure gold and dissolve it in aqua regis. Precipitate it with oil of flints, dulcify the calx with warm water and dry it, and so it is prepared for your work. Then take regulus martis powdered and mix it with three parts of salt nitre, both which put into a crucible and make them glow gently at first. Then give a strong melting fire and then this mixture will become to be of a purple color, which then take out and beat to powder. Add to three parts of this one part of the calx of gold prepared as before. Put them into a wind furnace in a strong crucible, and make them melt as a metal. So will the nitrum antimoniatum in the melting take the calx of gold to itself and dissolve it, and the mixture will come to be of an amethyst color. Let this stand flowing in the fire until the whole mass be as transparent as a rubine which you may try by taking a little out and cooling of it. If the mixture does not flow well, cast in some more salt nitre. When it is completely done, cast it forth being flowing into a brazen mortar and it will be like an oriental rubine. Then powder it before it be cold. Then put it into a vial and with the spirit of wine extract the tincture.

This is one of the best preparations of gold and of most excellent use in medicine.

ANOTHER TINCTURE

First make a furnace fit for the purpose which must be closed at the top and have a pipe to which a recipient with a flat bottom must be fitted. When this furnace is thus fitted, put in three or four grains, not above at once, of aurum fulminans which, as soon as the furnace is hot, flies away into the recipient through the pipe like a purple colored fume and is turned into a purple colored powder. Then put in three or four grains more and do as before until you have enough flowers of gold (that which fly not away but remain at the bottom, may with borax be melted into good gold). Then take them out and pour upon them rectified spirit of wine tartarized, and digest them in ashes until the spirit be colored blood red which you must then evaporate and at the bottom will be a blood red tincture of no small virtue.

AURUM FULMINANS

Take the purest gold you can get and pour on it four times as much aqua regia. Stop your glass with a paper, and set it in warm ashes. So will the aqua regia in an hour or two take up the gold and become a yellow water, if it be strong enough. (Be sure that your gold has no copper in it, for then your labor will be lost, because the copper will be precipitated with the gold and hinder the firing thereof). Then pour on this yellow water drop by drop pure oil of tartar made per deliquium, so will the gold be precipitated into a dark yellow powder and the water be clear. Note that you pour not on more oil of tartar than is sufficient for the precipitation, otherwise it will dissolve part of the precipitated gold to your prejudice. Pour off the clear liquor by inclination, and dulcify the calx with distilled rain water warmed. Then set this calx in the sun or some warm place to dry, take great heed and especial care that you set it not in a place too hot, for it will presently take fire and fly away like thunder and not without great danger to the standers by, if the quantity be great. This is the common way to make aurum fulminaris, and has considerable difficulties in the preparation. But the best way is to precipitate gold dissolved in aqua regis by the spirit of salt armoniac or of urine, for by this way the gold is made purer than by the other and gives a far greater crack and sound. Note that the salt of the spirits which is precipitated with the gold must be washed away and the gold dulcified as before.

A few grains of this being fired give a crack and sound as great as a musket when it is discharged and will blow up anything more forcibly far than gunpowder, and it is a powder that will quickly and easily be fired. This is of use for physick as it is in powder, but especially it is used in making the foregoing tincture.

TO MAKE GOLD GROW IN A GLASS LIKE A TREE WHICH IS CALLED THE GOLDEN TREE OF THE PHILOSOPHERS

Take oil of sand, as much as you please, and pour upon it the same quantity of oil of tartar per deliquium. Shake them well together so that they be incorporated and become as one liquor of a thin consistency. Then is your menstruum or liquor prepared. Then dissolve gold in aqua regia, and evaporate the menstruum and dry the calx in the fire, but make it not too hot, for it will thereby lose its growing quality. Then take it out and break it into little bits, not into powder. Put those bits into the aforesaid liquor (that they may lay a finger's breadth the one from the other) in a very clear glass. Keep the liquor from the air, and you shall see that those bits of the calx will presently begin to grow. First they will swell. Then they will put forth one or two stems, and then diverse branches and twigs so exactly as that you cannot choose but exceedingly to wonder. This growing is real and not imaginary only. Note that the glass must stand still and not be moved.

ANOTHER WAY

Calcine fine gold in aqua regia so that it becomes a calx, which put into a gourd glass, and pour upon it good and fresh aqua regia and the water of gradation, so that they cover the calx four finger's breadth. This menstruum abstract in the third degree of fire until no more will ascend. This distilled water pour on it again and abstract it as before, and this do so often until you see the gold rise in the glass and grow in the form of a tree having many boughs and leaves.

TO MAKE GOLD GROW AND BE INCREASED IN THE EARTH

Take leaves of gold and bury them in the earth which looks towards the east. Let it often be soiled with man's urine and dove's dung, and you shall see that in a short time they will be increased.

The reason of this growth, I conceive, may be the gold's attracting that universal vapor and sperm that comes from the canter through the earth (as has been spoken in the Anatomy of Gold) and by the heat of putrefaction of the dung putrifying and assimilating it to itself.

A REMARKABLE OBSERVATION UPON A GOLDEN MARCASITE

There is found a certain stone in Bononia, which some call a golden marcasite, some a salary magnes, that receives light from the sun in the daytime and gives it forth in the dark.

About this there has been much reasoning among philosophers, as whether light be really a body, or any kind of substance, or an accident only, and whether this stone had any gold in it or no, and what it did consist of. He that first discovered it thought that he had found a thing that would transmute metals into gold (by which it appears that there seemed to be something of gold in it or something more glorious than gold). But his hopes were frustrated by a fruitless labor, notwithstanding which I conceive there might be some immature or crude gold in it; for crude gold is a subject (being there is some life in it) that is most fit to receive the influences of the sun according to the

unanimous consent of all philosophers and, therefore, is by them not only called salary, but sol, the sun itself. It is prepared for the receiving of light thus. It is calcined two ways. First it is brought into a most subtle powder with a very strong fire in a crucible. Secondly, being thus brought into a powder, it is made up into cakes as big as a dollar or a piece-of-eight, either with common water alone or with the white of an egg. Put those cakes being dried by themselves into a wind furnace S S S with coals and calcine them in a most strong fire for the space of four or five hours. When the furnace is cold, take them out, and if they be not sufficiently calcined the first time (which is known by their giving but little light) then reiterate the calcination after the same manner as before, which is sometimes to be done thrice. That is the best which is made with the choicest stones that are clean, pure, and diaphanous, and gives the best light. With this being powdered, you may make the forms of diverse animals, of what shapes you please, which you must keep in boxes, and they will, receiving light from the sun in the daytime, give light in the night or in a dark place which light will vanish by degrees.

THE VIRTUES OF THE AFORESAID PREPARATIONS OF GOLD

With the aforesaid preparations, the ancients did not only preserve the health and strength of their bodies, but also prolong their lives to a very old age, and not that only, but cured thoroughly the epilepsy, apoplexy, elephantiasis, leprosy, melancholy, madness, the quartain, the gout, dropsy, plurisy, all manner of fevers, the jaundice, lues venerea, the wolfe, cancer, nollis angere, asthma, consumption, the stone, stopping of the urine, inward impostumes, and such like diseases which most men account incurable. For there is such a potent fire lying in prepared gold which does not only consume deadly humors, but also renews the very marrow of the bones, and raises up the whole body of man being half dead.

They that use any of these preparations for any of the foregoing diseases must take themselves to their bed for the space of two or three hours and expect sweating to ensue for, indeed, it will send forth sweat plentifully and with ease, and leave no impurity or superfluity in the whole body. Note that they must take it fourteen days together in appropriate liquors.

Let young men that expect long life take any of the aforesaid preparations once in a month, and in the morning, but they must abstain from meat and drink until the evening of the same day, for in that time that matter will be digested into the radical humor, whereby the strength of the body is wonderfully increased, beauty does flourish most wonderfully, and continues until extreme old age.

Let old men take it twice in a month, for by this means will their old age be fresh until the appointed time of death. Let young women and maids take it once in a month after their menstrua, for by this means they will look fresh and beautiful.

Let women that are in travail take it, and it will help and strengthen them to bring forth without much pain, notwithstanding many difficulties.

Let it be given to women that have passed the years of their menstrua once or twice a month, and it will preserve them very fresh, and many times cause their menstrua to return and make them capable again of bearing children. It cures the plague and expells the matter of a carbuncle by sweat most potently.

When I say that this, or it will do thus or thus, I mean any one of the forementioned preparations, viz., aurum potable, oils or tincture of gold.

THE PREPARATIONS OF SILVER IN GENERAL

All the several preparations of gold may, except that of aurum fulminans, be applied to silver, of which being thus prepared the virtues are inferior to those of gold, yet come nearer to them than those of any other matter whatsoever, or howsoever prepared.

Note that silver has some peculiar preparations which neither gold nor any other metals are capable of.

A GREEN TINCTURE OF SILVER

Take fine silver and dissolve it in twice so much rectified spirit of nitre. Then abstract half of the said spirit in sand. Let it stand a day or two in a cold place, and much of the silver will shoot into crystals, and in oft doing, most of it. These crystals are very bitter, yet may be made into pills and taken inwardly from three grains to twelve. They purge very securely and gently, and color the lips, tongue, and mouth black. If in this dissolution of silver before it be brought to crystals, half so much mercury be dissolved and both shoot together into crystals, you shall have a stone not much unlike to alum. This purges sooner and better, and is not so bitter. It colons the nails, hair, skin, if it be dissolved in rainwater, with a lovely brown, red, or black, according as you put more or less thereof.

Take of the aforesaid crystals of silver and mix with them a like quantity of pure saltpetre well powdered. Then put this mixture into the distilling vessel at the bottom of which must be powdered coals to the thickness of two fingers

breadth. Then make a strong fire so that the vessel and coals be red hot. Put in a dram of the aforesaid mixture, and it will presently sublime in a silver fume into the recipient which, being settled, put in more and do so until you have enough. Take out the flowers and digest them in the best alcoholized spirit of wine so that thereby the tincture may be extracted which will be green.

A GREEN OIL OF SILVER

Take of the abovesaid crystals of silver one part, of spirit of salt armoniac two or three parts, and digest them together in a glass with a long neck, well stopped, twelve or fourteen days. So will the spirit of salt armoniac be colored with a very specious blue color. Pour it off and filter it. Then put it into a small retort and draw off most of the spirit of ammoniac, and there will remain in the bottom a grass green liquor. Then draw off all the spirit, and there will remain in the bottom a salt which may be purified with spirit of wine or be put into a retort. Then there will distill off a subtle spirit and a sharp oil.

This green liquor is of great use for the gilding of all things presently.

If you take common rainwater distilled, and dissolve and digest the aforesaid crystals of silver for a few days, you shall after the appearance of diverse colors find an essence at the bottom, not so bitter as the former, but sweet. In this liquor may all metals in a gentle heat by long digestion be maturated and made fit for medicine. But note that they must first be reduced into salts, for then they are no more dead bodies, but by this preparation have obtained a new life, and are the metals of the philosophers.

TO MAKE OIL OF SILVER PER DELIQUUM

Take of the aforesaid salts or crystals of silver and reverberate them in a very gentle fire. Then put them into a cellar on a marble stone, and they will in two months time be resolved into a liquor.

TO MAKE A LIQUOR OF SILVER THAT SHALL MAKE THE GLASS WHEREIN IT IS SO EXCEEDING COLD THAT NO MAN IS ABLE FOR THE COLDNESS THEREOF TO HOLD IT IN HIS HAND ANY LONG TIME

Take the aforesaid salt of silver, pour upon it the spirit of salt armoniac, dissolve it thoroughly, and it will do as abovesaid.

With a glass being full of this liquor you may condense the air into water in the heat of the summer, as also freeze water.

TO MAKE SILVER AS WHITE AS SNOW

Take of the calx of silver made by dissolution of it in aqua fortis. Dulcify it, boil it in a lixivium made of soap ashes, and it will be white as any snow.

TO MAKE THE SILVER TREE OF THE PHILOSOPHERS

Take four ounces of aqua fortis in which dissolve an ounce of fine silver. Then take two ounces of aqua fortis in which is dissolved half an ounce of argent vive. Mix these two liquors together in a clear glass with a pint of pure water. Stop the glass very close and you shall see day after day a tree to grow by little and little which is wonderful pleasant to behold.

I have set down several vulgar preparations of gold and silver, and of almost all things else, I shall now crave leave to give an account of some philosophical preparations of the philosophers gold and silver. For indeed the art of preparing them is the true alchemy, in comparison of which all the chemical discoveries are but abortives and found out by accident, viz., by endeavoring after this. I would not have the world believe that I pretend to the understanding of them. Yet I would have them know that I am not incredulous as touching the possibility of that great philosophical work which many have so much labored after and may have found. To me there is nothing in the world seems more possible, and whosoever shall without prejudice read over the book entitled The New Light Of Alchemy shall almost whether he will or not (unless he resolves not to believe anything though never so credible) be convinced of the possibility of it. What unworthiness God saw in gold more than in other things that he should deny the seed of multiplication (which is the perfection of the creatures) to it, and give it to all things besides, seems to me to be a question as hard to be resolved, yea, and harder than the finding out the elixir itself, in the discovering of which the greatest difficulty is, not to be convinced of the easiness thereof. If the preparations were difficult many

more would find it out than do (says Sendivogius) for they cast themselves upon most difficult operations and are very subtle in difficult discoveries which the philosophers never dreamed of. Nay, says the aforementioned author, if Hermes himself were now living together with subtle witted Geber and most profound Raimund Lullie, they would be accounted by our chemists not for philosophers, but rather for learners. They were ignorant of those so many distillations, so many circulations, so many calcinations, and so many other innumerable operations of artists nowadays used which, indeed, men of this age did find out and invented out of their books. Yet there is one thing wanting to us which they did, viz., to know how to make the Philosophers Stone, or physical tincture the processes of which according to some philosophers are these.

THE PROCESS OF THE ELIXIR ACCORDING TO PARACELSUS

Take the mineral electrum, being immature and made very subtle. Put it into its own sphere so that the impurities and superfluities may be washed away. Then purge it as much as possibly you can with stibium after the alchemistical way, lest by its impurity you suffer prejudice. Then resolve it in the stomach of an estridge which is brought forth in the earth and through the sharpness of the eagle is comfortated in its virtue.

Now when the electrum is consumed, and has after its solution received the color of a marigold, do not forget to reduce it into a spiritual transparent essence which is like to true amber. Then add half so much, as the electrum did weigh before its preparation, of the extended eagle, and oftentimes abstract from it the stomach of the estridge, and by this means the electrum will be made more spiritual. Now when the stomach of the estridge is wearied with labor, it will be necessary to refresh it and always to abstract it. Lastly, when it has again lost its sharpness, add the tartarized quintessence, yet so that it be spoiled of its redness the height of four fingers and that pass over with it.

This do so often until it be of itself white, and when it is enough and you see that sign, sublime it. So will the electrum be converted into the whiteness of an exalted eagle, and with a little more labor be transmuted into deep redness, and then it is fit for medicine.

THE PROCESS OF THE ELIXIR ACCORDING TO DIVI LESCHI GENUS AMO

Take of our earth through eleven degrees, eleven grains, of our gold, and not of the vulgar, one grain, of our tuna, not of the vulgar, grains two. But be you admonished that you take not the gold and silver of the vulgar, for they are dead, but take ours which are living. Then put them into our fire, and there will thence be made a dry liquor. First the earth will be resolved into water which is called the mercury of philosophers, and in that water it will resolve the bodies of the sun and moon and consume them so that there remain but the tenth part with one part, and this will be the humidum radicale metallicum. Then take the water of the salt nitre of our earth, in which there is a living stream if you digest the pit knee deep. Take therefore the water of it, but take it clear and set over it that humidum radicals, and put it over the fire of putrefaction, but not so much as was that in the first operation. Govern all things with a great deal of discretion until there appear colors like to the tail of a peacock. Govern it by digesting of it, and be not weary until these colons cease and there appear throughout the whole a green color, and so of the rest, and when you shall see in the bottom ashes of a fiery color and the water almost red, open the vessel, dip in a feather, and smear over some iron with it. If it tinge, have in readiness that water which is the menstruum of the world (out of the sphere of the moon so often rectified until it can calcine gold). Put in so much of that water as was the cold air which went in. Boil it again with the former fire until it tinge again.

THE PROCESS OF THE PHILOSOPHERS STONE ACCORDING TO PONTANUS

Take the matter and grind it with a physical contrition as diligently as may be. Then set it upon the fire and let the proportion of fire be known, viz., that it only stir up the matter, and in a short time that fire without any other laying on of hands will accomplish the whole work, because it will putrefy, corrupt, generate, and perfect, and make to appear the three principal colors: black, white, and red. And by the means of our fire, the medicine will be multiplied if it be joined with the crude matter, not only in quantity but also in virtue. Withall, they might therefore search out this fire (which is mineral, equal, continual, vapors not away, except it be too much stirred up; partakes of sulphur, is taken from elsewhere than from the matter; pulls down all things, dissolves, congeals, and calcines, and is artificial to find out, and that by a compendious and near way without any cost, at least very small, is not transmuted with the matter because it is not of the matter). And you shall attain your wish, because it does the whole work, and is the key of the philosophers which they never revealed.

THE SMARAGDINE TABLE OF HERMES FROM WHENCE ALL ALCHEMY DID ARISE

True, without all falsity, certain and most true. That which is inferior is as that which is superior, and that which is superior is as that which is inferior, for the accomplishing of the miracles of one thing. And as all things were from one, by the mediation of one, so all things have proceeded from this one thing by adaptation. The Father thereof is the sun, and the Mother thereof the moon. The wind carried it in its belly. The nurse thereof is the earth.

The father of all the perfection of the whole world is this. The virtue thereof is entire, if it be turned into earth. Thou shalt separate the earth from the fire, the subtle from the thick, sweetly, with a great deal of judgment. It ascends from the earth up to heaven, and again descends down to the earth, and receives the powers of superiors and inferiors.

So you have the glory of the whole world. Therefore let all obscurity fly from you. This is the strong fortitude of the whole fortitude, because it shall overcome everything that is subtle and penetrate every solid thing, as the world is created. Hence shall wonderful adaptations be, whereof this is the manner, wherefore I am called Hermes

Trismegistus, having three parts of the philosophy of the whole world.

It is complete, what I have spoken of the operation of the sun.

POSTSCRIPT

If I shall hereafter see that what I have here done shall deserve a second edition, I shall "hereunto add some other parts of chemistry, viz., sublimation and calcination which here I have omitted (except what I have written by the way of reference to the perfecting of any kind of distillation). For indeed distillation (which is the making, extracting, or purifying of liquors) is the chiefest subject of this discourse and, indeed, the whole, except some spagyricall experiments and curiosities set down in the fifth book.

Francis Bacon - Experiments touching Sulphur and Mercury

This section on the making of gold is included Century IV of Francis Bacon's *Sylva Sylvarum, or a Naturall Historie in ten Centuries...* London, 1627, which was part of Bacon's unfinished *Instauratio Magna*.

This text was transcribed by Marcus Williamson.

Experiments in Consort touching *Sulphore* and *Mercury*, two of *Paracelsus Principals*.

There bee two *Great Families* of *Things*; You may terme them by severall Names; *Sulphureous* and *Mercureall*, which are the *Chymists* Words: (For as for their *Sal*, which is their Third Principle, it is a Compound of the other two;) *Inflammable*, and *Not Inflammable*; *Mature* and *Crude*; *Oily* and *Watry*. For wee see that in *Subterrancies* there are, as the *Fathers* of their *Tribes*, *Brimstone* and *Mercury*: In *Vegetables*, and *Living Creatures* there is *Water* and *Oile*: In the *Inferiour Order of Pneumaticalls* there is *Aire* and *Flame*: And in the *Superiour*, there is the *Body* of the *Starre*, and the *Pure Sky*. And these Paires, though they be unlike in the Primitive Differences of Matter, yet they seeme to have many Consents: For *Mercury* and *Sulphure* are principall Materialls of *Metalls*; *Water* and *Oyle*, are principall Materialls of *Vegetables*, and *Animals*; And seeme to differ but in *Maturation*, or *Concoction*: *Flame* (in Vulgar Opinion) is but *Aire Incensed*; And they both have Quicknesse of Motion, and Facilitie of Cession, much alike: And the *Interstellar Sky*, (though the Opinion be vaine, that the *Starre* is the *Denser Part* of his *Orbe*,) hath notwithstanding so much Affinity with the *Starre*, that there is a Rotation of that, as well as of the *Starre*. Therefore, it is one of the greatest *Magnalia Naturae*, to turne *Water* or *Watry Iuyce* into *Oile* or *Oily Juyce*: Greater in Nature, than to turne *Silver*, or *Quick-silver*, into *Gold*.

The Instances we have, wherein *Crude* and *Watry* Substance turneth into *Fat* and *Oily*, are of foure kindes. First in the *Mixture* of *Earth* and *Water*; which mingled by the help of the Sunne, gather a Nitrous Fatnesse, more than either of them have severally; As we see, in that they put forth *Plants*, which need both Juyces.

The Second is in the *Assimilation* of *Nourishment*, made in the *Bodies* of *Plants*, and *Living Creatures*; Whereof *Plants* turne the Juyce of meere *Water* and *Earth*, into a great deale of *Oily Matter*: *Living Creatures*, though much

of their *Fat*, and *Flesh*, are out of *Oily Aliments*, (as *Meat*, and *Bread*,) yet they Assimilate also in a Measure their *Drink of Water*, &c. But these two Wayes of *Version of Water* into *Oyle*, (namely by *Mixture*, and by *Assimilation*) are by many Passages, and Percolations, and by long Continuance of soft *Heats*, and by Circuits of Time.

The third is in the *Inception of Putrefaction*; As in *Water Corrupted*; And the *Mothers of Waters Distilled*; Both which have a kinde of *Fatnesse*, or *Oyle*.

The Fourth is in the *Dulcoration* of some *Metalls*; As *Saccharum Saturni*, &c.

The Intension of *Version of Water* into more *Oily Substance*, is by *Disgestion*; For *Oyle* is almost Nothing else but *Water Digested*; And this *Disgestion* is principally by *Heat*; Which *Heat* must be either *Outward*, or *Inward*: Againe, it may be by Provocation, or Excitation; Which is caused by the Mingling of Bodies already *Oily*, or *Digested*; For they will somewhat Communicate their Nature with the rest. *Disgestion* also is strongly effected by direct *Assimilation*, of *Bodies Crude* into *Bodies Digested*; As in *Plants*, and *Living Creatures*, whose Nourishment is farre more Crude than their Bodies: But this *Disgestion* is by a great Compasse, as hath beene said. As for the more full Handling of these two Principles, whereof this is but a Taste; (the Enquiry of which is one of the Profoundest Enquiries of Nature,) We leave it to the *Title of Version of Bodies*; And likewise to the *Title of the First Congregations of Matter*; Which like a Generall Assembly of Estates, doth give Law to all *Bodies*.

Francis Bacon - The Making of Gold

This section on the making of gold is included Century IV of Francis Bacon's *Sylva Sylvarum, or a Naturall Historie in ten Centuries*... London, 1627, which was part of Bacon's unfinished *Instauratio Magna*.

This text was transcribed by Marcus Williamson.

Experiment Solitary, touching the *Making of Gold*.

The World hath been much abused by the Opinion of *Making of Gold*: The *Worke* it selfe I judge to be possible; But the *Meanes* (hitherto propounded) to effect it, are, in the Practice, full of Error and Imposture; And in the Theory, full of unsound Imaginations. For to say, that *Nature* hath an Intention to make all *Metals Gold*; and that, if she were delivered from Impedients, shee would performe her owne *Worke*; And that, if the Crudities, Impurities, and Leprosities of *Metals* were cured, they would become *Gold*; And that a little *Quantity* of the *medicine*, in the *Worke of Projection*, will turne a *Sea of the baser Metall* into *Gold*, by *Multiplying*: All these are but dreams: And so are many other Grounds of *Alchymy*. And to help the Matter, the *Alchymists* call in likewise many Vanities, out of *Astrology*, *Naturall Magicke*; Superstitious Interpretations of *Scriptures*; *Auricular Traditions*; Faigned Testimonies of *Ancient Authors*; And the like. It is true, on the other side, they have brought to light not a few profitable

Experiments, and thereby made the World some amends. But we, when we shall come to handle the *Version & Transmutation of Bodies*; And the *Experiments* concerning *Metals*, and *Mineralls*; will lay open the true Wayes and Passages of *Nature*, which may lead to this great Effect. And we commend the wit of the *Chineses*, who despaire of *Making of Gold*, but are Mad upon the *Making of Silver*: For certain it is, that it is more difficult to make *Gold*, (which is the most Ponderous and Materiate amongst *Metalls*) of other *Metalls*, lesse Ponderous, and lesse Materiate; than (*via versa*) to make *Silver of Lead*, or *Quick-Silver*; both which are more Ponderous than *Silver*; So that they need rather a further Degree of *Fixation*, than any *Condensation*. In the meane time, by Occasion of Handling the *Axiomes* touching *Maturation*, we will direct a *Triall* touching the *Maturing of Metalls*, and thereby turning some of them into *Gold*: For wee conceive indeed, that a perfect good *Concoction*, or *Disgestion* or *Maturation* of some *Metalls*, will produce *Gold*. And here wee call to Minde that we knew a *Dutch-man*, that had wrought himself into the Beleefe of a great Person, by undertaking that he could make *Gold*: Whose discousse was, that *Gold* might be made; But that the *Alchymists* Over-fired the *Worke*: For (he said) the *Making of Gold* did require a very temperate *Heat*, as being in *Nature* a Subterrany *Worke*, where little *Heat* cometh; But yet more to the *Making of Gold*, than of any other *Metall*; And therefore, that he would doe it with a great Lamp, that should carry a Temperate and Equall Heat: And that it was the Work of many Moneths. The Device of the Lampe was folly; But the Over-firing now used; And the Equall Heat to be required; And the Making it a *Worke* of some good Time; are no ill Discourses.

We resort therefore to our *Axiomes* of *Maturation*, in Effect touched before. The First is, that there be used a *Temperate Heat*; For they are ever *Temperate Heats* that *Disgest*, and *Mature*: Wherein we meane *Temperate*, according to the *Nature* of the *Subject*; For that may be *Temperate* to *Fruits*, and *Liquours*, which will not *Worke* at

all upon *Metalls*. The Second is, that the *Spirit of the Metall be quickened*, and the *Tangible Parts opened*: For without those two Operations, the *Spirit of the Metall*, wrought upon, will not be able to digest the parts. The Third is that the *Spirits doe spread themselves Even*, and *move not Subsultorily*; For that will make the Parts Close, and Pliant. And this requireth a Heat, that doth not rise and fall, but continue as *Equall* as may be. The Fourth is, that *no Part of the Spirit be emitted, but detained*: For if there be *emission of Spirit*, the Body of the *Metall* will be Hard, and Churlish. And this will be performed, partly by the Temper of the Fire; And partly by the closenesse of the Vessell. The Fifth is, that there be *Choice made of the likeliest and best prepared Metall, for the Version*: For that will facilitate the Worke. The Sixth is, that you give *Time enough for the Worke*: Not to prolong Hopes (as the Alchymists doe;) but indeed to give *Nature* a convenient Space to worke in. These Principles are most certaine, and true; We will now derive a direction of *Triall* out of them; Which may (perhaps) by further Meditation, be improved. Let there be a *Small Furnace* made, of a *Temperate Heat*; Let the *Heat* be such, as may keep the *Metall perpetually Moulten*, and no more; For that above all importeth to the Work. For the Materiall, take *Silver*, which is the *Metall* that in Nature Symbolizeth most with *Gold*; Put in also, with the *Silver*, a Tenth Part of *Quick-silver*, and Twelfth Part of *Nitre*, by weight; Both these to quicken and open the Body of the *Metall*: And so let the Worke be continued by the *Space of Sixe Monthes*, at the least. I wish also, that there be, at some times, and Injection of some *Oyled* Substance; such as they use in Recovering of *Gold*, which by Vexing with Separations hath bene made Churlish: And this is, to lay the Parts more Close and Smooth, which is the Maine Work. For *Gold* (as we see) is the Closest (and therefore the Heaviest) of *Metalls*: And is likewise the most Flexible and Tensible. Note, that to thinke to make *Gold of Quick-silver*, because it is the heaviest, is a Thing not to be hoped; For *Quick-silver* will not endure the Mannage of the *Fire*. Next to *Silver*, I thinke *Copper* were fittest to be the *Materiall*. *Gold* hath these *Natures*: *Greatnesse of Weight*; *Closeness of Parts*; *Fixation*; *Pliantnesse*, or *softnesse*; *Immunitie from Rust*; *Colour or Tincture of Yellow*. Therefore the Sure Way, (though most about,) to make *Gold*, is to know the *Causes* of the Severall *Natures* before rehearsed, and the *Axiomes* concerning the same. For if a man can make a *Metall*, that hath all these *Properties*, Let men dispute, whether it be *Gold*, or no?

Joannes Agricola - *Treatise on Gold*

Johann AGRICOLA [1589-1643].

Commentariorum, Notarum, Observationum & Animadversionum in Johannis Poppii chymische Medicin, darinnen alle Process mit fleiss examinirt, von den Irrungen corrigirt, und mit etlich hundert neuen Processen, geheimen Handgriffen, aus eigener Erfahrung vermehrt und illustrirt, Auch der rechte und warhafftige Gebrauch der Artzeneyen, mit etlich hundert Historien verificirt, Darneben was in Chirurgia und Alchimia oder transmutatione metallorum damit zu verrichten gründlichen offenbahret allen Standes-Personen, Medicis, Chirurgis, Chymicis, Balbirern, Feld-Scherern, Ross-ärzten, Goldschmieden, und allen Haus-Wirthen hochnützlich zu lesen und zu gebrauchen. Leipzig. 1638-39.

This is a translation of part of the text made by Leone Muller and transcribed by Mark House.

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TREATISE ON GOLD

JOANNES AGRICOLAE P. & M. D.

Commentaries, Notes, and Observations

Regarding, the CHYMICAL MEDICINE

of JOHANNES POPPIUS

Wherein all processes are carefully examined, corrected of errors, and augmented and illustrated by several hundred new processes and secret manipulations taken from his own experience,

Where also the right use of medicines is verified by several hundred case histories, in addition to a complete revelation of what is to be done with them in surgery, and alchemy, or the transmutations of metals. For all persons of respectability, physicians, surgeons, chymists, barbers, army-surgeons, horse-doctors, goldsmiths, and all householders most useful to read and use. Oportet sapientiam transferre ad medicinam, & medicinam ad sapientiam. Medicus enim Philosophus est Deo aequalis.

With the Privileges of His Roman Imperial Majesty and the Elector of Saxony.

Leipzig, Publ. by Thomas Schurer's heirs and Matthias Gotzen.

Printed by Gregorius Ritzschen in the year

1638.

Translated from the original by Leone Muller, 1988.

Joannes Agricola - *Treatise on Gold*

Dedication

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**TO HIS SERENE HIGHNESS' HIGHBORN PRINCE AND LORD
LORD FREDERICK
HEIR OF NORWAY
DUKE OF HOLSTEIN/SCHLESWIG/DITMARSCHEN AND STORMARN/
ETC.
COUNT OF OLDENBURG AND DELINENHORST/ETC;
MY GRACIOUS SOVEREIGN AND LORD:**

**YOUR SERENE HIGHNESS, HIGHBORN PRINCE
YOUR PRINCELY GRACE IS AT ALL TIMES ASSURED OF MY MOST
HUMBLE OBEDIENT SERVICES.**

Most Gracious Prince. How miserable the life of all men is and how quickly it closes like a garment, does not require much proof. Aside from daily experience, it is testified to by the entire Holy Scripture. True, it could be somehow endured if it were only miserable and painful outside our body, due to the vicissitudes of fortune, but it is a much greater pity that we must experience so much misery in our body that we can often not have a single healthy hour in our whole life. Therefore we must eat our tear-drenched bread with great sighing and hurting, and finally also end our life in unspeakable pain, which can be and must be the greatest misfortune in this world.

When therefore our dear forefathers considered what noble gift of God health is, they indicated it by a proverb, saying: Health is better than all wealth. Conversely, it follows that illness and physical pain are the greatest misfortune. That this must be so, and it is not contradicted by the proverb of our ancestors, and is confirmed by what our eyes see. Let us look about ourselves, not only in the big cities where there are well organized hospitals and infirmaries, but also in almost all villages, even houses, and see how the great and mighty diseases and pains are raging against men, behaving like evil spirits, and causing many persons to lose their wits and reason. Therefore God causes us to recognize that we must delve into ourselves, learning to know ourselves, lest we anger our Creator further by deliberate sinning. Rather should we beg Him with a fervent prayer to give us also a healthy body aside from a sane rational soul. This has also been known by the honorable pagans, who said: we pray for a healthy mind in a healthy soul.

If only we pray to God to take from us all kinds of illnesses, He will be merciful and gentle. And just as He provided a physician against our eternal destruction, namely His Son Jesus Christ, to heal and cure our souls, He has also shown His kindness to us in a peculiar way by creating the bodily medicines out of the earth, then leaving them to men to be used to advantage, so that we should also have a Nepenthes in our mortality - about which Homer has likewise said wonderful things - enabling us to drive away not only every depression and and sadness with these high arcana, but also all illnesses. Those who had been striving for made much good progress in the Art, have been held in high esteem above all others - the pagans even bestowed divine honors on them - as may be seen from the true case histories which we render in abbreviated form, as those concerned do not wish to become known.

But when this noble Art reached its true flowering, the weeds soon appeared which wanted to suppress the good seed.

Therefore many spoilers, misleaders and butchers of honest men appeared who attempted to obscure the good either from a lack of understanding or from untimely arrogance.

ii. Now we find that also mighty Kings, Princes, and Lords were engaged in this Art, considering it the highest good next to the soul's salvation. In particular, the Egyptians had been blessed with special knowledge in it above all other nations. They were not just satisfied with the general preparation of medicines but reflected deeper on the matter, dissected the subjects correctly and extracted their essences. They separated the pure from the impure, and they were the inventors of the true Chymia, or the

Art of Spagyrics. In it they excelled to such an extent that all the books on the subject cannot relate enough of them. That is also why Moses had been so far instructed in the Egyptian Arts that he could burn the Golden Calf with fire, which as one of the greatest wonders and is not to be esteemed so little as others may think of it. For it is such a stable creature of God that it cannot be destroyed by any element.

As we read, Moses destroyed it and threw it on the water. This destroying and burning is the noblest work in hermetic medicine.

Long before Moses' time, Hermes had been famous in the medical art. He had been the very oldest philosopher, physician, and priest, according to whom the whole Nature was divided into three parts or kingdoms: the vegetable, the animal, and the mineral. In these three kingdoms man has now to look for the pearl of his health and also for acquiring the genuine *Nepenthes*.

True, many learned men of rank have endeavored to raise this embedded treasure and use it for the health of the human body.

They also did their share with great praise and were great wonderworkers in their time but, aside from the Egyptians, they tackled and assiduously investigated only one kingdom, namely the vegetable realm. They prepared their medicines from it, although they did their separation of the pure from the impure in the accepted vulgar way. But they left the other two kingdoms almost completely aside and perhaps did not believe that in them was hidden a treasure for human health. They contented themselves with plants and also drove away severe diseases in their time, while herbs had a much greater power in their countries than nowadays and diseases had not reached such a degree of exaltation as at present. Necessity, therefore, has compelled us to seek further and to invent medicines that are more potent than the diseases. It cannot be contradicted that if the medicine stands in the same degree as the disease, and Nature cannot help the medicine, no successful cure can result. That is why our dear ancestors wanted also to search through the other two kingdoms to get to know and solve their secrets, just as there have always been noble geniuses, both in previous times and in ours, who applied their talent with particular zeal. Mankind cannot thank them enough, especially those who brought the noble Art *Chymia* to our lands and planted it there. I could enumerate a whole catalog of them.

But as I well know that your Serene Highness is a prince highly talented by God, endowed with all the qualities, and having a great knowledge, it is unnecessary to make a long introduction. In my youth imagined and planned - with God's help and for the benefit of my neighbor - also to learn something useful in this Art. Thus, through God's guidance, I chanced upon the laudable art of medicine and devoted myself to it. Therefore I did not permit myself to become deterred from learning something by any troubles, expenses, sour and very dangerous travels but had been looking for learned men in all lands, listened to them and carried on conversations with them till at last I had, as the saying is, absolved my studies and attained the degree of Doctor. What I learned and understood in my youth I have afterwards applied to my fellowman in my practice - and I am mentioning it without boasting - I have been successful.

iii. However, in addition to my practice, I have not omitted to work in the laboratories of chymists, using a good part of my assets for it, which work has been graciously blessed by God and has endowed me with glorious secrets. So as not to bury the benefits granted to me by God in ungratefulness but to turn to them to great usefulness. Also seeing how many misleading process-books fill almost the whole world, giving the noble Art of *Chymia* nothing but a bad name, I could no longer keep silent about those misleading authors. To bring to light but a small part for the benefit of the process to be in my work, and I hope that the reader will sense in them my special diligence and sincerity. But aside from this, I must also admit that not everything has been elaborated as well as it might have been. It was not a lack of goodwill but the terrible war that has hindered me from doing so, to my great damage. All my belongings were robbed, smashed, and completely spoiled, so that hardly one book was left to me. Thus I have also so often been hindered from continuing with this work by the invasions that I felt inclined to stop everything, and I would have done so if some distinguished, learned men, highly experienced in medicine, had not encouraged and urged me to publish. Consequently, I have finished the work and given it to be printed. I am sure that learned men will not

be displeased that because in addition to the careful preparation of medicines I have also revealed, as clearly as sunlight, their use by actual case histories. I well know that there are some *Zoili* (critics) [*Zoilus* was a proverbially stern critic of *Homer*] who will not omit to slander this. Therefore it is necessary for me to look around for a patron who would stop their mouth.

Now I have sufficiently known for several years what a peculiar love Your Serene Highness has for noble medicine, on account of which Your Highness also has attained immortal fame within and without Christendom; in particular, what a special love Your Grace has, out of Your innate Princely affection, for the true chymical medicines and how highly You esteem them. Therefore I could not refrain from obediently and humbly offering Your Serene Highness the First Part of this work and to choose You as particular Patron and Protector, not doubting that Your Grace would look upon this work with benevolent eyes and receive and accept it from me unworthy man with favor.

I wish I could offer Your Serene Highness a greater work, but the bad times have not allowed me to do so, much less let me reveal all my labors and studies at this time. Perhaps God will send better times and grant me secure tranquility to take care of this high work more assiduously, so that what is missing in this work can be replaced in future ones.

May God grant Your Serene Highness, for the benefit of the Evangelical Christendom, a long life, steady health, together with every wellbeing, and I commend myself obediently and humbly to Your Lordship's gracious and mighty patronage, also remaining Yours submissively and obediently.

Leipzig, 12 July 1638.

Your Serene Highness's

Humble and obedient Servant,

Joannes Agricola, P. & M.

D.p.t. Practicus in Leipzig.

Joannes Agricola - *Treatise on Gold*

To the Reader

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TO THE KIND READER

iv. Kind, dear reader. There is an old proverb: He who builds a road must allow himself to be judged by everybody. Thus I have no doubt that my book will suffer the same fate and that different verdicts will be pronounced on it. One man will say that I am doing what another had already done long ago, and that this process is so well known that it is unnecessary to waste so much paper on it. Another will state the contrary, saying that it is wrong to throw pearls before the sows and to put food into the mouth of every ungrateful crow; that one should keep those arcana secret and not make them too common. But these two judges should know that they are both wrong. The first must not think that I have patched this work together from other authors like a beggar's coat, adorning myself with other peoples feathers. If I had wanted to do that, I would not have undertaken to explain and elucidate Poppius as a signpost. True, I must admit that many books on distillations and processes are available and that almost the whole world is filled with them, but how incorrect they are and how badly a beginner fares with them is proven by the experience, unfortunately. I remember what happened to me in my youth when I wasted time and much money on such a wrong process.

Many a man may well write a process that is clear enough to an experienced chymist, no matter how obscure it is. To a beginner, however, it is not only of no use but rather confusing and damaging - as some of our author's also are - and he gets so mixed up with them that he can never get out of this labyrinth unless he obtains an Ariadne's thread. That is why many are induced to abandon the chymical works altogether, keeping only to the roving vagrants, and giving the poor patients no matter what, exposing them to mortal danger - and I know many of them.

Also, the lazy apothecaries are doing this in general. They do not prepare their distillates themselves but buy them wherever they can obtain them cheap enough, be they prepared as they may, as very many instances are known to me in this country. I could relate the sad story of what happened to a good and learned man with the Mercurio Vitae (the Mercury of Life) which turned into the Mercurio Mortis (Mercury of Death). This is therefore not one of the least reasons that moved me to publish this writing and to faithfully communicate to all and sundry the processes which they can follow without any danger and without incurring any expenses. All manipulations are so clear that it is impossible to make them clearer. As I have experienced it in my work, I do not doubt that others who have but a slight knowledge of the degrees of the fire, can copy them.

But the others should know that no violence is done to Nature by this publication, for the great works of God must be revealed. If it is not done by me, it is done by someone else, and everyone can trust me that I have not done this because of ambition but rather upon the impulse received from God and honest men, also because of great pity with the patients. For what I have seen, experienced, and made with my own hands during my various travels in high-class important laboratories and in my own practice, I can communicate in full truth to my fellowman who does not possess the means that I have had.

v. Thereby the wonders of God will become manifest, and the poor suffering fellowman is served in accordance with the First Commandment of God. Such is the love of our fellowman that we are to show towards him. Tell me, someone, if I see a man lying in the road laden with heavy trouble, am I doing right or not if I help him? In many pharmacies I do not find any prepared arcanum with which I could serve him. Therefore I must let him lie there in his great trouble for lack of the right medicament. But if I had a special secret in my house and could drive his sickness away with it, tell me, would I not thereby perform a Christian and God-pleasing work on this man? I

believe so indeed, for God wills it and Nature teaches us the same. If I or someone else does not reveal such devices, the patient must die. Therefore, God becomes angry if we do not reflect on the wonders of Nature through negligence, since for every illness the good God has put its specific antidote into Nature, and has commanded the faithful spagyricist or physician to extract it.

Accordingly, those are greatly mistaken who either begrudge their fellowman those arcana or do not want to learn to prepare them through negligence. They may well say that neither Hippocrates nor Galen knew anything of these things, although they had been great physicians. Why, then, should I bother about them? Yes, it is indeed true that Hippocrates and Galen were distinguished men, but it does not follow that God had bestowed His Mercy on them alone, and that His might had not perhaps withheld anything from them that he could not reveal to us in this century. Whoever thinks this way is a blasphemer of God's Majesty, and I do not doubt that after us still much greater secrets will come to light, as Paracelsus has predicted, which will also obscure our own. For it is certain that before the end of the world everything will be revealed, as Christ the great physician himself testifies. It would indeed be the greatest nonsense for Christians, and no one must take offense at Galen's words when he writes in Lib.2, De Pulsibus: Mosen multa dixisse, sed pauca probasse.

But if God does not wish to grant His high secrets, neither will that man obtain them from such writings, no matter how clear they are, because God has many means to hide them from the unworthy. It is not enough for a man to read such things, he must also implore God for understanding and blessing. And there is no doubt, if Chymia had been known at the time of Hippocrates and Galen, they would not have spared any trouble to learn it. But who can say that Hippocrates and Galen knew and cured every and sundry illnesses? Nobody will be able to affirm this, for in our time we find many illnesses of which the dear ancient ones did not know in their century, as I could mention a whole catalog full. Likewise, there are many diseases in the foreign isles of our time which are not known to us who are living in this region of the world, as I myself noted and observed in my many travels of which I will write a special treatise in the future.

And granted that the above physicians cured all diseases in their time, it must still be remembered that illnesses had then not reached such a high degree as now when man's nature is ever more weakened and the balsam of Nature is too powerless to drive them out. There is no need for a proof of this, for Hippocrates shows that in his time eunuchs and woman had no podagra. Look around now, and ask especially in Austria and Moravia, and you will learn if these people have no podagra. Yes I might find some in Thuringia and Meissen. It can therefore not be denied that at that time man's nature had been much stronger and could drive out all such superfluities through her emunctories. Nowadays she does not do it, and one has to resort to good medicines to help Nature.

vi. For if I am to cure podagra, the medicine must stand in a higher degree than the sickness, otherwise it will not be overcome but remain uncured. That is how the common proverb originated: Tollere nodosam nescit medicina podagram. But if I have a medicament that stands in a degree higher than the sickness, I can drive it out at its root, annulling the aforesaid proverb. It is those degrees that must be learned in the spagyric and chymical schools and must be produced with coal. But here the oxen are standing at the mountain, here no one wants to put his delicate hands and ring-decked fingers into the ashes, or wake one or more nights. Everyone thinks, if the apothecary does not wish to prepare it, let him leave it. But with this a physician's conscience cannot be clear, for how can he say that this medicament can cure the patient, not knowing if it has been prepared left or right (meaning: correctly or wrongly).

True, it would sometimes be possible to bear patience with those lazy people, if only they did not stamp on the experienced spagyricists and slander them so miserably before those who are inexperienced in the Art, including high potentates and Princes. And supposing that occasionally a mistake is made by an itinerant practitioner, should the child therefore be thrown out with the bath? Certainly not. One should look at the roving vagrants and distinguish between them and learned men who have studied their foundations and are also well experienced in the practice.

But so as to make it known for what I am responsible in this work or what advantage there may be derived therefrom, the kind reader should know that I first put down the author's text as is. After that, I analyze it, reminding the reader where it is right or wrong and if the works proceed as the author promises. In the third place, I indicate my experience or the work which I have made with my own hands and found to be right in the fire and I communicate faithfully what was the result. These processes may be boldly followed, and the reader may certainly believe that not a single process will be found that has not been frequently elaborated and found right. Although one or another way also be found in other authors, I have experimented with it and have myself verified it in the fire. Only, I must remind the reader that such works also require a chymist somewhat experienced with fire, although these are common works, a beginner here receives very fine directives and manipulations, enabling him to make good progress, provided he will regulate the fire correctly, neither too much nor too little. Much depends on this. If I have an opportunity to do so and if this work does not become too big, I will draw the most necessary ovens at the

end, indicating which are used for the most necessary works. Then a beginner can install them himself, or have them installed. A beginner must know that the quantity of furnaces does not help much. If he has a Balneum Mariae, a Balneum vaporosum, an ash - or sand oven, a reverberating furnace, and a big furnace without cupels, he has enough to start. Afterwards, when he wants to prepare very subtle things, his work will teach him what kind of furnaces he needs and how he should have them built. Now and again he will find many formulas for them in authors and chymists.

Fourthly, after the description of the preparation he will also find the right use of the medicines, how he should apply them as internal medicine and for surgery. And this is not just said without any further comments, as is the case with nearly all other writers, but when it is said that this or that medicine is good for this or that effect, it is followed by a case history, indicating with what person, in what case it has been used, what it achieved, and how it was applied; also, what other medicines had to be used. It is not enough to say this serves for that. The Topica do not accomplish everything by themselves but the universalia must also be taken into account, as I have here taken special care to see to it that the right appropriate methods be taken. This care will be found in few authors, and in this a student has almost an extract of the whole medicine, both in theory and practice. How much work this has cost me, every intelligent person can easily judge for himself. I do not remember that a similar work has appeared, for my book contains such cases and odd histories that you will not easily find the like of them in any handbook. And the cure is not only oriented towards the hermetic practice but the theory is joined thereto, so that together they form a right harmony.

Barbers, army surgeons, and other surgeons will herein find such manipulations that they could not find any better ones, provided they will apply themselves and work with care. Householders will here have items of house medicine which they can safely use in emergencies, especially if they live far from a physician. From the case histories and examples quoted, they can see if their case is applicable to the medicine, or the medicine to their need. Therefore I have introduced hundreds of histories, for many a man learns more from them than he can sometimes learn in several years from practitioners. If I had not been worried that the work might become too lengthy, I would have related a few hundred more histories, since for every sickness or every remedy three or four could have been indicated. But this will be saved for another occasion, provided God will extend my life, and whatever is lacking here concerning the Wonder Medicine will be put in my Chirurgia which, if it pleases God, will soon follow.

Fifthly. In this work it can also be seen if a possibility can be found in Nature for transmuting one metal into another. Regarding this, there is much arguing pro and contra, but experience is the arbiter of all these things. I myself must admit that it is of little use for Particulars, though one cannot deny in general that the possibility exists. What experience has taught me, I have revealed, as may be seen from every work. I have not written it with the aim of promising golden mountains but have only done it to show the opponent what is possible with Nature. Whoever does not wish to try it out for pleasure, let him refrain from doing it for gain. For a mistake can very easily occur, and then the desired effect does not follow and all labor is lost. But whoever uses it as a medicine cannot lose much by such an experiment. What has been said about the transmutation of metals has only been done incidentally, as the context proves.

Sixth point. Many wonderful secret medicines are indicated for special diseases, which show what amazing things they can do and which are, as it were, a bridge for the Specifics, to allow them to reach their enemy and attack it. For most sicknesses the entire perfect method of a right and complete cure is given, and those cures are applicable to nearly all individuals and constitutions. Nor is the like often found in other authors. May God help that it will serve for His own praise and glory, for the great relief of the poor patients and the needy, and for the instruction of the studying youth. I hope to have served all these hereby.

I for my person do not doubt that this work will be received by many with gratitude. But those who are all too clever and fancy they know everything, do not require such instruction. Thereby, however, they betray themselves, so that they, as Terence says: *Intelligendo nihil intelligant* (Understanding they understand nothing).

viii. Aside from this, I beg the sowlike - grunting mysochymists and Lucians not to blow their noses too hard about it, else they might bleed to death, and their great wit might even be turned into foolishness because of the freeing of their brain and liver. For whoever wants to be too smart, behind him the fool generally peeps out, and he should remember that all gifts come from God. He distributes them in a wonderful way according to His Will. One should first read and then judge. If then there is nothing to it, he can condemn. In addition, Alchymia is not a new poem, as many imagine, but was known in Egypt long before Moses's times, as may be seen from all credible histories.

Whoever wishes, may read Diodorum Siculum, Cael; Rhod. and others. He will find how experienced in Chymia the Egyptians had been, also that Moses had been educated in all the arts of the Egyptians. Nor did they consider their imagined gods to be true Gods in their hearts, except the common man whom they humbugged, but many had a different understanding of them, as may clearly be seen in the Poimandres of Hermes. He recognized one God only,

Creator of heaven and earth. This is beautifully told in the Hieroglyphicis Aegypti Graecis of Dr. Michael Majerus (Maier), which is a special pleasure to see and read.

As this work has become somewhat lengthy and a special order has to be made in its presentation, I have divided the whole treatise in two parts. In the first I have engaged in anatomizing the metals only, so that they should stand and be found in their own repository. In the second, the minerals and vegetables are together, likewise in their proper order. We have called on God that He may grant us His Grace for Christ's sake. Amen.

Joannes Agricola - *Treatise on Gold*

Chapter 1.

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Chapter 1

How to extract the Gold's Virtue and to prepare a wholesome Medicine

All true chymists and philosophers write that common corporeal gold is of not much use in man's body if it is only ingested as such, for no metallic body can be of use if it is not previously dissolved and reduced to the prima materia. We have an example in corals. The virtue of corals is not in the stone or the body but in their red color. If the corals are to release their power, a separation must first occur through a dissolution, and the redness must be separated from the body. Tincture the body is a shell which is left behind quite white, but the essence of the corals, which is quite red, afterwards perfectly accomplishes its effect in man's body because the obstruction has been separated from it (that is, from the stone and the body). Thus you should also deal with gold, silver, iron, lead, and other metals. If they are to bear fruit, they must likewise be separated from their bodies, that is, from their inner earth or slime, to allow their radical moisture to operate quite unhindered in man's body. Before, its power could not accomplish it, as the bodies were still held by their metallic slime and earth. Consequently, whoever wants to do something useful in medicine must see to it that he first dissolve and open his metallic body, then extract its soul and essence, and the work will then not result in no fruit.

Orator U C Note

In his book De praeparationibus medicamentorum Chymicorum (On the preparations of chymical medicaments), the author writes a short preface and thinks that all medicaments that come from the mineral family, apart from their legitimate preparation, are of no use, and so it is and it is the truth. Nevertheless, the old Arab and Greek physicians used metals thus raw and praised them highly, especially in the Electuariis de Gemmis, Exhilerante Galeni, although some, yes, the majority, doubt that this writing is one of Galen's. According to him, the metals, especially gold, rejoice man's heart and his vital spirits, drive away melancholy, and thus arouse in man a good and desired condition.

But as to give here my view as well, I am certain that raw metals, without prior preparation, help little or nothing at all. Our natural warmth is far too weak to be able to cook and prepare the metals in such a way that they can penetrate to the heart through the small veins and finally throughout the body, imparting their effect. Even so, some are convinced that metals are supposed to have been eaten and digested by chickens, just as Pliny wrote in his time that if a hen were fed with gold leaf, it would transform the gold into an essence in its stomach. And thus, if it were eaten, the chicken would bring man great strength and health. Some also believed that in our time and wrote wonders about it, how gold veins are supposed to have shown up in the chicken livers, which is ridiculous. I am surprised that it did not also lay golden eggs, like Aesop's hen! Then they would have become mighty rich people in a short time, especially if they had bred as many chickens as in Egypt, where they are hatched in a specially arranged oven, and 20,000 creep out all at once. They could have laid many eggs, thus producing several million gold for a poor man. Let anyone who wishes believe this, but experience has taught me differently. I have tried it at different times and very carefully attended to the chickens. But after several days of feeding the chickens with gold leaf, I found nothing but - salve honore - gilt muck. I had therefore spent my money very badly.

I had the chickens slaughtered, wanting to know if the gold seed in them had perhaps grown so big that they could henceforth excrete nothing but gold. But less than nothing was to be found, while the chickens had eaten more than two ducats of gold. I felt sad because my Art did not progress.

This, however, I have seen. A chicken belonging to a Count had swallowed a big pearl. When the chicken was cut open after several hours, the pearl was indeed found in the stomach but its lustre was all gone, as if it had been reverberated in the fire. This stands to reason, because pearls have not got the same fixation as metals, especially not as gold and silver, which are most indestructible. Experience proves that no element can destroy (), and although some *Aquae Chrysuleae* (gold waters) can corrode it and dissolve it into water, there is nevertheless no destruction. If the waters are again distilled off it, the () is left just as good as before. But if a pearl is thus dissolved, it can no longer be brought into its body, that is, become a pearl, although many chat of it, pretending one could thus make one big pearl from many small ones. True, a body, also one of mother of pearl, can put be put together, but one cannot give it the right lustre of pearls.

(), however, stays shining, also after its dissolution. I will admit, however, that gold did appear in the stomach of the chicken as if it had undergone an alteration, but it was in fact nothing except that it got ready for exit together with the other excrements. It seems so very incredible that gold-veins have supposedly been seen in the liver. From where did those veins come? Either they allowed the gold leaves to move entire to the liver through the veins, or they had to grow out of the blood - none of which can be true. If the gold had been digested, part of it would have turned into blood and should have been communicated further to the other organs by the liver. If the blood had then immediately reversed into gold, it would follow that the whole chicken, which takes its nourishment and increase in weight solely from the blood, would have turned into gold. One could then have wished that he had had chickens as big as aurochs or elephants - then the gold of the century would have appeared in the world.

I am also convinced that raw, unprepared metals are more harmful than useful to man. Because of their heaviness they enter the abdominal folds, mingle with the tartar, thus increasing the pain, as could be proven by many examples. Although I can remember that I knew a furrier in Weiss, the region of the Enns river in Austria, who, when he felt a discomfort in his stomach, got hold of some iron filings, ate a good amount of them and cured himself thereby. Matthiolus and Mizaldus also remember such meals and report that they agreed well with the people. True, there are good reasons for this, as iron is sooner destroyed than other metal. I would nevertheless not like to use it. For we cannot know what kind of a work Nature intended to make of it, whether it was supposed to become a tree or a metal, which the Farmer discusses quite well and reasonably in *Arcanum aperta arconorum arcanissimum*, and also thoroughly instructs his disciple in it. Of the same opinion is also the luminous most noble Sendivogius, who philosophizes wonderfully and thoroughly about it in his treatises.

True, it is certain and undeniable that if metals are to be brought into their essentials, they must be dissolved into Salt, Sulphur, and Mercury. However, these are not the *prima materia* but the *materia secunda ex prima orta* (the second matter originated in the first). Of what use would it be to us if they were to revert directly into their chaos? We could not do anything with them. Nature, however, does with them as she pleases, which the artist cannot copy. For him it must be enough to stay with the predestined and predetermined *materia*, and to extract and prepare from it its true essence. But how that is done, about that all keep silent and do not wish to come forth. But if you do not have the *prima materia* of the metals, you will never radically open the gold, and this *prima materia* is the bolt before the door of many fine geniuses, preventing them from entering the shrine of Nature. Dear Lord! How many have tortured themselves and tried to find this key, but they sooner died searching than that they found it. Many a man has been delayed by the name of *prima materia*, which he did not correctly understand, searching for a key that would bring the () into the *prima materia* or chaos. As I have indicated above, this would be of no use to me, but with the other *materia prima* I can afterwards make what I want. In this there is hidden a great secret, especially if one wishes to bring out the *substantialia*.

When they hear of the Principles, many believe that they will turn into a *Mercurius currens* (Liquid Mercury?), a special Salt, and a separate Sulphur. They take great pains to get the process for obtaining these Principles, and do not save any expense. I have found a distinguished man who had in his possession a whole pound of liquid Mercury of (), but he achieved no more with it than that he prepared with it a precipitate. How much expense this had caused him is easy to guess, let alone how much labor was involved. He did believe that because he had the liquid Mercury of the Sun, he had already won the party and was on the right way according to the philosophers, as they declare unanimously that one has to prepare the Mercury. This has led many of them astray into an eternal labyrinth, out of which they cannot find a way. They could not believe that this Mercury also has its hypostatic principles. But the Philosophical Mercury is a simple body, and with it a Mercury is made, as the philosophers say: *Fac Mercurium per Mercurium*. (Make Mercury through Mercury). Yes, they say, our Mercury is our gold, and our gold dissolves common gold. These are strange sayings, which appear absurd to Aristotelian philosophers and totally contrary to Nature. Nevertheless, it is the pure truth, and it can be depicted by a coarse example by taking a vulgar (common) Mercury, adding to it filed or granulated lead, and setting it to digest for some time. The lead will also turn into a Mercury and pass with it through the leather. It can also be sublimated with it.

When some men saw this, they immediately fell for it and imagined that they were now holding the fox's tail and it could no longer escape. Thus they also undertook this processing of the gold, but their miserable work revealed how much they had been mistaken and that the writings of the philosophers are not to be understood superficially according to the letter.

I must admit that at the beginning of my labors I had also believed that either vulgar Mercury or at least the liquid Mercury of the () had to be infallible, according to what is written. Therefore, I tried to make the Mercury of the () with vulgar Mercury. I spent a long time on it, till it went as quickly through the leather as common Mercury. When I finally succeeded, the vulgar Mercury and the gold were nevertheless left as they had been previously. And supposing it had turned into a liquid Mercury, it would not have helped me because at that time I did not understand things better.

But if I set it to digest and proceeded as the philosophers teach, various colors appeared, black, white, yellow, and red. Following the last, however, a ridiculous mouse was born, and I had nothing more than a precipitate for the French (V.D.) and other diseases. Therefore, I went away chapfallen. Without doubt, Poppius' opinion is the same, just like the common erroneous view of most laboratory workers, because he tried to explain this dissolution by the example of the corals, which, however, does not fit in every case. Tincture alicujus corporis extractio (the extraction of the tincture of a body) is something else than *resolutio corporis in sua principia sive in primam materiam* (the resolution of a body into its principles or into *prima materia*).

Regarding corals, however, it is true and certain that their best power is contained in the tincture and that the body is not good for anything, which is not just simply true. I must admit that the chief virtue resides in the color or tincture, but it does not therefore follow that there is also nothing in the other bodies. The tincture of the corals is their least part. One pound yields but a little, and if we treat the work quite subtly, we can hardly obtain half a dram of the true tincture of essentials, as Mr. Lauremberg also writes in *Animaadversionibus & Notis ad Aphorismos Angeli Salae*, where we can read him further, and where he convincingly presents his views to Angelo Salae. I myself must applaud Mr. D. Lauremberg and admit that the tincture in precious stones and corals is so scanty that it makes me wonder that so little can be extracted. Therefore many believe that it is impossible for the Art to extract a tincture, but they are mistaken. The tincture may well be extracted, but it is impossible to obtain it in great quantity. Consequently, we can infer what is to be thought of the tincture sold in pharmacies, where they have big vats full of it. It is nothing but a mere brandy, slightly colored during digestions or due to the acid with which the corals are dissolved and which is still contained in it! Yet a great fuss is made about it, whereby both the physician who does not know better and the patient are cheated. But the tincture of corals is such a beautiful ruby-red juice, and there is so little of it, that one beholds it with amazement. I myself have seen very little of it aside from what I observed in Kassel in the Princely Pharmacy and in Marburg with Dr. Johann Hartmann. A single grain of this tincture does more than a whole pound of the common. If our author's opinion were true, namely, that the body of corals is good for nothing and only deserves to be poured away, it would follow that the Salt of corals and the magistery were of no use at all. Experience, however, has proven it to be quite different. I have learned in practice that if a magistery of corals is especially well prepared, it is a mighty tonic for the heart. If this only came from the tincture, there would be little hope in it.

Although I must admit that the greatest power is in the tincture, one must not therefore throw the body away altogether, because it can be so beautifully prepared that it results in very great virtues. Its crystalline Salt - with which was as a ruby. From the body I made the Salt which was as clear and crystalline as diamonds can never be. When I had it in its last solution, I again added to it its own tincture, drew the superfluous liquid off per *balneum* until it looked quite dry. Now this crystalline Salt turned as red as blood and as transparent as crystal, which was not only a special pleasure for my eyes but in addition made me happy, thinking this process could possibly also be applied to the higher metals. I am still of opinion that if the tincture were extracted with a proper *menstruum*, the body changed into a transparent one, and that tincture were again added to it, it might well turn in to something. An experienced chymist could try it, perhaps his work would be a good investment. Consequently, the body of corals should not be completely rejected.

I have extracted from the above-mentioned pound more than four Lots of pure crystalline Salt. Of course, a clumsy laboratory worker can handle it so badly that he spoils everything, and that afterwards nothing else can be prepared from it. For we find not a few of those inexperienced laboratory workers who spoil more than they bring to a good end, especially when they follow their own fantasies. What I am saying is not at all to be understood as if I esteemed and approved the prepared coral powder of the common apothecaries, much less praise and hold in high regard the powdered corals administered by the would-be intelligent females. They cannot do anything in medicine and are no better than if one had swallowed a handful of sand. They go to the stomach and out again through the behind. Only faith must do its best, or else nobody would believe that such red corals are a medicine. Experience, however, shows

what good one can hope of them. Whoever wishes to scour his stomach and intestines with them, as dishes and pans are scrubbed, let him do it, but I do not want such a scrubbing.

With the body of corals of which the tincture has already been extracted, a Spiritus can be prepared which burns like a brandy and can be used for many things in medicine. But how to bring each into its added will be shown according to the author's instructions and illustrated by my own experience. Therefore, we will each time start with the text, or the preparation and its use, while I indicate my preparation in the note and observation, so that no one who wants to copy it will go wrong, and thus we are beginning with the oil of gold.

Joannes Agricola - *Treatise on Gold*

Chapter 2.

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Chapter 2.

Gold Oil.

Fine gold, 2,3,4, Lots, or as much as you like. It must first be poured three times through antimony, each time driving the antimony off on a cupel, as goldsmiths and refiners know how to do. Of that Basil of the Benedictine

Order says as follows: The Grey Wolf must eat the Lion, which must be devoured by it three times, after first purifying itself and cleansing its eyes with the Wolf's blood, so that they shine brightly. The Wolf is the antimony; the Lion, however, the pure gold. When now the gold has thus been purified, have it beaten thin like paper. Make of it round, rolled-up rolls that can be put into a separator. Pour on it Aquam Regis (King's water) that has previously been conjoined with the sublimated ammonia during distillation and rectification. This water must stand two fingers' high above the gold. Now close the mouth of the retort, so that the spirits do not vanish. Set the glass in warm ashes and dissolve it in the Balneum and gently distill the moisture off it. Then refine it strongly in the sand till the corrosive or sharpness has altogether gone over the head. The gold will be left at the bottom of the vessel like a brown powder or dust.

This powder must afterwards be reverberated, closed, in a steady fire, day and night for 13 weeks. the heat must be such that the gold neither flows nor melts. In the heat the gold will stew in its own juice, so that it will thereafter in the second dissolution drop its earth and metallic slime. After that, take one-third of the subtle gold calx and pour its own water over it. It is a crystalline, transparent, mineral water, quite pure and delicate, which Paracelsus calls the Green Lion and Basil, Aquam Solventem (Dissolving water). Take nine parts, everything closed in a phial, let it circulate for three weeks in a vapor-fire, and the gold will turn into oil, leaving its slime and earth behind. Regarding this metallic earth, its virtue is to dry in surgery and also to heal, especially every fluid damage. This preparation is done according to the chymical and not to the common method.

Aside from the rational soul, God has made no more wonderful creature than gold. It is such an excellent body that does not know anything of destruction from any element. Therefore it was called by the Arabs fortitudo omnis fortitudinis (strength of all strengths). But for a long time it had only been misused, and nobody could believe that God had enclosed a medicine in this wonder-creature. The ancient Greeks only used it for the luxury of their life. This was only because they did not know the noble Art of Chymia, which can prepare it into a medicine. For this reason the Arabs reflected a little more deeply on this matter and discovered that in it there must lie a great power and a Universal Medicine.

Avicenna, Geber, Arnold of Villanova and similar witnesses can be found now and again, which all goes to prove that gold is the very noblest subject in the whole world. This has not only been confirmed by the philosophers and physicians but its test and effect have proven the truth of what they stated. Just as the aforementioned Arnold of Villanova cured with it the King of Naples, who had suffered from lepra and restored him to full health. If I wished to name all the sick WHO WERE CURED BY GOLD; IT WOULD RESULT IN A BIG, IMMENSE WORK. Let those see to it how they can one day take the responsibility for writing against their conscience and negating everything the learned physicians have left in their writings and experience has proven true, of whom Eratus is not one of the least. He issued a public treatise or dialogue against it, and as nothing could be found in it but wrong assumptions and hypothesis, it is not worth answering it, although he has already been refuted by many and his worthless arguments have been pointed out to him. Of such men the whole country is full nowadays. They do not

wish to admit that there are such mighty virtues in gold and other metals, though experience has taught us differently. Those fellows can never answer for it, for they are doing violence to God and Nature, while they should thank God profusely for this noble subject and not only use it out of greed, vanity, and arrogance - because it was not created for that purpose - but rather for the maintenance of man and his body which is subject to all kinds of diseases. In gold there is such a congenial combination of elements that it must incontestably follow that the very best medicine can be prepared with it, provided we ourselves apply us and do not begrudge a little effort.

We could actually have patience with those people if they only kept their opinions to themselves, but they must be blamed for so greatly playing down and slandering those wonderful medicines before others. They speak of them like the blind man of colors, just as recently an old, otherwise quite experienced physician told me to my face that metallic medicines are pure poison. But when I asked by what principle he could prove it, he replied that they were altogether harmful to man because of their poisonous origin. I had to laugh and did not consider this reasoning worthy of an answer. I only said that no old woman would have so little intelligence that she could not refute that reasoning. Therefore it is totally wrong to revile and slander those noble medicaments, which they do not understand. Cardanus and Scaliger were also of that opinion. Nevertheless, Cardanus had to admit willy-nilly that he had seen an important test made with potable gold. Scaliger, likewise, changed his opinion after he got better informed.

If only our cocky critics would do the same! Then many a man would work harder in this work than he does, and many more secret things would be revealed which stay unpublished due to the slandering. True, it would be unfair to stick all arcana on the nose of the ungrateful world. Therefore the true philosophers have not without reason depicted gold by a circle with a point in the center (), thereby showing its great perfection. They also compare it to the heavenly sun, for just as the sun refreshes all sublunar things with its heat, so gold likewise refreshes all human organs, especially the heart. And just as the sun is the king of the planets, so gold is the king of metals, and the heart is the king among the human organs. These three have a great affinity for each other. Only the external look of the gold rejoices the heart of the misers, and in order to obtain gold enough they are using all kinds of means, also against their conscience. They often resort to such means as cost them their health and life, and they do not pay attention to it no matter how great the danger may be.

Now we will turn to the preparation of aurum potable (potable gold). A great deal could here be said of the true potable gold, and there is hardly any chymist, yes, hardly any common laboratory worker, who would not know a special and secret preparation. In addition, many a man utters such nonsense that one must rightly laugh at it, and we can now and then also read about such fantasies. Yet all are very much mistaken, just as I recently saw someone who wanted to prepare potable gold with ear wax! Regarding that, I think it would have been much better if he had taken monkey wax. Then, someone tried to make potable gold with pigeon dirt, but it remained gold as before, and the dirt also remained what it had been. There is indeed nothing in the world so crazy that one does not find people who dare process it to gold according to their fool's head. They boast a great deal about it, but finally the unhappy ending shows up their foolish beginning. This is certain and true: gold may be prepared as anyone wishes, without the universal menstruum of the ancient ones - it is yet not the ancients' aurum, for their gold is a different gold. I can imagine that Basil Valentine means antimony by the term Grey Wolf - much less Paracelsus. Although many call antimony the Grey Wolf, it is only to be understood figuratively and is only enigmatically true. Is it that antimony, or the Grey Wolf, refines gold and adds a beautiful lustre to it? But how does it help the Philosophical Work? For all philosophers admit unanimously that their gold is no common gold. Yes, their gold dissolves gold. If then it is not common gold, how can it be processed through antimony? Common gold is dead and powerless, unless it be dissolved through the prima materia out of which it was born, and be born a second time. Only then will it really become Philosophical Gold and aurum potable, a small dose of which can drive away all sicknesses in a short time.

Yet this must not be understood as if I wanted to deny all the gold's virtues. No, because experience proves that common gold has mighty effects in many sicknesses. The gold of Hermes, however, and that of other philosophers is a medicine that cures all sicknesses, no matter where they come from. Like fire it penetrates the whole body, cleansing it of all superfluities and restoring it to the highest degree of health. Whoever achieves it is extremely happy. On this preparation many tons (?) of gold have been squandered, while nothing has been accomplished except thereby learning to distill a little. That is why artificial furnaces, instruments, and glasses have been invented, so that, if the ancients were now to raise again and see them, they would not know for what purpose to use them. It is undeniable that the Art has advanced so much that Hermes himself would be surprised and could not do what modern Artists do. But this is what we are lacking: that we can nevertheless not achieve what they knew, as we can further read in Sendivogius.

Without doubt, in his *Liber de Tinctura Physicorum* (Book of Physical Tinctures) Paracelsus understands quite a different Green Lion than the author imagines, for it is not born in the general manner of lions but appears ex sputo

Lunae (out of the spittle of Luna), which was likewise invulnerable. The philosophers have written entire books about it. Especially in the Rosarium it is often said that there are three things that do the work, Leo viridis (Green Lion), aqua foetida (evil-smelling water), and fumus albus (white steam). This Green Lion has made many men crazy, nam illa viriditas vertitur in aurum nostrum (for that greenness changes into our gold). So we hear clear enough that the Green Lion is quite another thing, but each interprets the philosophers' sayings according to his understanding. If we then ask what the philosophers really meant thereby, they stand there not knowing whether to say white or black.

This Lion quarrels with the Dragon and is wounded and devoured by it, because of which the Dragon must also burst. But when they putrefy together, a sweet medicine results, like that of Samson's lion, which can cure all diseases.

It is regarding this Lion that many wonderful and beautiful processes have been undertaken with gold, many dangerous sicknesses cured by it, but nevertheless it is also true that it is quite unlike the true Philosophical Gold, and that it cannot be compared with it at all. Even if the gold were prepared in such a way that it could never again be reduced into a body - which can be done, and many boast about it although the proof is surely lacking - it is still only a Particular medicament and no such a Universal one as the true philosophers' potable gold should be. Thus all philosophers say that their gold is not yet corporeal or in a metallic body, either by Nature or through fire, but that it is soft, does not resemble gold either in substance or external form, and that it contains its own water by which it is dissolved without the addition of anything else. This water must never be separated from it but stay with it forever, and it is coagulated with it. These seem to be sheer paradoxes but in truth they are pure apodictica and no fantasy, as many may think they are.

For the water of the philosophers is also their gold, which dissolves and coagulates itself, also their only menstruum acetum acerrimum (most acid), and not the spirit of wine or another corrosive water as Augurellus understood Lully's Solvent Water or Mercury, when he wrote about in Lib. I, Chrysopae.

Whoever does not find these properties in his gold is no doubt far from the right way and cannot hope for a good ending of his work, may he labor as hard as he likes. For gold is water and yet is none, but it can easily be turned into water if the Artist wishes. Many a man might think that these are odd notions, namely, that the gold of the philosophers is simultaneously their menstruum, solvent water, and Mercury, and yet it is the pure truth. It can and must not be otherwise, anyone may believe it or not. Aside from this, the highest truth remains that if its own water does not remain with it, the gold is worth very little. Many will think that that must be a strange gold that can dissolve other gold. Yes, it dissolves itself, and it is the Dragon that devours and revives itself. It is the Phoenix that burns itself and rises from the ashes much more beautiful than before. For if gold is sown into its field, it grows and multiplies itself, bringing a thousandfold fruit for the maintenance of man's life.

But where this water can be found is kept very secret by the philosophers. They say that it must be fetched from India. True, it is easiest to get it in India, as the best gold mines are there. Experience has shown us, however, that an Indian crow brought this water to Germany in its pouch and poured it on a mountain. Thus a fountain is said to have sprung up from it which provides enough of this water, and at present it is as easy to obtain it in this country as in India. One has to be careful, however, to find the right fountain, as there are many other fountains around it that contain poison. The water is precisely of the kind which Pegasus (a winged horse that caused the stream Hippocrene to spring from Mount Helion with a blow of his hoof) beat out of Parnassus with its hoof, or which the mountain Nostacris in Arcadia (typist: please note that it is Arcadia and not Akkadia) pushed out of a rock and which cannot be kept in any other vessel than the horn of a horse.

Each may reflect himself on what this strange water may be. Let it suffice to say where this water can be found and what qualities it has. And I will add something one has to carefully note about this water and by which it can be recognized: It lights and burns itself, simultaneously burning the gold. This may well be the fiery means whereby Moses burnt the Golden Calf to ashes and gave of it to drink to the children of Israel in that water. If you cannot find this water which burns itself and turns into red ashes, you may surely believe that you will achieve nothing in this secret. It is gold and at the same time water and fire. It is hot and cold, like Jove's Hammonius fountain, moist and dry, it wets and dries again.

True, the author thinks in this process that we should pour our own crystalline-mineral water on it, but he does not indicate what kind of water it must be, or if gold contains in itself, or if it is to be obtained from another source. Many have been laid astray by this water, so that they achieved little with this process. Even if they had obtained this mineral-crystalline water - which is made by two different processes - and had added it to the gold, it is yet not the right handle and the right key for opening this strong lock and house, even if it were broken down ever so subtly into its atoms. For as long as it is not processed in such a way as to be dissolved into its prima materia, it is not the true philosophical dissolution. The author's mineral water will never accomplish this, even if it were left mixed with it in the digestion till Doomsday. It does not do anything the gold except that it gets calcined. Finally it separates

again from it, which the Philosophical Water never does, as has already been said. If it has once mingled with gold or silver, it cannot be separated from either in all eternity. Both become one single water, the water of life and health, rendering all creatures fertile. It is like the water in the country near Suessa (town in Latium) which renders those fertile who drink of it, be they men or women. If, on the contrary, a woman, cow, dog, or sheep drinks of the river Aphrodisios, it makes them infertile. This water, however, also makes old withered trees fertile again, if it is poured to their core through a hole drilled into them and the hole is again tightly closed with a plug.

The author instructs us to let the water circulate with the gold for three weeks, but before doing so it has to be reverberated for 13 weeks, which is a long and tiresome work. It is also dangerous, as in reverberating we can easily overlook that it flows back again into a body, when a great deal of calx is produced. If this happens, the previous pains and labor are totally lost. Therefore I cannot advise any beginning laboratory worker to spend much time and work on this process - reverberating requires much labor and coal. He may well think that this process is quite philosophical, but it is as common as the others that are now and then found in the authors of books on alchemy. Of those processes Ulstadius has many in his work *Coelum Philosophorum* (The Heaven of the Philosophers), from which one can take some, just as Libavius has compiled a whole hodgepodge from other authors. Likewise, D. Andreas Brentius, though the works of Brentius must not all be despised. They contain very fine manipulations which I myself have used in part.

Before this, I also prepared it according to the author's instructions. When it was ready, I finally coagulated it. The mineral water of which he speaks evaporated, leaving me only a fine subtle gold calx which I added to silver in flux. It tinged it into gold, but I had little gain from it as I obtained no more gold than I had used in the preparation. Pains, labor, Aqua Regis, and other expenses were lost. Nor could I tinge with it as the gold had not been radically opened, much less perfectly. In that condition it cannot give more to its needy neighbor than it has itself. If, however, it had entered its mother's womb a second time in a good Nicodemian manner and had been born again, it could have brought fruit a hundred fold, as Sendivogius expressly writes in his *Alegoria*, at the end of his twelve treatises. Many indeed read it but the least number of them understand it, believing that if only they could bring gold into a liquid form, they would have a tincture. Yes they may well get a tincture but it is no good, and the Artist will not be able to get rid of his hunger with it. Yes, he will in addition be obliged to add of his own gold and lose it, and this work is not for any poor fellow, as one does not obtain a good medicine with it.

But whoever hopes to get rich thereby is greatly mistaken and is led astray. I, too, was struck in this error at the beginning of my laboratory work and believed the dissolved gold would immediately become the Philosophers' Stone - but what I did get is not worth boasting about. Even so, I learned many a good thing from it by experience. Nevertheless, it is not to be despised completely. It is a rudimentary beginning and the proof that the transmutation of metals is no poem, as many pretend, or that it is the devil's work. They shout so much and so loud about the transmutation that it would not be surprising if the whole world had become deaf from it. This, however, is done without understanding, because they speak according to their lights and believe that because they do not succeed, it is also impossible for others.

It is and remains indeed a genuine Art, whether you or I know it or not. I have seen with my own eyes, at two different places, how to transform tin into good gold, and in great quantity. Once it was done by an Englishman in Salzburg, in my presence and that of a medical doctor. I myself took the gold to the mint and had Ducats made of it. It was not only gold to all appearance, as the sophists are used to make, but the stablest gold in all tests. After that, I saw such gold in Italy, in a convent where a monk transmuted two pounds of lead into the best gold by means of a few grains of some red powder.

Whoever does not wish to believe those experiments, let him read Hoghelande, Elias the Artist, and others. Then the light will shine into his eyes, unless he has no eyes like the moles. It is customary to say: *Manus nostrae oculatae sunt, credunt quod vidunt* (Our hands have eyes and believe what they see). If one also does not believe those, I do not know what advice to give, since Thomas says: If I see the marks of the nails, I will believe. So many people have seen it, and yet it is not believed. Such a person must have a stubborn coarse donkey brain, not worth looking at a sincere Philosopher, far less speaking and conversing with him. The hide of ignorance stays in front of those fellows' eyes, and although we tell them ever so often that so many proofs have been given at various places - and that that gold is still there at this moment - they will nevertheless say that it was not natural but was done as a work of the devil who, they say, did some bedazzlement, thus cheating people.

Yes, those fellows may well have been blinded by the devil, rendering them incapable of seeing what wonders God has put in Nature. And this objection is not valid: that God alone can change Nature. That is indeed true and will remain true. To this one should reply that the Philosophers do not alter Nature in the least, for then it would follow that an ox would turn into a man, a man into a wolf, as happens with the Laps through sorcery. They only remove the accidents of the metals to be transformed, as they differ not by species but solely by their accidents.

This is mightily thoroughly discussed in Quercetanus Contra Aubertum. What is lacking in my treatise, the kind reader may discover in that work. I only touch upon the truth in a few words and prove that the transmutation of metals is true and has its foundation in Nature. Of course, I do not wish to force anyone to believe me - the Art remains true irrespective of whether you believe in it or not - and by your not believing it is neither balled over nor destroyed.

Now then, as we do not deal expressly with it, we do not wish to stop further at this but return to our process, examining our potable gold more closely and seeing how we can usefully apply it as a medicine. We will also consider how it can be separated without danger and be liberated from the strong fetters in which it had been caught. As God has closed it so tightly, a mighty treasure must doubtlessly lie hidden in it, and to prevent thieves from robbing it and causing damage with it, the Lord God has preserved it so carefully, and it is rightly called Lillium inter spinas (the lily among thorns).

In the vegetables (plants) there are no such great virtues. Therefore they have no such strong fetters. Experience shows that they rarely retain their powers more than a year. Then their virtue evanesces, as may be seen in old seeds. Then their multiplying power is extinguished, and such corn never rises and brings fruit. Gold, however, and the higher minerals never suffer, and if gold were to lie for a thousand years in water-rotten earth, it would not lose any of its power. Likewise Mercury. Acrid fumes do not harm it much, but it passes through them like a brave hero, without detriment to its capability, not heeding any danger. This cannot be said of any vegetable, be its name what it may. It is solely the right key that is lacking, and this key is also the bride for whom one dances. Whoever finds this key must fervently thank Gold for it in his heart every day, for he will possess everything his heart may desire.

But returning to the author's crystalline-mineral water, his key - it is prepared of vitriol and tartar, and with it he says he opens the firm fetters of gold. There is probably something to it, but it does not do the opening. It is far too weak, it cannot enter the chamber where the treasure is hidden but must stay outside. But this it does: it makes the gold very subtle and turns it into the very finest atoms, so that it can thereafter be made potable and its enormous virtues can be extracted. This is not done by the crystalline water alone. There exist various other menstrua to achieve it, as will be shown in the following process and my Notes. They will accomplish precisely what the author's water is supposed to do, and this process does not require as much time in reverberating and digesting, consequently will save much expense. And you are not struck with any one author's process, especially as you have understood from the discussion led until now that this is not the kind of menstruum of which the Philosophers write.

I esteem them equally highly - you can use one or another - but nevertheless it cannot be denied that one is better than another. One is much easier, more akin to human nature, and not so corrosive. The sharp corrosive spirits mix so much with the gold that they cannot easily be removed, as I have already indicated. It happened to me myself that I could not remove them by any means except through reduction. Of those menstrua I say that you should guard and beware of, for they spoil the good and turn a teriac into a poison. Consequently, gold cannot be taken into the body without danger, of which Penotus also reminds us and warns us against, saying: If the gold solutions to be put or dripped on silver, they must be red and not black, which the common solutions nearly all are. They are not to be despised or discarded, as Quercetanus also requires, just as other chymists whom one should rightly follow.

I must relate that I recently saw some clear water at a friend's. It transformed filed gold - not dissolved in Aqua Regis - into a bloodred liquid through a good digestion. After it stood in digestion for one month, the water disappeared and the gold rose in the glass as if some fermented paste were rising, which was a pleasure to see. When it was given stronger fire afterwards, it settled down again, and the glass looked as if some gold leaf had laid in it. Nothing rose anymore. It was fixed and stable. My friend opened the glass and weighed it, it had increased in weight due to the menstruum. He poured some more of the water over it and set it back, closed, in digestion. The gold united again with it and was as red as blood and quite fireproof. When it was taken out, I took two grains and put them into a glass of warm wine. It dissolved very quickly and tinged the wine bloodred, which was amazing to see. The wine became somewhat sweet from it. I am of the opinion that if ever a right tincture was prepared from gold, this was it.

I can truthfully say that during my lifetime I have seen much regarding the preparation of potable gold, and have also experienced as much myself as any man of my age, but nothing more beautiful has come to my attention. One could not notice any suspicion of any corrosive in the menstruum, but it was quite pleasant in taste, almost like wine about to become somewhat "hard". Gold melts in it like butter near a fire or in the hot sun. Nor did it leave any White Earth in the solution, as the solutions for the magistery generally do. It was a thick, red liquid and finally a powder, at first brownred, the bloodred. But whether it could do anything in the transmutation of metals, I cannot say, for I have not tried it, nor have I seen it tried. My friend only gave me a little of it, which I afterwards used for the sick - to my great astonishment, because it was especially effective in extremely serious and dangerous sicknesses. But what kind of water this was and of what it consisted, the practitioner did not tell me at the time. I can quite easily believe, however, that it must be made of a substance closely akin to gold. I have concluded so, because when

I put just one drop of this water in a silver spoon, it soon resulted in a golden tincture, many hundred times more beautiful than the rubedo (redness) or sulphur of antimony. Although the latter also tinges silver, it is not quite pure but blackish-yellow. This one, however, was as pure as if a goldsmith had gilded it, and yet the water was as clear and white as crystal.

If, then, someone knew its prima materia, I believed, he would not be far from the Universal Menstruum, since it dissolves gold without any violence. This is a characteristic of a true philosophical menstruum, as Sendivogius and others attest to, for like associates with like. Although he was otherwise my great friend, I could not persuade him to entrust me with the composition of this water. When I asked him about it, he always replied that I had seen enough, and if I opened the eyes of intelligence just a little, I would certainly find it and know what qualities it has. They would show me if I was right or wrong. If I had been smart, I would secretly have made a projection to try if this tincture was also effective in the tingeing of metals. I would then have been sure that this was the true Menstruum and Philosophical Mercury. But it is said: *Cogitationes posteriores sapientiores*, or God did not want me to know it yet but wants to be ever implored for it. It looks as if it were a mean thing but in truth it is the greatest secret of all Nature.

This I consider a sure potable gold, for nothing corrosive was used in its preparation but everything went on quite smoothly, and the solution and final coagulation were like blood. Of course, one can find some solutions that also turn out red, but the menstruum used is somewhat sharp. It is the reason why Angelus Sala was moved to state in his Aphorisms that it is impossible to change gold into a liquid without a corrosive. This applies to the proceedings of the common laboratory workers, but it does not follow that it is impossible to find in Nature a menstruum capable of dissolving gold without Violence and suspicion of corrosion and reverting it into the prima materia. Because Angelus Sala did not know or believe, should it therefore not be true! It is not right of such a chymist simply to make such a statement, for if I and someone else do not know something, does it therefore follow that it does not exist in Nature?

Garzias ab hortis mentions in his Indian Observations that the Indians have a water in which gold will soften, so that it can then be formed by hand into anything they wish. Afterwards it will again become hard as before, which is no small wonder. He does not say, however, if it is a natural water or one prepared artificially. Be that as it may, it would seem that it could not be a corrosive water, otherwise the gold would not only become soft but it could in addition not be thus manipulated by hand. What will Sala reply now?

I do not doubt that this water is prepared by Art, but it is done from a substance that loves gold and has a special affinity for it, or else it could not achieve such a feat. Thus H.D. Laurenbergius also relates that he knows such a water that gently melts gold without any suspicion of corrosives, like ice in hot water. If then this is true - and there is no doubt it is - it must certainly follow that gold, without Sala's objection - can be opened and reduced into its prima materia without a corrosive. Whoever is endowed by God with so much good fortune that he can accomplish this, may well thank Him and be happy that he has such a treasure which cannot be paid with any amount of gold, for no sickness can be so severe that he cannot cure it, and he will thus become a wonderworker through it.

Aside from this unique water, nothing can be found that could accomplish this, no matter what it is called, be it spirit of salt or wine - it does not do it. But this should not be understood as if I wanted to reject all preparations of potable gold. Not at all. This writing is only to indicate that there are two dissolutions of gold. One is done quite gently and without violence through melting, whereby the gold is so much dissolved that it can never again be changed into a Body. This is the philosophical, natural, and friendly dissolution. The other is done in various ways with different menstrua and calcinations, by Mercury, Sulphur, various salts, etc. It is called violent because gold is thereby not changed into the prima materi but only into extremely fine atoms, and through them gold can again be reduced.

Yet, aside from the Universal Menstruum, there still exist other means to bring gold so far that it can never be smelted into another Body. This has its special reasons, but it does not follow that gold has been changed into the true prima materia. Even so, a fine medicine has been made with it, as will be seen later in my Notes. I consider it highly and have also often used it to great advantage in my practice. One must take care, however, not to be tempted by the multiple processes, thus achieving no more than a leprous gold calx and doing more harm than good. Those who do that would do much better to leave gold in peace. Although they know and have read that gold contains a powerful medicine, they do not know how to deal with it properly. If the shells can be removed and the core extracted, one has an arcanum with which nothing in Nature can be compared, as has already been mentioned above where it is written that gold is constituted in such a way that it cannot be destroyed by any element.

But someone might here object: "I hear much talk and discussion about it, and you only open your mouth wide but do not put anything into it, or you want to wash the pelt, but without wetting it. Therefore I cannot achieve a right preparation and am getting quite confused or even suspicious, for the process of Poppius is boring and obscure, and I cannot trust other processes - of which one can now and then find whole foddors - especially as I hear that the dissolution is so hard to handle".

To this I reply: It is indeed true that many written things can be found in almost all books and that nevertheless hardly anybody can reach the desired goal, and that in the end effort, labor, and expenses are lost, as I have myself experienced not once but frequently. Thus I had at first put so much faith in Libavius that I believed his words were nothing but Gospel truths. I worked according to the processes he had compiled but achieved nothing but the sowing of effort and the reaping of misfortune. Even when I burnt myself several times, I did not want to stop because I could not imagine that such a man could have written and published so many untested things - especially because he examined and severely censured other men's works.

What I found to be true, however, is very little, and my Vulcan (fire) would in no way go along with such precepts. Therefore, I did not obtain enough to bring forth a louse. Of such writers there are more. They write either too obscurely or in a veiled manner, so that even Oedipus could not guess their meaning, or their processes have only sprung from their own brain and have never been tested. This has spoiled many a natural talent and scared it from working in the laboratory. It would be better if they stopped writing.

So that the beginning laboratory worker and kind reader do not also waste work, time, and money, as I did, I will here indicate a process which I have worked with my own hands and also found good for my patients in many sicknesses. Just as in the following processes I will not present anything that I have not performed myself, assisted by my collaborators. I will honestly report what they accomplished in various diseases, hoping that young students about to begin their practice will be greatly served by it. I do not remember that similar book with such a method has seen the light of day, for in the practice one can see what a specific medicine can do. Now we will proceed with our process for making potable gold.

Take some of the best purified gold, as much as you like, have a goldsmith laminate it very thin, the thinner the better. Cut it as big as a Thaler (old coin like the Dollar), the cut round pieces from a stag's antlers, as big and thick as half a Thaler, take a cement can no wider than the pieces of antlers or half a Thaler, so that only the pieces fit in. One can also make it of good clay, as one pleases. At the bottom of the can put one finger's width of sand or gypsum, which is better. On it put a piece of antlers, upon that a piece of your gold, above it again a piece of antlers, then again gold. Put everything layer upon layer, as the chymists say, till the can is full or till you have used all your gold. Again, put gypsum upon it till the can is quite full, close the can with good lute, let it dry, then set it in a medium strong cementing fire, at first very gentle, then finally so strong that the can will well glow for one hour or four. Let it cool, open the can, and you will find the gold calcined almost flesh-colored.

This work must be repeated three times. The gold will become quite soft and can be pounded and rubbed. Now mix it with calcined antlers and reverberate it on a cupel but not too strongly, for a whole day. The gold will turn almost the color of bricks. Then it is correctly and well calcined, and you may be sure that you cannot get a better calcination. It will become so subtle that it can easily be used in medicines for several sicknesses without any further preparation, for this calx is sweet and not contaminated by any corrosives.

Upon this beautiful pure calx pour the following prepared menstruum. It will extract its tincture in a few hours like blood, leaving its metallic slime behind. Pour the menstruum off, pour fresh one upon it till all of the tincture is extracted and nothing but a dead earth is left. Nor is that to be thrown out, because it has a special power for drying and cleansing all discharging damages, so that they heal all the sooner. Distill your menstruum down to dryness through sand, and a purple-colored tincture will be left in the glass. Upon that pour a good spirit of wine. How that is to be correctly prepared will be found further on in the Treatise on Tartar. Better, use some quintessence of salt. How to make that will also be taught under its title. Set it closed to digest and it will extract a yet purer tincture. Distill the spirit of wine to half, and you will have a wonderful potable gold. Or, if you pour some quintessence of salt over it, you can leave it such as, without distilling it and use it as a medicine, because the essence of salt is by itself a fine medicine, also without gold, as will also be shown in its proper place.

Even if this potable gold is one of the best kinds there are and does its share with glory in many sicknesses, it can still be processed higher, so that one grain accomplishes more than ten do otherwise. Although this preparation looks bad, it is quite philosophical, and as can be seen, does not contain anything corrosive. Neither Salt, Mercury nor Sulphur is added to this calcination, and although it is said that the volatile salt of stag's antlers (carbonate of ammonia) calcines gold, it is true but is no harmful corrosive. By itself it is a wonderful poison-eliminating medicine, which can be taken into the body without harm or damage. In addition, it does not mix with gold in such a way as to stay with it, as the corrosive spirits are want to do - which may be seen by its taste and weight - but the glowing disappears, leaving the gold behind pure and only calcined. I am of opinion that a better calcination cannot be found in the common works than this. Therefore a student may follow it quite assuredly, provided he knows just a little of how to deal with the fire, so as not to make it too hot and smelt the gold into a Body. If he did, all his work and trouble would be lost. If he prevents the smelting, he has already won, and thereafter the subsequent work will proceed without trouble and hindrance.

How this potable gold is to be heightened in its virtue, I will also show. Whoever cares, can do it, he will not regret it. Although it requires some time, it is yet a wonderful work and help in need. Therefore the physicians can see hereby how sincerely I am operating and that I do not hide the manipulations needed to obtain such a medicine or, as others do, withhold what is most necessary and keep silent about it.

Take therefore 1 lb. of the best purified live Mercury (how it has to be prepared will subsequently also be indicated in its chapter), pour over it 1 lb. of the best rectified oil of vitriol, let it digest closed till the Mercury is altogether dissolved. Distill the oil from it quite strongly and finally give it so much fire that it can sublimate up, then it will rise very white and crystalline. Some black feces will be left at the bottom of the glass. Pour those off as they are good for nothing, remove the sublimate, put it back in a retort and pour the oil of vitriol over it. Let it dissolve again, and when this is done, again distill the oil off it and sublimate the Mercury. It will rise even more beautifully than before. You must repeat this work till the Mercury appears bright, transparent, and clear as crystal. Then it is well prepared for this purpose.

Now take 2 Lots of it, and 1 Lot of the previous liquid or potable gold, mix them well, enclose them together in a phial, set that in a vapor fire, and in 20 days, at most 25 days, it will turn quite black and look like melted pitch. Thereafter set it in ashes or sand, and it will become grey-white-yellow and finally red like blood and transparent like a ruby. Thus you will get a medicine like which there is none better in virtues, and it is a true panacea for use in almost all sicknesses, especially where strength is required. It does its effect without any discomfort and almost through imperceptible perspiration, as will be shown in the description of its operation.

After the calcination of the gold, I thought of a special menstruum. Now I will also show you how it is to be prepared to make the work and the process perfect. It depends on the best manipulation, and this is what is to be done: Take a good amount of boy's urine, distill it to half, pour away what is left, and put the distillate again in a retort. Again distill it to half, and do this work three times. With the subtle spirit a beautiful, transparent, shining salt will rise. Rinse all the salt with the spirit out of the alembic, weigh this spirit, mix it with the same amount of the best spirit of wine, let it gently putrefy together for 8 days, then distill it, and you will have a wonderful menstruum for all metals, minerals, and precious stones. With this you can obtain the true tincture of gold.

Do not believe that you will get a better and surer process in authors, though they talk a lot about it and every small shopkeeper praises his goods. Finally you will nevertheless discover for whose benefit their singing is. You must not ask or doubt if this process works or not. You have already heard from me that I do not want to write anything that my eyes have not seen or my hands have not worked, for I do not take these processes from mute books, as many have done. I wish to make a gift to and serve the studying youth with what Vulcan (fire), has given me. Writing is no art nowadays, but to invent processes and verify them in the fire is difficult, and it often happens that one must say, "of that we could not think". If now there is one who does not learn anything by my labors, he will understand and learn it much less from other writings, let him be assured of that.

We must now also explain how and for what this noble medicine is to be used, and how we can apply it to advantage. First, this potable gold is a special treasure and arcanum for keeping the human body from many sicknesses. It greatly strengthens the heart and all spirits. Administer 5 grains of it in water at room temperature. It goes through the body like smoke and preserves it, so that it can be kept from all possible sicknesses till the end of life. It is truly a great blessing of God not having to spend one's life on the sickbed. Wealthy people should have it specially prepared for them to assure them of good health in addition to their wealth. Of what use are riches and property to a man if he is sick, lame, and in bad health, and does not enjoy either food or drink? Truly, health is better than all wealth. Whoever despises those remedies despises God's goodness, for God has not only created money and properties for the sustenance of man but has also given the medicines, so that man might be better equipped for his profession. But I know many who would rather hang themselves than spend 100 Thalers for their health, and they are living so miserably that they are of no use either to themselves or to others. I consider this a great punishment of God.

For example, I have known some rich sows in this country who said that they would rather be sick than poor. Although they were rich enough, they did not get so much enjoyment from their wealth that they could eat one morsel with delight in a full quarter of a year, because of their sicknesses. Oh! May God preserve us from such "hospital wealth!" I would rather guard cows than lead such a miserable life with so many riches, since no man knows that he must finally leave all his belongings here, being unable to take anything along with him from this world. They must be fools, yes, maniacs, to have such thoughts. The body has indeed been created in the likeness of God. Although money and assets are also a great gift of God, the body is yet more than all that and has only been created for the purpose of being maintained and of serving our fellowman with it. Whoever then wants to end his life in good health till God calls him, can achieve it by this arcanum and frequent praying to God.

It is a special medicine for the stroke which it helps enormously. It does not put the physician to shame, unless the stroke affected the heart immediately and finished it. Otherwise, if there is still a little hope left, it does its work amazingly well.

I tried it for the first time on a noblewoman in Polten, Austria, and found it to be good. There lived a noble widow who had a sanguinary complexion and was full-blooded. She fainted at dinner, fell over, let hands and feet flop down, and began a death rattle. Her attendant saw that it was a stroke. Just at that time there was no physician in town, and as I had some business with Herr von Greuss in Walde - which is located not far from the town Polten - the patient's servant at once came there and asked Frau von Greuss for advice. She immediately left to see the widow, and I accompanied her.

When we arrived, we found that she was lying there without consciousness and movement, rustling all the time. I opened her mouth with a wooden instrument and poured some of the potable gold into her in some water of lilies of the valley. I sat her upright and gave her the dose once more, seeing to it that she kept it down, which was the case. Meanwhile, I had her rubbed very strongly with towels. After about half an hour she moved her eyes. I felt that the spirits were ready to return and put some sneezing powder made of lilies of the valley and tobacco into her nose through a quill. all at once she began to sneeze and opened her eyes, but she could not yet recognize anyone, nor could she speak. I now took some teriac, mixed it with a few drops of this potable gold, and after again opening her mouth with the instrument, I coated her upper palate with it. This I did once every half hour, and thus almost the whole night went by. Toward morning I again gave her 6 drops in water of lilies of the valley. Thereafter she became alive again, in one instant so to speak, at the surprise of all present, although she had trouble lifting her arms. I put some more teriac on her palate and opened a vein for her in the morning. Her blood was so thick that it could hardly get out of the vein. She felt increasingly better and also began to speak. I had the following decoctum made for the external members and had her rubbed with it.

Antistroke

decoction Rx. Rad. Aaronis

Pyrethri

Enulae camp. a. j Lot.

Urticae minor, jii Lot.

Castorehi

Myrrhae rub.

Mastichis an. j. Lot.

Aloe succtrinae, jii. Lot.

Piperis longi, jii.

Rosimarini

Salviae acut. an., jii. Lot.

Flor. Lavendul., jii. Lot.

Bacc, Juniperi

Sem. Erucae an. jii. Lot.

I had these boiled for her in white wine and had her arms and legs vigorously rubbed with it. She recovered thus her health in three days and lived thereafter hale and healthy for a few more years. I had to leave one or three doses of this potable gold with her which she was going to keep as a special treasure and use only in case of emergency. Afterwards, everybody wanted to know with what I had cured this dangerous sickness. I could tell of more such cures, but one is enough. I only relate this to show what potable gold can do and how it was applied, so that a practitioner can do the same in a similar case, unless special circumstances require a different procedure. It is therefore not without reason that I describe and report the circumstances so carefully.

If one requires a strong tonic in epidemic diseases, such as in pestilential and spotted fevers, it can be this potable gold, for it not only strengthens the heart powerfully but also drives the poison out through perspiration. Thus it cleanses all the blood of infection, as I have experienced in many places with many persons. When in June and July of 1613 there was a strong outbreak of the pestilential fever in Morea, also called Peloponnesus, in the town of Modon and other places, including Candia, and people frequently died of it, I and my travelling companions survived and preserved ourselves from that poison with this potable gold. I have also cured many Turks of this sickness, which afterwards was greatly to my advantage in the course of my peregrinations in oriental places. Because of it, I received good recommendations from one place to another, so that I could promote my planned travels and finish them the sooner, as I was not only escorted safely but also made some honest money thereby. Whoever, therefore, is infected with such a contagious disease, let him not wait but take 7,8,9, drops of this potable gold in some spirit of citrus fruit. It will immediately cause the perspiration to flow and bring peace to the heart. As

a prevention, take 5 drops early in the morning, once a week, and thereupon perspire a little. Those who have no spirit of citrus fruit may take it in a little wine.

It is an excellent remedy for palpitations and chlorosis, which mostly trouble young girls. Nothing better can be found in Nature, as it does away with the complaints in a few days. Some time ago, I cured a young girl of 14 years in Leipzig. She was so greatly troubled by this sickness that she could no longer walk through her room. I did not give her more than 3 doses of 6 drops each time, in extract of balm.

Her symptoms disappeared, her menses occurred, and thus she recovered her health. It is an excellent remedy for activating the menses. To such persons one gives, four days before the New Moon, 5,6,7,8 drops in either extract of balm or extract of saving (red cedar, juniper). If necessary, the body can be cleansed with the common purgatives. To do this, there is nothing better than the following pills. As a special arcanum, they remove the obstructions of the uterus, and not many like them can be found.

SPECIAL PILLS FOR THE MENSES

Rx.Extract. ex Baccis Lauri

Sabinae

Flor. Centaur. min.

Calendulae an. ji. Lot.

Salis Melissa

Sabinae an. j. Lot.

Olei Sabinae j. Lot.

Borrac. Vener jii. Lot.

Croci orient.

Mass. pil. Aloe phang. ji. Lot.

fiat massa pilularum cum oleo cinamoni. (for the pills).

Of this one gives morning and evening one scruple in one go, at the usual time. This composition is recommended for everybody. Following this, one gives the potable gold. It is said that wealthy women have these two arcana in their family medicine-chest, enabling them to prevent many a misfortune. It is indeed put so clearly before their eyes that they cannot go wrong.

In the case of a difficult birth, I know nothing better. It does not only accelerate the living birth but also the still birth and the afterbirth. At this one might be surprised. I saw it happen in 1612 with a Countess in Styria. She had been in labor for three days and as a result was exhausted. The child in her was dead, and everybody expected her to give up the ghost. Her husband did not spare any means. As I found myself about the same time at the Inn of that locality and heard how everybody lamented and felt sorry for the Countess I opened my travelling medicine-chest and sent her 10 drops by the innkeeper's wife, to be taken only in a little wine. As soon as she had taken it, she was in labor pains again, although they had already stopped completely. After about a quarter of an hour, the baby was born and the afterbirth followed. Thus the woman was kept alive. Her husband soon came to me at the inn, asking if I was the man who had sent something to drink to his wife. I said yes, and he asked me to do him the favor of driving home with him, as he wanted to show his gratitude to me. And as my advice was further required, I was ready to give it. I drove to his home with him and spent the night there. I was taken to the woman in childbed. She was so weak that she could not speak. I gave her 9 more drops in a little Malvasian (wine) and ordered her to be kept alone during the night, though care should be taken that she did not sleep too deeply. She rested very well and gently. When she awoke toward morning, she asked for me. I went to her and she thanked me, saying that next to God I was her life's extension. She begged me to stay with her for eight days, but as my travels did not permit it, I excused myself. Then she pulled a diamond ring from her finger and gave it to me. Her husband, with great thanks and joy, rewarded me very generously, and I stayed there for another half day. The Countess was feeling fine, and so I was graciously allowed to leave and also acquired - let there be no envious talk about it - a famous reputation. My name has become honorably known in all Austria, where physicians are somewhat more highly esteemed than in this country.

For cancer it is a powerful remedy, as it takes it out from the center to the circumference, provided one does not wait too long before it spreads into all the veins and corrodes them. If it reaches that stage, we cannot hope for a cure, but if it has not got the upper hand, it can well be cured with this medicine. Thus, in 1619, I had as a patient a wealthy woman who had previously tried many things. I also tried for three months but it did not help her, nor did the remedies which had done much for others - they were all in vain. Therefore I proposed to make potable gold for her, as I knew no other remedy for her cure. She was glad that I could suggest yet another remedy and procured to this end 5 Lots of fine gold. I prepared it according to the prescribed process and gave her 5 drops in a little warm wine three times a week. But she had to perspire a little after each time she drank it, as it is a diaphoreticum (perspiration-inducing) all by itself, even without any other means.

When had taken the potable gold for some time, it greatly purified her blood, so that it became noticeable: the cancer did not eat further all around as it did when she used the other medicaments. It stood still and cleared up. Likewise, the woman's pain became less day after day. On the outside I only put Sal Saturni (salt of lead) in it. The pain stopped altogether, but the cancer did not disappear quite so fast. She, however, did not pay any attention to it but moved about as she pleased, taking care of her household as before. She had no further complaints to the end of her life and lived after this cure for six more years. She was a woman 46 years of age.

This cure should be well remembered, for most physicians consider cancer incurable. But why is it considered incurable? Not because of actual malice or a defect in the medicine, but only because of the physicians' laziness.

They do not wish to prepare those medicines, as will be shown further in another place.

In the same year, in Leipzig, I cured a wealthy man of his dizzy spells. he could not safely go down a stair without someone walking next to him and holding him firmly to prevent him from falling. This was so serious that he once fell from his chair. Because of his frequent dizziness he was afraid of a stroke. To him I also gave this potable gold, but only once a week, and I prescribed for him a solution with which he had to wash his head once every eight days. After the washing, I also prescribed for him a balsam which he had to rub on the upper spinal cord, both temples, his nose and nape. In this way he was cured of this sickness with the help of God, at the age of 55. The solution, however, was prepared as follows:

Rx. Rad, paeoniae

Caryophyllat.

Zedoriae an. j. Lot.

Flor. primulae veris

Lavendulae

Tiliae

Anthos

Rosar. rub. an. jii. Lot.

Fol. majoren.

Rosis marin.

Melissae

Lauri

Salviae an. j. Lot.

Thuris opt.

Succiniam j. Lot

Everything to be boiled into a lixiviate.

With this he had to wash his head and quickly dry it again at a coal fire.

The balsam was prepared from the following oils and used as written above:

Rx. Olei Mosch. per expression, facti jii. Lot.

destill. Bensoini

Caryophyll. an. jii. Lot.

Rosar.

Cinnamoni

Citri an. jii. Lot.

Majoran

Rutae

Succini albi an. jii. Lot.

Moschi

Ambrae gris. an. jii. Lot.

Ladani opt. jii. Lot - to be mixed according to the Art to prepare the balsam.

This balsam cannot only be used to great advantage for dizzy spells but also for strokes and other serious head disorders, as will be further reported in another place.

If you wish to use this potable gold for the maintenance of your health, take 8 drops within 14 days in a perspiration-inducing liquid, and perspire somewhat thereafter. It is always better perspire a little after taking the medicine than to use it such as without anything else, for in sweating the blood is cleansed and everything impure is eliminated with the perspiration. Children, however, must take it only once in 4 weeks, and only 3 drops in one go. Likewise those who are over 50 years of age. Those who are over 60 can use it once in 14 days, because in old age bad moistures collect which must be driven out. In this way man can be kept hale and healthy to his last hour.

I knew a winegrower in Croatia. That man was 136 years old, at least, as he told me, and looked like someone about 60. He had a grandson whom I also saw, aged 72 years. He admitted that as long as he could remember he had never

been sick, because he still tended to his vineyards in his great age, was hoeing there, and did all his work as well as a youngster, and not even one finger was hurting him. He related to me many stories of the Turks which had taken place in Croatia, and the man had such a remarkable memory that I could not wonder enough at it. I asked what was the reason that he had grown so old and had always been in good health. He told me he had some earth which he dug up on a special mountain, that he was taking a pinch of it every morning in a tablespoon of brandy, and that that had kept him so long - in addition to God. He showed it to me. It was red as blood and like grease and stuck on one's fingers. I took it to be sealed or Lemnian earth or solar fat (axungia Solis), as there were various mines in the same locality.

As I had no time to go myself to the mountain with the man - for it was a good two miles away - not very far from the Turkish fortress of Petrinja - I could not obtain any of it to take along with me to test it to see if a Solar Spirit (Spiritus Solis) was hidden in it. But it must undoubtedly have been a solar spirit, else it would not have had such power. And this was especially noteworthy: If this earth was put in brandy, it melted almost completely in it. It is sure that Hungary and the kingdoms belonging to it had been especially rich in various goldish ores - and it is almost everywhere - but they cannot all be cultivated due to the Turkish danger. I had seen in Sohl that the Turks had invaded the country and taken away with them over 200 miners, men and women. One hears of that everywhere in the Walachia and in the Croatia, and in those places there still lies hidden a great treasure. When one gets to Macedonia and Thrace, especially around Philippopl, one can find the terra sigillata (sealed earth) at various places in different colors, red and white, which are also used by the Turks for various sicknesses. I myself have collected some of it and brought it back with me to Germany. I do not relate these stories without a special reason, for they prove that there is a special power in the solar spirit of gold for maintaining life, strengthening and increasing the vital spirits, thus obtaining the desired health. Therefore Geber says not unjustly: In the Sun and the Salt of Nature is everything. Now enough said of this for this time. We will proceed further to other preparations.

Joannes Agricola - *Treatise on Gold*

Chapter 3.

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Chapter 3.

Oil of Gold Prepared in the Common Way.

Gold purified through antimony, 1 Lot. Dissolve it into a gold-colored oil in a circulated oil of salt. When the gold is totally dissolved, pour oil of wine over it, not the common one obtained from tartar but that which is distilled from the best wine which still has its mother and lees. This done, the oil of gold will in one moment be changed into a blood red oil, like a beautiful transparent ruby. Now add to it 6 Lots of good spirit of wine to one part of this oil, set it in mild ashes, put a well luted alembic on it and begin distilling, at first gently, finally stronger. The gold will rise bloodred over the alembic, giving off a lovely lustre. Now it is prepared.

NOTE

This process may well be short but it has many difficulties in it. It is not so easy to tinge as many believe and as the words look because it requires two strong requisites, namely, the circulated salt-oil and oil of wine, and it takes a great deal of trouble and work before the oil of wine is made. The author has not indicated how it is to be prepared, but in the treatise on tartar he has written about it. However, it is just as little the correct one as that of which he warns us in this process. But I have added the right preparation, obtained by my experience, which can be found in my Note, where the kind reader can look it up. It must not be made from the feces of the wine, as the author indicates, but from the purest wine, if anything good is to be done with it, as experience teaches. For the pure oil of wine mixes with the wine. That which is made of the feces of wine, however, may well mix with it but it does not take its essentials over the retort. Whether this be a right solution, I let everybody see for himself.

What has just been said of the oil of wine also applies to the circulated oil of salt. If the gold is to be rightly opened, it must be the circulated quintessence of the salt - but how it is to be prepared, the author does not indicate here either; although he has a description of the oil of salt under that title, it is also bad and according to the common manner. I have added a preparation taken from my own experience, which can also be found there.

But in order to make the process soon available, uncurtailed, to a beginner, I have not spared the effort of adding it also here. If anything were perhaps lacking in one place, he could find the discrepancy compensated in another. It takes a lot of industry and time to get it right. To make it right, however, the process must be done as follows:

Have a retort made for you that has a tube at the back of the bottom. It must be quite narrow below, somewhat wider above. Fill it completely with stone-salt, such as is hewn in the mountains of Salzburg, Austria, and in Styria. Wall it in a furnace, lute a receiver in front but make a small hole between the joints with a quill, to give it air when the spirits move. Now give fire per degrees till the salt flows in the retort like water, which you can easily notice. Then let a few drops of water drip inside through the tubes, and the salt spirits will soon rise, penetrating forcibly into the receiver. Now you must give them some air through the small holes but close them up soon again, and they will move all the quicker, and it is so nice to see. You must continue doing this till all the salt changes into spirit. Take all the spirit and rectify it to remove the phlegma.

Of this spirit take 1 lb., add to it as much melted salt, knead it under potter's clay and turn it into little balls. Let them dry in the air and distill them trough a retort, as is customary. You will obtain a beautiful yellow-green spirit. Take the caput mortuum (death's head) out of the retort, powder it, and lixiviate the salt from it with lukewarm rain water, filter and coagulate it, dissolve it again and coagulate it. You must repeat this till the salt has become as beautifully transparent as crystal and flows like wax.

Add it to the spirit and let both well unite in the digestion. Now you have a fine spirit of salt that dissolves gold rightly and liquifies it. Aside from doing this, it is also a good spirit for use in medicine, and the common spirit can never equal its performance. True, it requires a lot of work but it pays the effort well, as everyone who uses it in such work will see for himself. The gold calx will also become as beautifully brown as if it had been calcined for some time with Mercury and Sulphur.

Thomas Kessler of Strasbourg also indicates a fine manner of making the spirit of salt with bellows: One has to have a retort made of good clay. It must have a tube at the back into which the bellows are directed, to enable the wind to get directly into the center of the retort, driving the spirit into the receiver. True, it is a fine piece of workmanship, but does not yield much. The retort must strongly glow for three hours before one begins with the bellows. I tried it, but when I saw that it would not yield much, I did as follows:

I had a retort made with two tubes, one in the center and one bellow at the bottom, as the figure shows. Through tube (a) I let the water drop in as indicated in the previous process, and quickly closed the hole up. After that, I directed the bellows into tube (b), and as soon as the cold water had dripped inside, I worked the bellows. An observer would have had great fun seeing how frequently and wonderfully the spirits ran into the receiver, and of what colors they were. It all goes fast, but the bellows must be glued to the tube to prevent the spirits from running out backwards. Therefore, it must be fitted with a long iron tube at the beak, so that it does not burn. The furnace must also be arranged accordingly, to let the tube stick out far enough. Likewise that which is supposed to stick out above. In this way things will go very well. It is possible to prepare a good amount in one day, because the air of the bellows does not permit the spirits to fall down again, to be united again with the Body, as happens otherwise. For they must go - but the receiver must be big enough, or else it is not without danger, as anyone will easily agree. For if the spirits force their way out and do not find enough room, they break the receiver, as happened to myself, not knowing that they are so violent and push almost like the spirit of tartar.

If someone cannot work this process of the spirit of salt for lack of the right instruments, and yet would need it, let him take 1 lb. of crushed salt and 2 lbs. of coaldust, mix them well together and distill them in the common way through a retort. He will also obtain a good spirit, but it must be well rectified once or three times to rid it of its feces. He can also use it in the dissolution of the Sun, as our author would have it.

The reason why I here describe the spirit of salt in so many ways is so that the laboratory worker be instructed how important the menstrua are. Often a single bad manipulation hinders a great work, and those who will only use a common spirit of salt, as the distillers sell, will no doubt work in vain and achieve nothing useful. It is the same with the oil of wine whose preparation, as already mentioned, you will find further on. The better the wine, the more wonderful the oil will be. You can use Spanish wine and will obtain all the more, as experience has taught me. But his you must take careful note of: If you have distilled once, you must repeat it once or several times. Then you will get a good medicament, for the often repeated process turns the work into a subtle medicine.

When you have driven all the gold over the alembic, put it in a cold place for some time, such as a cool cellar, and in time beautiful transparent crystals, like rubies, will sprout. You can take those out with a wooden pair of tongs, and dry them on paper. There are very few of them, as the Body does not all rise in one go over the alembic. Therefore the Death's Head can be taken out, reverberated with sulphur flowers, and the gold calx will become quite pure. Pour again some spirit of salt of salt and oil of wine over that, and proceed as before. The entire Body will finally rise over the alembic. More will be reported on this at another place when we will deal with other preparations.

These crystals still have another advantage: Take one part of them, add 3 parts of Mercury of Saturn optim. purified, set it together in sand in a phial and give it a graduated fire. Mercury will precipitate in a short time, and it will not only result in a fine medicine but also in a sample of gold, so that you can see with your own eyes that the Mercury of lead can thereby be turned into gold. It can either be melted with borax or melted and assayed by the cupel with lead. Thus you will certainly find that it is no empty talk, although some would deny that it is a proof. It might well be so, as the crystals made of gold can again be brought back into a Body and provide a gold proof. It is easy to answer this by first observing the weight of the crystals, then that of the added Mercury and the prepared gold. In this way you will see if you have an excess or not. I am of opinion that there will be some, but I do not say that it will be of great importance in regard to all costs incurred, because it does cost something to prepare the Mercury of lead. Thus, these crystals also do not just cost a little, yet one can nevertheless prove thereby that it is possible to make a transmutation without the Universal Tincture. Whoever wishes, can try it, he will not work in vain, nor will he lose much thereby, and the gold will turn out quite beautiful, more beautiful than that from the Hungarian mines, of which I once had 3 ounces together.

Nor is this oil of gold to be despised, because it is of great usefulness in medicine if properly applied. Whatever I have learned, I will reveal. It may well be that others have also tried it for other sicknesses, but I have mostly used this composition for the French disease (venereal disease), when it strongly drove the poison out through perspiration, thus healing the infected persons.

First I tried it on a scholar who had a training school not far from Vienna in Austria. He was not satisfied with Germany but devoted himself to the French. ("The French" was the name given to syphilis). He had acquired it from a French "putain", or whore. He already had it to the highest degree: his hair was falling out, boils came out on his temples, spots were also on his thighs, and whatever other symptoms there are in such an infection. I did tell him that I was willing to cure him, but that it would be at great expense as the infection had already advanced so far. The woman with whom he was living offered to assume all the costs, if only he could be restored to good health. I thought they were sleeping together, and it looked to me as if she were also infected, but she did not say anything about it. I prepared this oil of gold for him, as I had received enough money for it, and gave him 6 drops a day in one dose, in some spirit of Lignum Sanctum (holy wood). I made him perspire to dryness in a bathroom, and when he had done this for four days, he got a rash over his body like the rind of a birchtree. He was very ugly to look at, as his blood was totally infected. I continued for 14 days, and it drove the disease out of his body most formidably. Then I made him take a bath in the following solution: 2 lbs. of sulphur, 4 lbs. of salt, 1 lb. of tartar. All this had to boil strongly in a kettle with water, till the water was quite whitish. In that he bathed four times, when the dirt fell off him and he became quite clean and healthy.

When children contract smallpox or the measles, they cannot be helped by any better remedy than this oil of gold, giving them once, twice, or three times each time 4 drops in a tablespoon of lentil broth. It will soon drive them out and off the heart, so that they are rid of the sickness in a few days.

Against dizzy spells it is likewise a wonderful expedient. With it I cured two wealthy persons in a short time, one a man, the other a woman, both belonging to the nobility of Thuringia. I did not give them more than 6 drops in a spoonful of swallow-water, continuing thus for 14 days. Externally, I had their temples rubbed with snake grease. Their dizziness disappeared, and one has to-date not noticed anything of it in them.

Nasal polyps are chased away very quickly, as I tried doing for a noble young lady in 1630. She was greatly troubled with it. I first put some spirit of Nieri on it until was everywhere sorely corroded, although it was sore enough by itself, greatly hindering her breathing and speaking. After that, she had to coat it every morning and evening with this oil, and it may well have still other virtues in medicine. But because I have no experience in that regard, I cannot give a true report on it. The kind reader will have to be content with the experiments I have related.

With this oil I still did something else: I took one Quentlein (1.66 gr.) of it, added to it 3 Quentlein oil or tincture of sweet antimony and congealed it in a phial to a fixed, darkred powder, which took four weeks. Finally I gave it a very strong fire and it flowed together in a glass. I removed it, pulverized it, and used it in many sicknesses. It also did its share amazingly well and was almost like a panacea.

I wanted to know if I could also put a golden-yellow coat on Luna (silver) in aquafort. I beat the calx down and edulcorated it, then added some of this medicine and set it in a gradation fire. The Luna calx turned brownred in 8 days, and red oildrops were hanging in the phial above the matter. I congealed it still longer, the drops vanished, and everything became red. On the very day I intended to take it out, the imperial invasion took place. Not only was the glass smashed but I was robbed of all my medicines, so that I cannot tell whether or not it would have resulted in something. Someone who has this medicament in stock should test it, he cannot lose much by doing so. I am of opinion that it would turn into something, especially because the ferment had been united to and congealed with the tincture of antimony. But I do not wish to be the cause that everybody embarks on goldmaking, because I myself

cannot do it. I only say that Nature is wonderful in her works. Whoever reflects on them may well occasionally discover a secret. Often a bad and mean thing has so much in it that nobody would believe it.

Joannes Agricola - *Treatise on Gold*

Chapter 4.

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Chapter 4.

Another Process for the Preparation of Oil of Gold

Take purified gold, 2 Lots; quick silver, 8 Lots. Make of them an amalgam such as goldsmiths make when trying to gild. Put this ground gold in a leather and dry the quicksilver off it. The () will be left in the leather like a white mass or dough. Put it in a crucible or cupel, mix it with three times as much sublimated sulphur, then set the cupel in a reverberating furnace till the sulphur and the mercury disappear completely and the gold is left in the cupel like a brown powder. This gold is as fluffy as a sponge. Put it in a glass, pour over it some oil of vitriol, which has been united with the White Swans, thereafter distill it to oil over the alembic. This oil must then be rectified with spirit of wine, strengthened by its oil. In this way one can also obtain a beautiful red oil.

NOTE

In this formula the author again shows us another process for making potable gold. Although he does not lack in processes, they are deficient in so far as gold cannot thereby be made truly potable. If there is a subject under the sun with which many processes have been undertaken, it is gold; and if there is one by which less has been accomplished, it is precisely gold. Therefore many have been induced to even bar gold from medicine. But those have not acted intelligently, for what fault is it of the pure and good gold that it is treated so wrongly? It would rather do away with such processes than it must submit to be tortured so badly as the daily works show more than enough. These Laboratory workers err all together in the sole key for opening its hard locks and fetters, for many works disclose an uncertain foundation. However, where there is no foundation, how can a stable house be built? I remember a funny dreamer in Leipzig who pretended that gold, which is a pure fire, could not be opened or made potable except by another pure fire. In so saying he was not wrong, and it is so in truth. But I asked him what he understood by the fire that was to dissolve gold. He did not wish to tell me but said that it was a fire that only lights but does not burn. Now I well remembered that Paracelsus also wrote of such a fire, but whether that dreamer understood what was meant by it, I doubt very much, for in such a fire the angels and good spirits are also transformed.

I asked where he hoped to get this pure fire. Now it was difficult to get him to talk. Once I tried getting drunk, thinking that the wine was a sure betrayer of many secrets. It worked, and when he had become drunk and truthful, he let the art out of the bag and said that it was no other than the wil-o'-the-wisps, that they were such a pure fire. I would have loved to laugh at it but could not let him see what I thought till I had learned all his secrets. I also wanted to know how to catch them, but he did not wish to disclose this secret to me. But I did not think other than that this art would burst my stomach with laughter - or I already had the will-o'-the-wisps in my stomach and they wanted to get out again. I could not imagine that the old fool was serious, but he insisted solemnly. Then I thought how God could let a man fall down so much that he could imagine such absurdities. All that I found out - and that was also the reason why he had been called will-o'-the-wisp-catcher during his lifetime. I have met many other strange dreamers but none like him - but I cannot know if he ever caught a will-o'-the-wisp.

We must also examine the author's process. Many think very little of it, as the () must be amalgamated with Mercury and calcined with Sulphur. For they say that Mercury robs gold of its inherent moisture and that it becomes subsequently all too dry owing to its reverberation with the Sulphur. Whether this is true or not, I will indicate in the proper place, It may very well be that this calcination is not of very great benefit to medicine, but whether it is due to the fact that Mercury robs gold of its moisture, I will not dispute. So, it cannot be highly considered because of this, but the whole process appears suspect to me, and I believe the author has never worked it himself or achieved potable gold by it.

He wants to dissolve the gold with oil of vitriol and drive it thereby over the alembic, which gives me much to think about, because the corrosive oil of vitriol does not dissolve gold in such a way that it rises with it over the alembic. It

is evident and requires no proof that the corrosive oil of vitriol fixes all volatile spirits and makes them stable, including sulphur, which becomes so fixed by it that no fire can light or burn it. If it does that, how then can it take gold, the stablest of all, along with it over the alembic? Here it is not important that some object and say that gold can be worked so far with other corrosive spirits that it rises into the alembic - why should the spirit of vitriol not do the same? But the answer is easy to find: one corrosive spirit is not like another. I am here speaking of the corrosive spirit of vitriol and not of its sweet arcanum, of which something will also be said later. For I am well aware that from vitriol a menstruum can be prepared that can dissolve and take over the alembic not only gold but all other metals and precious stones. To do this, however, is not everybody's doing and ability, and it requires an experienced and learned Philosopher and not a common laboratory worker. The process also takes quite some time, and the White Swan must also be present, as the menstruum is useless without it.

But what kind of Swan this is, neither Basil nor Paracelsus has expressly stated, although Basil speaks about the Swan. But if it is to be understood literally, I very much doubt, and I cannot imagine that the common laboratory workers know the White swan or know how to look for it. Nor can I believe that Poppius understood it, otherwise he would have achieved much more precious and greater works with this menstruum, as it can be called a Universal Menstruum, which it really is. In nearly all his works our author goes for the menstruum prepared of tartar and vitriol, which he no doubt understands here, and of which we will also speak of in its place. Soon afterwards he indicates how to prepare it under the name of "arcanum of Tartar". Thus he also speaks a great deal about it in his Preparation of Silver and Preparation of Tartar, using his process seven times, as indeed a Universal can do. Let scholars judge of it, my opinion will be found expressed clearly enough in my Notes.

But I consider the menstruum with the Swan of Basil and Paracelsus much more important than that which I saw at a wealthy Philosopher's. He put a whole Ducat in it. It disappeared in half an hour without any noise, and the menstruum turned bloodred from it. Therefore a young chymist must take great care not to trust every process - only to gain misery and bitterness for his great trouble. True, a process can soon be written, but it only becomes apparent how true or right it is when it is put in practice and elaborated according to the letter. If any man were to verify his writings and processes, of which he smears together big volumes, oh! how badly he would fare and he would finally be obliged to say that his writings had only been the thoughts of his brain, and that he had imagined that they would also succeed in the fire.

Shortly before, I thought that many do not speak highly of the calcination of () with Mercury and do not wish to adapt it for medicines, such as those which are prepared with the power of the fire, like the Aquae Regis and the spirits of the salts of ammonia. I will therefore indicate here a fine method, for although gold must be calcined if one wants to make something important of it, suitable for all works, dissolutions, and extractions, it must be done as follows:

Have a fine crucible made of the kind that the glaziers have. It must not be too big or too small. Set it in the glass furnace at a constant heat and let it stay in a continuous flux. It must be placed in such a way that it can frequently or constantly be stirred with an iron wire. Let it stand in that heat for 14 days, and you will find a beautiful gold calx within that time. It melts easily in almost every menstruum and can afterwards be worked as you like. Little is lost of the gold. I have sent 3 Lots of gold to the glassworks, and when the calx came back, not more than half a Quentlein had been lost. It was so delicate that no laboratory worker could have made it subtler or clearer, of a somewhat blackish-brown color. Such a calcination can easily be done. The glazier gets a good tip and does it, leaving the stirring to boys who are doing it day and night. And a Thaler goes a long way.

There are other ways of calcination. I have seen a gentleman in Austria calcine gold in a constant fire, but the fire was made of pure sulphur. After four weeks - for that is how long he left the gold in the fire - it was so soft that it could be ground into a fine flour between one's fingers. But because this calcination is not suitable for everything, I will not recommend it. Each will see which kind of calcination he should use for his work. Before reporting the above, I had indicated that which is done with stag's antlers. It is not only suitable for all works but there is no suspicion of a corrosive in it. Likewise, the above calcination in the glass furnace can also well be used. I have read about more than a hundred calcinations of the Sun, but when they were examined they are nearly all cast over one last and issue from one foundation: either through dissolving waters or through fumigations or cementations, through minerals, also through lead, because the fumes of lead also calcine gold, rendering it so soft that it can easily be reduced to a powder. I would not want to use it for medicines, however, as lead fumes are poisonous and contain arsenic.

Some assert that gold can be calcined with the salt of rainwater, May dew, or hail. If it is put in it while in flux, it is supposed to turn into a delicate powder which can afterwards melt in any kind of liquid. If that were so, it would indeed be a fine thing, and I would myself think highly of it as it would be quite a handy means. However, I have neither tried it nor worked with it, and I can therefore not say anything sure about it, because I cannot make a reliable report about something my eyes have not seen themselves.

Once someone came to me who said that he calcined gold with the salt of rainwater, May dew, or hail for all his works! I do not wish to contradict it, as they contain anyhow a great secret for many sicknesses. I also know that some have prepared potable gold with their spirits, but it takes some effort to make the salt and requires a rather long time. The same is done with rainwater, but it results in a beautiful salt. I know a man who wants to make the Philosophers' Stone from rainwater. Whether he will accomplish it, time will tell. But I believe that he will achieve little without the central salt of Nature. It is probably true that water is a receiver for all celestial influxes, though it is questionable that it can be specified upon metals from its general condition. I am leaving to every man his will and ideas. They will show him what he can do with it.

ON THE ESSENCE OF THE SUN & THE ARCANUM OF SULPHUR OF GOLD

If one takes what is beaten thin/
Opens it as it should/
Then pours into it drop by drop/
Mutratur which grows beautifully on the Rhine/
Of that an oil arises of itself/
Take note of what I am telling you about it/
The gold then settles again/
Slowly drips away until at last/
The effervescence stops of itself/
Put a long alembic on/
And strongly distill everything again/
Till no more juice comes off it/
Then pound it to a fine powder/
And pour it into warm water/
To dissolve the sharpness/
Stir it with a wooden spoon/
Pour it off/ and pour fresh one over it/
So that nothing corrosive is left/
Gold calx should be left brown and subtle/
But if there is much of it/
Repeat the work again/
Just as before/
The more often this is repeated/
The more subtle and beautiful it becomes/
Nor has it any grain or lustre/
But that has been completely destroyed/
That one has also to take note of/
When you believe that everything has been poured off/
Dry it quite gently/
Or else it will quickly ignite/
Bursting the oven at short notice/
Everything above and below/
That happens as fast as lightning/
Therefore, use common sense and intelligence in this/
Something else I wish to relate/
If you cannot get any oil of Mutratar/
Take common herbs/
Prepare them into a fine salt/
Dissolve it into an oil/
Use it as indicated above/
When the gold has been prepared/
I give you this additional information/
Twelve letters - the number fourteen/
Five syllables and also six vowels/
Rectify this very finely/
And pour the gold calx into it/
Set it in digestion well closed/

Then leave it for several days/
The solvent will become beautiful and red/
This essence will help you in case of need.

N O T E

These rhymes have been taken from an old book, and many have played with them like the cat with the mouse, believing that enormous secrets were hidden in them. Thus I met a laboratory worker in the archbishopric of Salzburg, who was otherwise no incompetent man and knew some fine manipulations. With him I had many discussions about the secrets of alchymy. Finally, he told, but confidentially, that he had a description of the secret of the Philosophers' Stone. He was so secretive about it, however, that he did not let the cat out of the bag. At last I promised him so much if he only let me read it once a quite superficially, that he agreed. After reading it, I had to laugh out loud that the good man considered these empty verses so important. I had hoped that I could surely go fishing in them, but I could hardly catch a crawfish.

I told him that there was nothing secret in these lines, that it was only the fulminating gold (or: leaf gold), aurum fulminans, known to all alchemists, that was indicated in them, and that he did not understand the word Mutratar nor the last eight lines in which mention is of 12 letters, 5 syllables, 6 vowels, and the number 14. He said that they contained a great secret - but this secret is also known to the coal-heavers. I believe that many would attain to the Art or some other secret if they did not set such great store by those futile things, they are only cheating themselves thereby. Good Lord! What a catalog of names I could report of those I met in my travels who relied on such false rhymes. They had bought them for a great deal of money from vagrants or fraudulent rascals, believing that they now had all they needed, that nothing was lacking, and that they had only to start working. But at the end they were shouting: "The thief has cheated me!" And I have seen more than three gallows full of such vagrants who peddled such rhymes.

When they came to me with them, I questioned them. They failed lamentably, bringing forth many excuses. They pretended not to understand such high matters themselves but had found the verses in some old vault or cloister where many distinguished alchemists had lived many years ago - to which they could swear magnificently. Whoever is not careful is easily caught in their thieve's net, for one's inquisitiveness is strongly prodded after such a mendacious discovery, especially as they can affirm it with so many oaths. They also say that they have seen such a large quantity of man-made gold, yes, that they themselves had seen it being made, and they use whatever more bacon they can find to bate the trap. What man would not listen with delight to those sirens who sing so beautifully that it makes you forget food and drink, like the companions of Ulysses. O you frivolous fellows, how will you one day answer for it that you attract so much money into your pockets with your thieving finger?

I knew a gentleman in Thieving who had been given 5.000 Thalers to a vagrant for such a process. when I became acquainted with him soon afterwards, he trusted me so much that he let me read it. After reading it, I told him that I had that process and poem four years ago and that it contained nothing but fantasy and nonsense. The good man was greatly startled, and when I explained one thing and another to him, also telling him that precisely the word Mutratar and the twelve syllables were in that process just as in these rhymes, he became even more startled and recognized the futility of this process. Although he said that he was going to write to the swindler, wherever he was, I have not heard any further, but I believe he did not say much to this fraud but preferred to keep quiet. It may also be that the swindler used a false name, as those fellows normally do. Nor do I doubt that our author himself thought little of it, because he gave it the title, "On the essence of the Sun and the arcanum of sulphur".

I must confess that there is no more stupid and bad process than this among all those dealing with gold. If the spirit of wine were to lie on it for a hundred years, it would not extract the right essence or sulphur from it, as experience shows more than enough. It is easy to write such things, but experience tells how true the writing is and what the process can do when it is tested. But so that beginners may not be misled by such poetry, I will explain here briefly what is said in it. Many a man might think that it is all seraphic wisdom, while it is nothing but an operation for acquiring fulminating gold.

The explanation is as follows: Laminated gold has to be dissolved in Aqua Regis. When it is dissolved, the oil of tartar (for Mutratar is tartarum', the letters have only been transposed) has to be poured in drop by drop. A strong roaring and effervescence will arise, But the drops must be put in only one after another because of the fast ebullition. When the fermentation has stopped and everything is calm, the liquid has to be distilled off (it can also be just poured down while the gold precipitates). Some powder is left. Warm water has to be poured on that to remove the sharpness. If the gold were not altogether dissolved softly and subtly, the process has to be repeated from the beginning. Then it has to be dried gently, only in the room or in the air but not in the sun, or else it would quickly ignite, breaking everything it meets, as I once experienced in Austria. I had 8 Lots of this gold calx and wanted to dry it in the room on a copper cover in a stove. I had hardly left the room, as I wanted to go to dinner, when a rumbling arose in the room to startle everybody in the house. We did not know what it was. When I had opened the

door of the room to leave, the gold ignited and broke the tiled stove into a thousand pieces, also shattering the railing around the stove. Thus I sustained a great loss, as I did not retrieve one Pfennig (small German coin) of these 8 Lots of gold.

If sulphur flowers are mixed with the gold, however, and they are again cemented and burnt, it loses all fulminating, which is quite surprising. What is even more surprising: The fulminating is due to the tartar, and if after the gold has fermented, a good amount of oil of tartar is poured on it, it does away with the in the same way, no matter how strong the heat is that one applies. Many will not believe this, and yet it is the truth. Many might say that it is against Nature, because two contrary or different operations cannot be done simultaneously in one subject.

If you have no oil of tartar at hand, the verses tell you to burn grape vine to ash and make salt of it. Then let it flow to oil in the cellar, and use it in the same way. This also works, it also precipitates the gold, but vinewood is often harder to obtain in many places than tartar. Nor are you always tied to these salts, others also precipitate gold, such as the salt of pine trees or ashes of firtrees, and there is more ash from firs than from vines. In addition, there exist other means for precipitating the dissolved gold in Aqua Regis than the salt of tartar, although Angelus Sala, in his Aphorismi, does not believe it. But experience is the teacher of fools.

But is it true that gold receives so much power to explode from these salts, someone might ask, not unreasonably. I say no, although the striking power does not properly stem from the tartar, for I have at various times precipitated gold with fir ashes. It did not explode, although the fire was rather strong. This has to be ascribed to the spirits which ignite the sulphur of the gold, making it explode so violently. This exploding occurs contrary to common sense, because other powder fulminates ahead or above itself, while this one kicks backwards and below itself, and with such force that one Quentlein of that fulminating gold has more force than 8 Lots of common gunpowder.

The sulphur of iron does the same as gold, but aside from that, no sulphur of any metal does, no matter how it is prepared. That is why many would like to conclude that these two metals must have a great kinship between themselves. They believe that the sulphur of iron is as good as the sulphur of gold, which is quite wrong, however. In all eternity, the sulphur of iron will not become a sulphur of the Sun, irrespective of how the preparation is carried out. The sulphur of iron remains what it is and cannot resist the power of Saturn (lead), even if it is a valiant hero. Nevertheless, it must concede victory to this old gentleman.

Now we will finish with the paraphrasing of the rhymes. When everything has thus been prepared and the calx of gold has been achieved, one is supposed to pour on it some spirit of wine, that is 5 syllables, 6 vowels, 12 letters, together the number 14. These words have misled many a man, believing that they contained a high arcanum, and the true Philosophical Menstruum were thereby revealed. But it is not so and is only bla-bla and humbug, which is no arcanum, much less the Universal Menstruum. This is the reason that many believe that the spirit of wine must be the true Philosophical Menstruum and that they spend a great deal of time acquiring it.

Well then, with this spirit of wine one was supposed to extract the tincture of gold, and this was supposed to be the essence of the Sun which could help in case of need. Let those believe it who want to, I for my part cannot believe it. Nor do I let myself be persuaded, because I am quite certain that the spirit of wine does not extract any essence out of this fulminating gold. It is far too weak to decompose such a perfect subject, the most perfect Body. And what would it matter if it could extract an essence, it would yet not be the essence that could help you in need, for it would only be a subtle part of the gold, separated from its Body. It can do little, and can in no way lead you to riches, for it has not become plusquamperfect (more than perfect), as it has to become if it is to do something for others. Gold does not have its powers from it, it has no more than it requires for its own perfection. If it is to accomplish anything, it must first acquire such a virtue in its regeneration, when it has again to enter its mother's womb.

Now it is obvious that the spirit of wine is not the gold's mother, nor can it ever become so. As gold did not originate in spirit of wine at the beginning of the earth, it must necessarily follow that the spirit of wine can in no way extract a useful tincture from gold. It can therefore not be called "Sulphur of the Philosophers", while itself and its Body can be reduced. Yes, more men, many of them, including Angelus Sala, do not wish to admit that the tincture can be separated from the Sun - although Sala later changed his mind and recognized his error. One cannot deny that the color should not separate from the Body, that the Body stays behind as silver, and in the reduction it is not again a Body of the Sun but fixed silver that is left, which acquires another sulphur in antimony and copper, turning into gold again. Therefore many believe that because this fixed silver can again become gold, one could add a sulphur, which could tinge it into gold. This is true, provided one has the right Philosophical Tincture, or the silver is made so fixed that it can pass all gold tests through cement, antimony, and quartz. Otherwise it is impossible that anything useful can result thereby. But how this is done remains to be reported, because the Philosophers keep it very secret. Some time ago, I saw at a Philosopher's in Italy a lump of several pounds of silver, which stood all tests. All it was lacking was the right color, which he could give it very easily. He frankly admitted that by his skill he could make a hundredweight of silver fixed within three months, provided he had just one partner. But how he did it, I was not

told. True, many process-makers and braggarts write exceedingly big volumes about it, but in truth they are nothing deceit and processes that can never be brought to perfection. Hardly one hair curler can be found who does not pretend to know how to make fixed silver, and yet, with all their art they are such poor wretches that one could take pity on them. One may well say here, "Physician, help thyself!" And if they did not occasionally meet an imprudent beginner, hardly conversant with the writings of the Philosophers, who gave them bread for some time, for God's sake, they would have starved a long time ago and the world would have got rid of them many years ago.

I knew one of this sort in Erfurt. He convinced some good credulous people that he could fix all Thalers in a short time and finally transmute them into the best gold, and that it would not cost much at all. These good people imagined that they would soon become great gentlemen, and accepted the artist. He built various kinds of ovens, put up a pair of bellows, and set up an entire goldsmith's workshop. First, he tried with a small sample of 3 Lots of silver. He cemented these and juggled about with them till he thought that the time had come to ensnare the birds. But it was nothing but the White body of the Sun from which the tincture had been extracted. He put it into the cementing box as if it were only common silver.

When now everybody was eagerly looking forward to the issue, and the day had been set - which he first selected in the calendar to make sure there was a lucky aspect of the Sun and Moon - when the monkeys were supposed to come out of the box, everything happened in a solemn and devout manner. He pulled the boxes out of the fire and when they had cooled, he told his sponsors to open them themselves, so that they could see that he was dealing with them honestly and sincerely. Furthermore, he said, he was going away for one or two days, they should meanwhile have the fixed silver tested to see if it could pass all assays. This was done. The silver passed all examinations and was found to be good, but the color was lacking, and the people did not know what to do. The artist, however, stayed away for eight days, and they were greatly looking forward to his return. They were very sorry and worried that their teacher in the Art would not return at all, because he was being tested. Yet they were full of good hope nevertheless, as he had left behind his Suppellectilem, which was not that important. Meanwhile, they told their intimate friends of this feat and promised to accept them also into their society when the artist returned. Their friends were likewise interested in the new art and consented to put up a sum of Thalers.

The artist returned after one week. There was great joy, and a wonderful meal was prepared. They were very happy indeed, especially when he asked how the silver passed the test, if it had also stood the gold assays. Everything was confirmed with delight, and each wanted to be the artist's next client. Then he told them that he would in future also turn this fixed silver into gold, and he began making arrangements for it, which was easy to do. Now their mood became even more jubilant, and they were wondering where they might perhaps find a kingdom to buy - there would be no shortage of gold...

They now concluded a deal and decided, seeing that a great work did not take more time than a little one, to invest 500 Marks. The instruments were arranged and the work was begun. In the meantime, the artist saw his advantage. He changed the cementing boxes, took the silver out, yes, even out of town. Nevertheless, the alleged work is given fire. On a Saturday night, the artist pretends to go to confession, and the good people are supposed to watch the work for some time, to make sure that nothing goes wrong.

He left - looking for a father confessor in a foreign country. As he was staying away a long time, the good people were eagerly waiting for him with their meal, but because he had promised the father confessor not to eat anything that evening, he did not come back to table. They were surprised at it but did not think anything bad of it, thinking he would come after the sermon and communion. He, however, was taking a really long way!

Now the company suspected that something was not right. They decided to let the fire go out and take a look at the work. It took place the following Monday. As the artist had perhaps fallen asleep in the church and did not come, they opened the boxes - and found in them a mighty odd transmutation, for instead of their Thalers, they found nothing but horseshoes, lead, bricks, and similar fine substances - while the silver and the artist were roving throughout the world.

They now began to look at each other and froze as if they had attacked and caught a torpedo fish (eel). Their brief happiness turned into an immense dirge, and yet they could not complain openly. But when they disagreed among themselves, each accusing the other of having persuaded him to enter this deal, the affair became known, and the good people had to add insult to injury. And that was called "making silver fixed".

Of such cheats there are still many more in the world, who might also mislead wise men. That is the reason why I am relating this, to put everybody on his guard and not to give credence to such swindlers. For they have studied for many years how to cheat people, and I think that this is one of the reasons why alchymia is forbidden in Spain and that not everybody can work with it. Would to God that the same would happen in Germany! Then many an honest man would not be so shamefully done out of his property. And no person should work with it who has not been called to it by God and is a physician.

Now we will stop with this report and turn to the other preparations, according to our author's instructions.

ANOTHER WAY OF MAKING OIL OF GOLD

Take some of the brown gold calx that has been reverberated with sulphur. Put it in a phial glass with a very flat bottom. Set that in warm sand for 18 weeks, day and night. Give it constant heat but so that the calx does not melt. In this way the gold is finally swelling up and becomes as soft as cotton. Open the glass and pour over it the following fiery spirit of the arcanum of tartar, which extracts the tincture of gold in an astonishing way. This must be discarded over the alembic, when a gold-colored oil will rise, quite transparent and lovely to look at.

THE ARCANUM OF THE SALT OF TARTAR

Take the magistery of vitriol, which is quite clear, transparent and crystalline. Dissolve in it the vegetable salt, then distill the phlegms gently off it. Thereafter dissolve it in distilled rainwater till it loses all its feces and gets rid of its slime. Now coagulate it to dryness. Pour the vegetable blood, or the vegetable fire over it, then distill it over the alembic. First the spirit will come out, then the fiery spirit, and this is the arcanum for this work.

N O T E

The author presents another way of making oil of gold. It differs little from the first, except that the menstruum for the extraction is taken from vitriolic tartar, with the addition of brandy. The process is probably fine and can be made, although I have not tried it for gold. I have, however, done it for silver and found it to be true according to the letter. But the reverberation is a very tiresome work, as 18 weeks is a long time and much coal has to be used. In addition, this fire must be well regulated or else the substance will easily melt and revert into a Body. Then all effort and work are lost. This long time is required to allow the calx to become all the subtler, but one can achieve this just as well in a shorter time. In the manner indicated, potable gold cannot be prepared in less than half a year. The patient could die a hundred times before getting his medicine. I would advise (the alchemists) to use the gold calx which I taught in the previous process, or that obtained with stag's antlers. It can melt and be extracted in almost every liquid, even if one does not use the tartarized arcanum as a menstruum.

The gold calx can in any case soon be made volatile. Within two days I can volatilize it so much that it rises entirely into the alembic; even flies away. One may well be surprised that such a fixed Body can be so far destroyed that it can fly away without wings like Mercury, and yet can also be made fixed again with a little effort. I know how to make a spirit that destroys gold so much in a few hours that it flies with the spirit out of the glass into the air, if the glass is not tightly closed. Nobody knows where it goes, and it vanishes entirely, so that not one grain is left in the glass.

When I mentioned this one day at a princely table, the Prince did not want to believe it and asked me to show it to him in practice. When I did this in a short time - because I already had a supply of the spirit - he was quite surprised and said that he had had many laboratory workers, but none had gone so far. Furthermore, he said that if he knew how to make this spirit, he would not doubt the preparation of the Philosophers' Stone. But he was wrong, because this spirit had not been the Universal Spirit, as the Philosophers want it to be, but had been made from other minerals, and was corrosive. Therefore it could not and should not be an ingredient and medium for attaining this high Work. Although it could not be used for this purpose - nor had I prepared it to this end - it was yet a wonder that it could volatilize the gold so fast without further preparation. And if nothing was added to it, it did not let the gold drop away. Even if one tried ten times to separate it through the Balneum, the gold always went with it over the alembic, not as an oil or an extract but with its color, just the color of the spirit itself, only somewhat pale-yellow. Aside from that, it was beautiful, bright and white like spring water. It is not necessary to describe here how to prepare this spirit as it does not help this Work. It is also dangerous to operate with it because it kicks so much and violently as no gunpowder does. It is better, however, to handle the tartarized arcanum, but one must have a good amount of it, and I will here describe how I made it.

I took 1 lb. of salt of tartar, optim. rectified. Upon it I poured drop by drop the same amount of oil of vitriol. I let it effervesce, then put it down till it had settled. I decanted the liquid and gently dried the residue. I dissolved the latter in the phlegma of the vitriol, poured the pure off and filtered it. I distilled the liquid to half, then put the rest in a cold place. Now beautiful clear and transparent crystals sprouted, which I took out with a wooden spoon, letting half of the remaining water steam off further; set it back in the cellar, let it sprout, poured the liquid off, mixed the crystals with the previous ones. When I had dried and weighed them, I had obtained 2 lbs. from these 4 lbs.

On these crystals I poured some good rectified spirit of wine - which the author calls the "vegetarian blood" - set it to digest, as otherwise they do not easily dissolve, till they were completely dissolved. Then I distilled them according to the Art. When I had driven over 2 lbs. of the spirit, I changed the receiver, added another and increased the fire somewhat. Now a beautiful fiery spirit went over. I removed the Death's Head, enclosed it in a retort and reverberated it well. I also extracted its salt with distilled rainwater, added it to the distilled spirit, let it circulate for 8 days, and drove it over again. Thus I obtained a wonderful menstruum with which one can not only extract the Soul of the gold but also that of all metals, minerals and precious stones. It dissolves and extracts exceedingly well, and if it does not take everything over the alembic the first time, it must be cohobated and will work very well.

When I tried this process with silver, I could not get everything over the alembic the first time but had to pour it back several times into the left-over. Then it went over, leaving only a few feces in the retort, which were quite black and light. I am of opinion that one has to proceed in the same way with gold, as its Body is even more fixed and compact than the Body of silver, and the cohobations achieve much good, which could otherwise not be done. With this menstruum I have dissolved the crocus Martis, the crocus (saffron color) of iron and extracted its tincture, which turned out more beautiful than any dissolution of the Sun. I took it over the alembic in the same way. And when I separated the menstruum from it by a vapor bath, a beautiful oil was left, pleasant and sweet, as if it had come from the best gold. It also tinged silver into shining gold, though it was not stable. But when the silver was immediately held in the fire, it did not fly away like that which comes from antimony. It was only washed away when it was strongly rubbed. This work could well make you hope that you could make something out of iron with which you could earn your bread. I leave it to anyone who would like to try it. I am afraid, however, that it will hardly be possible without a good fermentation, because Basil says that Mars also attains glory by his quarrelsome, but that he must take care not to be pushed down again and suffer shame and derision, as the old Saturn (lead) is his archenemy: where he can give him a secret knock, he will not hesitate to do so, because the old folks are generally no friends of warriors.

With this oil one can also turn Mercury into a beautiful precipitate, which can be used to great advantage in many sicknesses. It makes it so fixed and fireproof that it can pass a rather stiff test of Vulcan (fire). I really think that if it is conjoined with the oil of gold, it can become something useful, but I do not wish to cause anyone to squander money on it. In this passage I only reveal my thoughts in case someone wanted to do something for Mars, although Mars seldom brings riches. Instead, he robs and takes wherever he can, not asking if it belongs to God or the poor fellowman, as a very honest man learned after 24 years. I could also tell a story of what war has cost me. May God one day end such abominable destruction of the country and restore noble peace to us, for then many fine arts will yet arise, honoring God and serving the poor fellowman. Well then, everything comes from God, good fortune and misfortune, and we must say with Job: *Si bona suscepimus a Domino, cur non mala sustineamus.*

We will also say something about the virtues of this gold. The author (Poppius), however, does not mention them, doubtlessly because it does precisely what has been said of the other preparations, to which I will also refer to the kind reader. He will easily notice when this gold oil is to be used. Not only will he learn the doses but also see from my comments in what cases I used them. It cannot be contradicted that gold can in general heal all sicknesses, as all the books of hermetic physicians testify. And whoever will read the history of cases cured by the potable gold of Anthony of London will find astounding things in them, observed and cured both by himself and others who had the potable gold brought to them from far-away countries. Of that a whole treatise has been written and printed in Hamburg. Even so there are some who do not think much of it, saying that this solution is not philosophical, etc. I will not discuss this here, while no one knows yet for sure by what means he dissolves the gold, even if there are several descriptions available, pretending to indicate the process. I believe, however, that he did not make his secret public to the extent that the sparrows could whistle it from the rooftops, for he would be a bad fencer who did not keep one stroke for himself. One thing is sure, it is no small science to know how to process gold correctly so as to turn it into a medicine without a corrosive.

What to think of potable gold that is supposed to be strengthened with the blood of Venus (copper) and Mars (iron), is not difficult to decide. I consider it nonsense, because the sulphur of iron and copper is not the sulphur of gold. Therefore, no such effect can follow, and I wonder that some wealthy physicians also publish articles about it, trying to convince people that cow dung is grease. Although both come from the cow, they are therefore not the same. Dung may well be spread, but plants do not melt thereby.

Basil also wrote something about it, and I have in my possession the original of his writing. I believe, however, that his views are quite different from the literal meaning. That gold has first to be enriched or activated by iron and copper, is hard to believe, for it is evident that both have impure and leprous Bodies which cannot protect themselves from the least corruption. If their blood were so pure that the Sun's blood were thereby raised to a higher degree, it would follow that they themselves could first keep themselves from corruption and destruction. Indeed, it is said: *Medice, cura teipsum* (Physician, heal thyself!)

If now it is true that each thing has its own seed, and must have its own seed if it is to be an autonomous Body, it must necessarily follow that gold must have a special seed, copper and iron other special seeds. Even so, it cannot be denied that the seed of metals is identical as far as their remote potentiality is concerned, and that it refined by cooking. Nevertheless, digestion produces a ripe fruit and seed different from the others, and the artist will never be able to cook gold from copper, even if he were doing it till Doomsday. Well, as this does not belong here, I will not deal with it at the present but wait for another opportunity. I am only relating it so that no one should be misled into thinking that gold can be increased in virtue by the lesser metals. The contrary can rather be proven, namely, that the pure blood of gold is infected by the impure and leprous iron and copper. Then it is quite useless to medicine.

Therefore one has to be very careful about such potable gold and not to believe what anybody fancies, but he must diligently read the writings of the Philosophers and reflect upon them with special care, even if they are only understood according to the letter.

Joannes Agricola - *Treatise on Gold*

Chapter 4.

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Chapter 4.

How to Prepare the Quintessence of Gold

Take some of the brown calx reverberated with sulphur, 3 or 4 Lots. Mix it with the crystalline coagulated dry water, 6 Lots. This water does not dissolve the metal in the common way but separates the good from the bad. It destroys the bad and the course, turning it into earthdust and slime, while increasing the good in its nature. This conjunction done, very carefully close the glass with lute, then set it in a gradation-fire in sand for 8 weeks, day and night, in steady heat, but only so much that the calx does not melt and shows just a slight brown glow. In that steady heat the crystalline water will open the gold completely, turning it into dust and ashes.

When now the gold has all turned into ashes, give it a stronger fire for three weeks. Then take it out, open the glass and pour it over these ashes the vinegar of Nature, which the Philosophers call Nature's fire. The vinegar will soon revivify the ash, extract its Soul, beat the earth and feces down and leave them at the bottom of the glass. You can do the same with silver and other metals. In this way metals can be totally anatomized and decomposed, bringing them into their crystalline and essential form.

Whoever wants to follow Nature further, may add to this essence of gold the essence of antimony, which may be quite sweet and transparent, nicely smelling and tasting, and also penetrating. This essence will soon be tinged and attract the tincture of the gold. Enclose the latter in a glass and set it in warm ashes. It will turn into a red transparent glass or salt, quite stable and fixed in the fire, quite transparent. It might well be called the arcanum of gold. It is also possible to add the essence of vitriol instead of the essence of antimony and coagulate further, as just said.

NOTE

I thought above that there is not one laboratory worker barely able to distill water who would not know a special arcanum for processing potable gold or the quintessence! Therefore more processes have arisen than there are hours in the year. They are all useless words and breadless arts which spoil more than they help, and each wants to arrange the hat after his head. Accordingly, I think less than nothing of those processes. Yet there is so much shouting about them that it fills all corners of the world. And now as almost everybody knows that medicine that an excellent medicine lies hidden in gold, everybody wants to extract it. Indeed, it is to be considered a great gift of God if this noble jewel is granted to a man. Those who strive after this high secret are not to be blamed but should rather be praised, provided they do not associate with sophists, thereby cheating people out of their money and ruining their health. Our author had likewise taken great pains and had strenuously reflected on how he could obtain this jewel we can easily see by his various labors that he tried in different ways. Among others, he also indicated this process on how to prepare the quintessence of gold. As I see it, however, this is not a quintessence but only a wearisome calcination and extraction with the arcanum of tartar or vitriolized tartar.

With this salt he does nearly all his works, believing that he has quite rightly proceeded according to the views of the Philosophers - which I cannot believe, because the crystalline dry water of the Philosophers and the arcanum of Nature are different from what the author thinks. The latter decompose gold, so that it can never again be brought into a Body (), unless it is done by projection. But according to the processes of our author, gold can again be reverted into a Body with little effort, and this crystalline water and our author's vinegar of Nature cannot do much that it would completely discard its covers and stand there naked. In addition, one is said to decompose the Body (); the other, to extract it, which is against all Philosophers. They always say that calcining, sublimating, fixing, etc., are all one work, and that it is done in a closed vessel and furnace. If this is true, as it is indeed, it must follow that the author never understood the views of the Philosophers, much less prepared Nature's vinegar and making potable gold thereby. This process can therefore not be a quintessence of (), no matter how often he insists that we must follow Nature.

This would nevertheless be a good teacher if he also showed the way of Nature, in which one should certainly walk. Nature does not lead us astray, provided we do not digress from her. She gives us the natural bodies and spirits in which the Art must work - prepare, purify and ready them, to become that which the Art had intended to make of them at the start. But at the same time she shows us, as if pointing with a finger, where we should direct our eyes, that is, to her work, as she operates in her workshop, and not as the misleading alchemists require in their false books, ever boasting of high matters. I am not speaking of the books of the Philosophers, however, although they are obscure and cannot be understood at the beginning. Therefore Baccaser says in the Turba: Qui longanimis erit libenterq; patientia fruitur in tramite justo hujus artis meabit, etc. It is a good warning.

It is the same with the vinegar of Nature. Nature has already prepared it. We must not make it under any circumstances but only take it out of her vinegar-jar. It is vinegar against Nature, sweet, pleasantly tasting and crystal-clear. Therefore it does not wet the hand and is called the most acid vinegar (acetum acerrimum) by the Philosophers, which are strange words. This vinegar correctly decomposes gold into its Principles, simultaneously extracting its tincture. Our author's process is unable to do this, and it is nothing but a preparation of the Body for turning it into a liquid. It differs very little from the other preparations, because for a quintessence all three Principles must be well purified. Here, the tincture and the Sulphur are indeed purified, but where are the other two, Salt and Mercury? Mercury, which appears in the form of a beautiful clear water, must likewise be brought to the highest degree of purity. The Salt also must be sublimated into a transparency, like diamonds or rubies. Then a quintessence can follow.

All this can be accomplished by the vinegar of Nature alone, without decanting or distilling. The common man will not believe this, because he calcines gold himself, dissolves and extracts it himself, thus believing that he can produce a quintessence. According to our author's instructions, gold must first be turned into a fulminating gold, then mixed with the vitriolized tartar, then cemented for fully 18 weeks. With the vitriolized menstruum the Sulphur is first extracted. This is saying it in a few words, but the work is so long that it becomes extremely tedious. Even so, there is something to it. This process is good enough to work after it, but you have to remember that it does not result in a quintessence, as our author believes. But whoever wants to obtain a fine essence in a short time, may work as follows:

I took the calcined gold and poured on it the secret spirit of vitriol. It dissolved the gold within 24 hours and extracted an essence like a ruby, leaving a white Body like fixed silver. Thus I could obtain the whole preparation and perfection within 8 days, because the real spirit of vitriol has the power of attacking, decomposing, and liquefying gold without violence. No other menstruum can easily do this, except that which I saw at a good friend's, of which I also spoke above. Anyone in possession of it could produce the quintessence of gold - but not everything is revealed to us, nor would it always be good to do so.

But how the secret spirit of vitriol, which so nicely dissolves gold, is to be prepared will be reported below under its title, to which I hereby wish to refer the kind reader. What is missing here will be disclosed there.

Here I will teach you to prepare a secret spirit for making potable () which tastes as good as a Seville orange. It subdues gold, causing it to melt in any liquid, yes, in rainwater, and it tinges bloodred. I have always considered this my greatest secret, and am still considering it such. I will communicate it here out of goodwill, but on condition that I am rightly understood. Whoever does not understand had better leave it, or else he might accuse me of misleading him. Yet I can say in good conscience that I am writing nothing but the truth, and I here reveal what I have made with my own hands. With this spirit gold becomes so beautiful and pleasant that it is amazing, and not one in a hundred will believe that there is so much power in this spirit. For if filed gold is simply put in it and subjected to a mild digestion, it will lose its luster and change into the highest redness. The spirit, however, unites with the gold and disappears - and Body and Spirit result in one sweet Body. No menstruum can do this, except the Universal of the world and the Philosophers, no matter what the laboratory workers write - it is not important. You must know, however, that this spirit must not be made more often than once a year, for various reasons, and this is no sophistry as some imagine. Although it can be made at any time, it does not have the power of decomposing gold, at which I myself have been surprised.

But so as not to keep you waiting any longer, know that in the soil near silver mines a special brown earth is found between the galleries. When the sun enters the constellation Cancer and at full moon, which happens every year about mid-June, that earth turns beautifully yellow, as if it were covered with the finest gold. It does not last for more than three hours when it disappears again and the gold vanishes in one moment, so to speak. I observed this carefully at Freiberg in Meissen. You have to wait for it attentively, otherwise you will not notice it. You must not only go by the calendar, but if you wish to collect this gilt earth, you must yourself be familiar with astronomy, to know at what time the full moon occurs in the sky in the mountains, so as not to miss this time, be it at night or during the day, it is all the same.

Get as much of this earth as you like, put it in an oak barrel to prevent the spirit from evaporating, half fill the retort with it, add a receiver, then distill the spirit off. It will look wonderful. When it is all out, distill the phlegma over. By rectification you must get the volatile salt from the left-over. The latter must be turned into a viscous substance by means of its fixed salt. Without it, the work is impossible as one must open the other. When the viscous substance is quite pure, distill it seven times through a retort, and you will get a beautiful crystalline spirit with which you can master the gold and get its essence. I do not believe that any writer has revealed as much as I have. Pray to God for good luck! It is plain enough, I believe a child could understand it. If you cannot make gold spiritual with this spirit and dissolve it into its three Principles, you will not do it with any Aqua Regis or salt of ammonia, except with the dry water of the Philosophers - let anyone say what he likes.

I have learned as much in chymia as any man who is a great boaster and swashbuckler. And praise be to God, I also know what the Art is capable of and how far its operation extends. If God grants you this means for obtaining potable gold, you must not search for other processes, for you will not need them. In a short time, and almost without effort, you will be able to prepare a panacea which will quickly help the sick in their needs. Of this you cannot use more than 5 grains at one go, and you will with pleasure learn its effects in a few hours.

True, I have only been looking for two years for this materia but have been unable to obtain it because I have always been impeded by the tyrannical troops. I must pray to God to let me obtain and enjoy it next year. Many great lords will remember how miserably they have been cheated with potable gold, and how much they spent for it. And what did they obtain? Nothing but words and leprous gold calx which they often used more to the detriment of their health than for the maintenance of their lives. If their laboratory workers had known this one menstruum, they would not have led their pious Princes in vain by the nose. It is right that this should happen to those gentleman. When they are supposed to make an advance payment to their physicians for a good medicine, nothing is being done and money is tied down with chains. But when such vagrants come, who carry their art only on their tongues, then all treasures are open, nothing must be lacking, yes, they even give great honoraria and golden chains for the cheating.

A few years ago, I saw such a swashbuckler at the court of a noble Lord. He only gave him a mere well-rectified spirit of vitriol instead of a true spirit of silver and brass, but praised it in advance to high heaven. Such a sacred thing it was, according to him, greater than Mary's shirt at Loretto! He was given a fine gold chain in addition to a portrait painting. I offered to make a good quantity of this spirit for 10 Thalers, which would be as good and even better than the former. But due to all the boasting, my offer was laughed at, because I had not told him such stories. that is how it still goes, and the fat will always float on top. An honest man would feel ashamed if he were to make such false claims as these shameless fellows do.

Likewise, I also saw a vagrant on Austria who carried a small travel apothecary along with him. He spoke wonders of what arcana it contained, and convinced people so much of it that he made a great deal of money. When he had exhausted his supply, he had it filled again by a laboratory worker called Johann Spangenberg, paying nine Thalers for it. When I arrived on the scene, he became quite scared. Nevertheless, this had been for him the right owl to catch birds, and he was indeed quite successful. When he noticed, however, that his tricks were about to become common knowledge, he moved away with his prey, after rather thoroughly emptying the purses of some Counts and Lords, whom he ripped off properly.

The same happened recently at a noble Court where a laboratory worker had gone through more than 40.000 Thalers. When the works and medicaments were examined, someone said he would prepare the same medicines for 500 guilders. This caused the Prince to become suspicious, and thereafter he did not spend any more money on laboratory works. This is the reason why the praiseworthy art of chymia reaps great contempt throughout the world through such men. Now we will no longer stop at those cheats but consider and examine the author's process further. The author also advises us to add the essence of the Sun to the essence of antimony and to coagulate them together. That is correct, but one has to take care that the essence of antimony or vitriol be quite sweet and red. Otherwise there will be a failure. How to prepare them will be shown in their place.

In the grand-ducal laboratory at Innsbruck in Thieving, I saw that the tincture of the Sun was increased by the tincture of antimony by 1 to 5 parts. After four days in digestion, various colors could be seen, and I was very surprised that during this time a flower appeared in the center, like gold. It did not change, but all around it there was something like a rainbow. Now the laboratory worker removed it from the fire and opened the glass. When the air touched it, all the colors in the center disappeared and only a muddy-red liquid was left. This caused everybody to be startled. We put it back and coagulated it to a red powder. After that, we took it out and put some of it on a red hot silver plate. It was fixed and did not smoke.

Now the laboratory worker took 1 Lot. of silver calx, 1 Quentlein of this tincture, and mixed them together with a pestle. The silver calx turned totally black. He put it into a phial, set that to digest, as it turned even blacker than before and flowed together like a lump of pitch. As I continued my traveling farther from there, I could not wait for the final result, but I heard from the Director of the Chemical Laboratory that he tried to refine the silver enough to

make stable gold of it. Whether he succeeded in doing so and the gold stood the test, I cannot say for sure. All experienced chymists believe that antimony contains the seeds and flowers of all metals, which we may well believe. As this oil had been fermented with the tincture of the Sun, one may well suppose that something came out of it. I wish I could have stayed long enough to see the result, but I took some of the tincture or essence along with me in my travels, to test what it could do for diseases.

After this, I visited some one belonging to the aristocracy, not far from Trient. He had a beautiful laboratory, a good laboratory worker, and he himself was a learned man with whom I saw many wonderful things. At that time I made sweet oil of vitriol, which was as red as blood and sweet as sugar. Something will also be said about that further on. I prepared this oil of gold for him and let it coagulate, which was done in a short time. It turned into a stone, transparent like glass. With it he cemented silver once or three times, then melted it with a rather strong fire, and everything flowed together into one mass. He distilled that on a cupel and obtained a white Body which he put in separation water (Aqua Fortis). The laminae turned brown-red and did not melt but decreased in weight. After they had laid in it for some time, he removed them and melted them. They registered half a point on the needle, and no separation water would attack them. Now he prepared a refining water of the following ingredients and put this Body in it, thinly laminated. It refined from day to day until it was as beautiful as the best Ducat-gold. Some black powder was left in the glass which afterwards, when melted, gave a white Body. The graduation (refining) water was made as follows:

Antimonii an Unc. j.

Vitrioli ad flavedinem calcinati Un. iiij.

Sulphuris vivi Unc. j.

Viridis aeris ij. Lot.

Salis gemma Unc. j.

Arsenici ij. Lot.

Mercurii sublimat. iiij. Lot.

to be very well mixed and pulverized, imbibed with the urine of young boys, distilled in a retort by the degrees of the fire, in a very large receiver, propter impetu spirituum copiosissimorum destillentur, exhibit aqua lactea, quam 1. purga, vel injectione lunae, vel cohobatione.

He loyally informed me of this process, but I never tried it. Therefore I will not say too much about it. However, I saw that the silver obtained the most beautiful colors of the Sun, though it is not true that this water fixed the silver. It was the preceding tincture that did it, the water only provided the color. If silver is fixed, it can be enormously refined by this water. I have, however, forgotten what the gain was. I suppose that the work had not been done without any gain, as both ingredients, () & () are wonderful fixers, and a great virtue is hidden in them. Thus, probably no sickness can resist this medicament.

We must now return again to our potable gold and speak about its virtues, especially about what I learned by experience and practice, and what is generally not found in other authors. Above, at the beginning of this Note, I mentioned that I had not prepared this essence according to the author's process. I did it in my practice and have noted what I have thus learned. However, so as not to deviate from my method of reporting, I show in each of the author's works what I have seen regarding it and what I have discovered about it in my practice, also for what it is used. As I have already above referred to several case histories which recommend potable gold, I will here only relate two or three additional ones which would be difficult to find elsewhere, to show what wonderful virtues and effects God has put in this subject.

In Gmunden, Austria, in the region of the Enns, I had a patient who belonged to the aristocracy. He had such a discharge in his eyes as I had never seen in my life. It swelled his eyes to make them look like chicken eggs, and they were as red as blood. It is easy to guess how much pain they cause him, as he could rest neither by day nor by night. After he had suffered for quite some time and had also consulted many physicians about it, he told me of his great pain and begged me to help him for God's sake. I accepted him and wanted to see what I could do for him. Seeing that his whole sickness consisted in such a strong, heavy discharge, I first ordered an enema for him, to be administered for several consecutive days.

Rx. Rad. Bzyoniae

Polypodij

Asari an. j. Lot.

Herb. Calaminthae

Betonicae

Malvae

Origani

Mercurialis an. m. j.

Cortc. Myrobalan. Ind. j. Lot.

to be cooked in a sufficient quantity of bullion, & tecto vase ad casum partis tertiae, cola &

Rec. Colaturae Unc. j.

Electuarii Drasenae j. Lot.

Mellis roset. ij. Lot.

Salis gemmae j. Lot.

Olei olivar. iij. Lot., everything to be mixed for the enema.

This enema removed much bad moisture from him. After that, I used many topical remedies, but it was to no avail. Although at first the discharge seemed to go away, it nevertheless returned each time. I, too, despaired of him and did not want to try anything further. But because the poor patient was in such pain, he begged me to try everything, even if it took his whole fortune, for he would rather die or be quite poor than suffer such pain. I then prepared potable gold for him after my own recipe and cleansed him six times a month with an extract of antimony and spirit of vitriol. After that I gave him every morning 4 drops of gold essence, and prescribed a proper diet for him. Within two months the symptoms disappeared, the tumor vanished, though the redness continued for some time. I drove it away with the following water:

Rec. Aq. Euphrasiae

Rosarum an. ij. Lot.

Levistici j. Lot.

Aceti Antimonii j. Lot.

Sacharih crystallini v. Quentlein (?)

(could be: v. Quent.)

Croci j. Scrup. misce.

With this he had to wash his eyes several times a day. The redness disappeared completely, and he got a fresh and healthy face again.

When I sailed from Limason, Cyprus, to Tripolis, Syria, and we had rather bad weather for several days, the upper sail above the round top had one day to be quickly removed. A boatsman, who was a Moor, wanted to run quickly from the ladder inside the ship. He missed his step, and when he was only halfway down, fell on an anchor that was lying in the ship, ready to draw up a rope. He had fallen on the ribs of his left side, which became quite swollen. He threw up much blood and was lying there whining like a dog. We were now on high sea, and no apothecary was near. I felt pity for the poor man, took my supplies and gave him a dose of my potable gold, mixed with sweet oil of antimony. He continued throwing up the whole night, but the pain subsided a little. The following day I gave him another dose, again another night. The throwing up disappeared and so did the pain, though there was much swelling. God granted us the good fortune to arrive in Tripolis on the fourth day, when I gave him a purgative prepared from Mercury, which drove a mass of black matter from him. The following day I gave him the purgative again, after which he became hale and healthy and thanked me profusely through an interpreter. I encountered this man again in Alexandria. He helped me in every possible way on the boat and praised my help with many words in front of his co-workers.

At Crain, at the Coratian border between Cammenick and a mountain castle called Cruetzen, which belonged to the Counts of Thurn, there was an inn in a village where I was lodging, waiting for an opportunity to travel to Glis-Wertz in Dalmatia, which was a mighty fortress, and Ragusa. My landlady was in bed, she was sick. I spoke with her; she spoke Wendish, I polish. These two languages understand each other fairly well, just as Slavonic is quite common in that country. I asked her what was the matter with her. She showed me her stomach. It was as swollen as I had never seen the like in my life. It was hard as stone but did not hurt her very much. However, she could not walk because of the huge swelling and weight. She said she had this trouble for over two years. She had spent a great deal of money on it, but nothing could help her. I asked how much she would give me if I restored her health. She was very happy about my concern and wanted to give me all she owned. Her husband offered the same. I began purging her with the Mercury all by itself - the preparation of this Mercury will be discussed later on. At first, it accomplished very little, eliminating mostly some yellow water. I gave it again the following day, also the third day. Then it operated properly and eliminated so much white, yellow and black slime from her that it was astonishing. Externally, I had her stomach rubbed three times a day with warm urine. Now the swelling began to get soft. As I saw her strength was low, I did not want to attack her further with purging. In the meantime, an opportunity to travel to Zeng arose. I therefore left her some of the potable gold coagulated with oil of antimony and prescribed that she should take 4 grains in a bit of Malvasian wine every day.

The innkeeper had a fine mule which he presented to me. I took it with me, rode with it over mountains and valleys, and it agreed very well with me. When I returned after four weeks and wanted to continue with my other planned journey, I found my landlady walking about in her room. Her stomach had decreased by a good yard. I myself was

surprised at it. I purged her twice more and gave her more of the gold, left, and told the innkeeper to get word to me in Venice or Pedua how all this would end. He did so after one month, telling me in a letter written in Wendish that his wife had become quite hale and healthy. He had also arranged for 20 Ducats to be paid to me by a merchant by the name of Simon Cagnoli, which the latter also did. I sold the mule in Treviso for 60 Sequins. Thus I obtained some money, and the woman recovered her health. I myself had not believed at the beginning that it was possible to cure such a sickness in so short a time. But praise and thanks be to God who has put such miracles in Nature and commanded the physician to operate with them. This case history is quite remarkable, and among a thousand patients there may well not be another like it. If there is, a student has now received good directives for treating it. The physicians Paravim Minadous, Andrigassius, and Spigelius, etc., to whom I also communicated this medicament, were also quite surprised at it.

I will tell yet another case history and close by relating what I did in Ischl, in the region of the Enns, for a boy, 14 years of age. He had fallen from a ladder and became mute as a result thereof. He was the only son of wealthy parents. For the parents this misfortune was a great cross, as one may well imagine. They had sent to Salzburg, Weiss, and Linz, wherever they knew of a physician, looking for help. They had sent the boy to Baden, to the warm thermal baths, but it did not help. He remained mute as before, and nobody thought he could be cured. What was surprising was that he did not feel any pain. Finally, his father came to Gmunden, into the house where I was living. At table he related how his son had arrived at such a great misfortune and said that he would give a thousand Ducats to get help. I entered into a conversation with him and said that if he were ready to trust me, I would try something with the boy. However, I did not want to promise him certain help, as he had already tried so much in vain. He was glad about it, and I drove with him to Ischl to examine his son and thereafter come to terms with him.

After examining the patient, I said that it would be a lengthy treatment because the veins and muscles of the tongue were bad, but if he agreed to send his son with me to Gmunden, I would do my best to cure him. The parents liked my proposal. I took the boy with me and began the treatment. The father gave me 40 Ducats for the preparation of the medicine. I took 20 Ducats thereof and prepared potable gold without the addition of antimony. I purged the boy three times with antimony, and will later indicate how to make this preparation. After that, I gave him several sudorifics, also prepared from antimony. They made him perspire a great deal. Thirdly, I prepared a solution for him with which I had his head washed twice early in the morning before he had eaten. He was to be washed each time for almost a full half hour, to thoroughly moisten the veins.

Rec. Rad. Pyrethri

Caryophyllat.

Asarillan j. Lot.

Bacc. Lauri

Juniperi an. iij. Lot.

Herb. Rosamarini

Betonicae

Spicae

Salviae

Majoran

Hederae

Musci Terrestris an. m. ij.

Chamaeipytt. m.j.

Flor. Verbasci

Chamomill.

Meliloti an. m. iij.

Lumbricor. terrestr. in olbano exsiccatore j. Lot.

Sulphuris vivi ij. Lot. incidantur, to be mixed and cooked in a common liquid. This solution agreed very well with him. He could lift his tongue and did as if he wanted to speak, but could not yet quite manage it. Meanwhile I had prepared potable gold and gave him every morning 5 drops in cherry-brandy. When he had taken it for 10 days, he recovered his speech, though he still stuttered somewhat. For this trouble I prescribed the following balsam:

Rec. Extracti Fellis caprilli j. Lot.

Olei succini

Angelicae

Caryophyll. an. j. Lot.

Camomill. Rom. ij. Lot.

Lavendul. j. Lot.

Nucis mosch. j. Lot, everything to be mixed.

I had rubbed him with it every morning and night, and he was freed from that miserable symptom through God's blessing - but I did not get the 1.000 Ducats. Even so, I was so well compensated that I could be satisfied. Owing to this healing, I acquired a great reputation, which was important to me as gold. It is right, however, to reward good work with gratitude.

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Chapter 5.

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Chapter 5

A Common Way of Making Potable Gold

Take some gold purified through antimony, 3 Lots. Dissolve it in oil of salt, mixed with Mercury made of urine. When the () is well dissolved into a golden oil, pour the oil of wine into it, and it will become red as blood. Take 1 part of this blood and 10 parts of spirit of wine, distill over the alembic till it is quite beautiful like a ruby, and you have a potable gold which can be used internally and externally.

NOTE

The author indicates various processes for making potable gold, and when they are examined by day, it is all one work, that is, a dissolution of gold. Only the menstrua are somewhat changed, for the rest it is one and the same, as I have already mentioned. You can take any menstruum you like, provided it does not harm (), so that the gold is not contaminated by it, thereby causing harm to man. Through the menstrua gold does not acquire any other virtues than those it already has. Arousing those, however, so that they can come out of their potentiality into actuality, can only be done by a suitable menstruum, which has been discussed in various Notes. Whoever possesses a good menstruum, let him dissolve gold in it, and he has enough processes, and must not look for another. Even if there were a thousand processes, nothing will finally result thereby but a dissolution. Nevertheless, one process is better than another. The present preparation is just like the recent one with the oil of wine, except that the spirit of urine is added to the oil of salt. Aside from that, it is one operation and has one effect. But here he speaks of the Mercury of urine, which is no other than the spirit of urine, and he does not say anything about the method of its preparation. Although I have already referred to the spirit of urine, I will nevertheless describe here the right preparation of the Mercury, so that laboratory workers are not hindered by a lack of knowledge thereof and can find in one context the whole perfect process. It is done as follows:

Collect a good amount of boys' urine, let it putrefy for some time, and distill the first and subtle spirit over like brandy. Set the filtrate in digestion for 8 days and distill again as before. Keep the spirit but boil the left-overs of both distillations quite dry in a kettle. Calcine it in a potter's furnace, extract from it its fixed salt with rain water, knead it under potter's clay, and distill it like common spirit of salt. You will obtain a yellow, sharp spirit, rather heavy in weight. Rectify it to remove all phlegma, then pour on it by drops the first-prepared volatile spirit. It will effervesce strongly, so that you will be surprised to find so many opposites together in one subject. A white substance will precipitate. Let it settle, pour the phlegma off from it, dry the rest, put it in a curcurbit and sublimate it with a strong fire. A beautiful bright sublimate will rise into the alembic. Remove it and keep it, as it is good for many things. Take one part of it, add to it 3 parts of spirit of salt, digest this together and distill it. Now you will have a wonderful menstruum for dissolving not only gold but all the other metals and minerals.

Now dissolve the calcined gold with it, according to the author's instruction, and you will obtain a very fine and right extraction. While feces will be left over in the retort, which turn into a white Body if they are melted with borax, but it is quite untractable, brittle, and breaks. If it passes through the bath of Saturn, however, its malleability is restored and it turns into a true fixed silver, which has also been referred to in the previous Note. How to process it to revert it to what it had been has also been reported.

The Mercury spirit of urine is an excellent medicine for all pulmonary diseases, because it cleanses them thoroughly and rids them of the slime that is the cause of tuberculosis, asthma, and other severe sicknesses. If one takes of it only one drop in a liquid such as hyssop, melissa, or carbobenedict water, it also expels the calculus, but without any suffering. It dissolves it, as the calculus is salty tartar. The spiritual tartar looks for it and masters it. Being a spirit, it penetrates and liquifies it, forcing it to pass together with it through the urether and bladder. I could tell many

examples of this, how I cured persons of high and low ranks with it - but of that more will be said in its place. Everyone who has a house apothecary should keep it ready, for it is not only useful for the aforementioned diseases but for many others. Taken in camphorated spirit of wine at the time of the Plague, it drives the poison out with great force through perspiration and urine. It resists all corruption, from which this disease actually stems, and all medicines for this infection should really be tinged with this spiritus, which should be carefully remembered. It is a great pity that hardly any apothecary exists where such a wonderful medicine can be found, to which one could resort in case of need. I am afraid it will also mean preaching to deaf ears.

If the brain sinks down either through beating or falling, people generally become insane. A wonderful experiment can now be made with this spirit. Of this medicine give every morning half a scruple in water of blue violets, and you will see with surprise how soon it will show its effect.

When in winter the external members, hands and feet, freeze, put some spirit of urine over them with a sponge or cloth. It extracts the frost in a few hours and prevents the member from rotting or developing a tumor.

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Chapter 6.

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Chapter 6

How the Purging () is to be prepared

Take 4 Lots of quicksilver, 1 Lot of fine gold, make an amalgam with them, such as goldsmiths do when they wish to gild. Thereafter, enclose the amalgam in a glass, let it stand for 32 days in a gentle heat, such as a vapor fire. After that, 3 days in warm ashes. In this time the Body of the () will have completely mixed with the quicksilver. Now pour the oil of vitriol over it, standing one finger's width over the materia. Set the glass in warm sand till the moisture has evaporated, then leave it in the same heat till it turns into a beautiful red precipitate.

NOTE

In this process and title the author indicates how the gold is to be prepared so that it may purge and turn into a fine precipitate, which also takes place. But if I take a good look at the preparation, it is rather a Mercury than a purging gold. This must be achieved by the Mercury, as Mercury can also do this without the addition of gold, if it is precipitated with spirit of vitriol or other means, of which more will be said later on. It becomes more sudorific than cathartic, as its effect shows. But when I look at the composition, I find that there is 4 times as much Mercury as gold. Therefore it is wrong to call it "purging gold". This process is not at all new or of particular importance, for this preparation can be found in many authors, and I had previously seen it in many laboratories, though under the title of "purging Mercury". More can be read about this and looked up in Penotus, Beuinus, Quercetanus, Harmannus, and other chymists, who prepare this medicine in a shorter time.

The author believes that gold would turn altogether into a Mercury which could in turn again be reduced into gold. But he is mistaken. Gold stays gold, even if it went through the leather with Mercury, as the goldsmiths also know. If they wish to gild, they must put the gold on the silver, and even if everything had been precipitated and appeared to have become fixed, it could be driven off in a good fire, leaving the gold beautiful and shining. It had therefore not been altered, let alone turned into a medicine. Therefore students must be alert not to be misled by splendid titles. In this composition one can also see that gold stays as it is and does not impart the least bit of its substance to the Mercury. Accordingly, gold does not cause such a purging.

But whoever wants to purge with gold, let him take only aurum fulminans (gold that explodes over fire with sharp detonation - beaten into thin leaflets) which, however, must be properly edulcorated, 10 or 12 grains. He will find that it also purges violently without Mercury, but without pain and danger. It will rid him of much bad moisture, especially if it is wrapped in a little black hellebore and taken in pill form. Then it purges exceedingly well, and is especially good for persons who cannot take much medicine. It is also a good remedy for persons who cannot take much medicine. It is also a good remedy for fine gentlemen who generally do not like to take many medicines and would rather be purged without them, if it were possible.

Thus, some time ago, I purged a noble Count without the addition of any medicine, either external or internal. The following day he had twelve stools. It was indeed a fine piece of the Art, and many who read this will probably have

a good laugh at it. But let them laugh or cry, it is the same to me, but even so it is the bitter truth, and I can perform it again whenever and at what time you are asking me for it. Nor is it sorcery, as some will think, but it happens in quite a natural way. In addition, it is surprising that it enables people to have as many bowel movements as they wish, and when they feel that they have been purged enough, they can at once stop, so that there is not too much of a good thing. Even if a man were several miles away from me, it can still be done as if he were present.

This purging method also provides you with a good way of purging pregnant women in case of need, as I tried recently with two such persons. It harms the fruit in no way, as it effects its operation without any trouble. That I should reveal it to everybody, however, I will not do. I reveal anyhow so much as nobody has ever done before. For how often it happens that a pregnant woman must be purged, and this is especially dangerous in the first and last months. Often mother and child must die from it. Those can be helped by this means, aided by God, and this is no paradox.

From a metallic body I can make a salt that is beautiful and bright like a crystal, without any rectification. It tastes like a somewhat sour apple. If you put no more than a grain of it on your tongue and let it melt, it purges in a surprising way 12 or 15 times, without any discomfort. Children and pregnant women can also use it, which is indeed a fine performance. It does not only attack the fluids, leaving the hard feces behind, as some purgatives sometimes do, but it removes all feculent material. It may well be called a specific purging medicine, and can be prepared in a few hours. But what kind of a metallic body it is, each may ponder upon, because it has no name. It is black, white and grey, and is heavy as gold. From this one can easily see what it is. (ha,ha,ha,ha,ha!)

What is more, I can cure epilepsy with it and have done so for various persons, praise be to God, giving only 1 or grains in a specific liquid, such as Linden -, cherry - or swallow-water. Well, to treat further of this cannot be done here and will probably be done at another place.

Poppius uses this purging gold for the cure of the French (syphilis), giving 2 or 3 grains in one Lot of teriac. True, the impure syphilis-infected blood is mightily cleansed by it, for it is not only purged through bowel movements but also causes profuse perspiration. It must be remembered, however, that if it is to purge, it must not be too fixed; if it is to cause perspiration, it must be reverberated in a strong fire. Then it gets a diaphoretic virtue and drives out the perspiration. All diaphoretics must be well fixed and separated from their volatile spirits, because the volatile spirits, move the abdomen and purge, as may be seen with antimony. Many think that it is impossible to prepare it in such a way that it only purges through the lower parts. Whoever can control its volatile spirits, however, can easily achieve it, and by many and various means, of which I will speak further on in detail.

Likewise, it is also used for the Plague in lemon water, juice or spirit, because it strongly fights every poison, provided it is made quite fixed. If great impurity is noticed in a subject, it can also be used for purging, but it must be done immediately at the beginning, since, as Quercetanus rightly reminds us in his *Alexicaco*, Mercurius strongly fights this poison. Thus one has heard that the Plague had made no dent in localities close to quicksilver mines. This is the reason why quicksilver is put around people's neck as a temporary amulet against the Plague.

This prepared gold is also used to advantage in cases of Red Dysentery when one generally becomes aware of a suspicion of poison, as in the year 1624, when such an epidemic prevailed in Thuringia. If you administer 2,3 or 4 grains in quince juice, it does much good, no matter through what channel it accomplishes its operation, for Nature knows well how to eliminate her excrements.

In jaundice, it does its share very well and can easily be administered by putting 5 grains into lavender water for three consecutive days. It not only drives away jaundice but all other sicknesses that have specific colors, and there is no better remedy.

In surgery, this gold is quite a healing medicine, for it provides a good foundation in all corrupted parts, cleanses them and promotes their healing. A surgeon may well rely on it, It eliminates everything impure without pain and corrosion, and does not let any accident become harmful. It heals all wounds in a short time, no matter what they are, because Mercury is a mighty incarnativum, better than all medicines, and barbers should use it instead of the common corrosive precipitate which is harmful and causes much pain. This one, however, operates quite without pain and does not cause any inflammation. Where there are especially deep holes, it heals them quickly, in particular if it is mixed with the other medicines.

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Chapter 7.

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Chapter 7

How to Prepare Diaphoretic Gold

Take some of the brown gold calx, calcined quite subtly like sponge or cotton wool, as has been mentioned several times before. It has to be calcined in a steady fire for 13 or 18 weeks. This calx must be put in a phial glass and frequently moistened with mercurial oil. When there are 2 Lots of the calx, pour 1 Quentlein of mercurial oil upon it all at once, then mix these well together, close the glass and set it in warm sand for 3 days. When the calx has again become fixed and dry, open, open the glass and give it again 2 Quentlein of mercurial oil. The glass must be closed again and put for 1 or 6 days in the sand till it is again fixed and dry. This must be done a third time and continued till 4 Lots of mercurial oil have been imbibed into the gold calx. Finally, it has to be given a strong fire to turn it into a stable red powder. When this work has been completed, you have the right Diaphoretic Gold.

NOTE

This preparation of diaphoretic gold is likewise more a preparation of Mercury than gold, as the whole composition proves, because the oil of Mercury, which is otherwise quite volatile, is tied with the gold and made stable in the fire. It should be more correctly called "diaphoretic Mercury" than "diaphoretic Gold", as twice the amount of gold is added to the oil of Mercury. This composition is almost literally repeated in the Treatise on Mercury. True, it is a fine composition, but one has to take care to obtain the right mercurial oil, devoid of any corrosive matter, otherwise nothing good will come of it. How to do this, will be clearly reported below by the author and myself, where the laboratory worker can look it up. Therefore, it is not necessary to add it here and to describe the same work twice or three times.

It is easy to prepare it, as these two coagulate easily. Only, one must not take too much liquid or oil. If it should happen through carelessness, the fire has to be correctly regulated to prevent the water or oil from rising and evaporating, leaving the gold alone at the bottom. This can very easily happen if there is too much spirit, because it is volatile and has great power. Not only does it rise quickly but it also breaks the glasses, as I myself have experienced. A beginning laboratory worker must pay dearly for his experience, especially if he is dealing with wrong and obscure processes. Strange things often happen, and nothing comes out of them. This is the reason why I have taken on this author, explained him, and illustrated him with special Notes and experiments, making a real system out of it, so to speak, and so clear that a person with little intelligence, or one who only now begins to learn, can well work according to it. Whoever is not helped thereby, cannot be helped. Nor do I believe that anyone has been acting so sincerely. True, many have published beautiful writings, but that they had been verified by experience - that did not happen.

The author did indeed not invent this process but compiled it from the old Philosophers who said that the gold had to be prepared through Mercury. This had a different meaning with them than the author now imagines. Some, however, got closer to this process. They were looking for a different liquid or mercurial oil and conjoined it with the gold. In that they were very successful and obtained a much nobler medicament than the author's. The author did hear a bell ring but he did not know in what village, because the term "Mercury" is an ambiguous word, and among a thousand there is hardly one who hits on the right understanding of it.

The right Mercury or its liquid absorbs the gold in such a way that it is so strongly conjoined with it that they can never again be separated - which common Mercury does not do. Even if it obtains great fixity, the two do not conjoin per minima. Saturn, no matter how lame he is, knows how to separate them. What he examines and finds to be stable will remain stable and need therefore not fear any enemy.

Of such a nature and capability is also the liquid of the real Mercury. But where to find and obtain him, I cannot report at this time, as I myself have not yet met him, although I saw him for some time at another good friend's. But to me he did not wish to come, although I have not stopped searching for him. Many Philosophers have reported that he can surest be met in Egypt. Therefore, I did not begrudge a journey to Egypt, visited there all seven ports where the Nile flows into the sea, especially as they say that he lives near the water. That may well be so, because where the Nile does not flow, Egypt is desert, dry and infertile and uninhabited. Therefore I could not inquire in such places but traveled from one port to another, was referred from one to the next, from the uppermost, the Canopico, to the Bolbitico, from there to the others, the Sebbenitico, Pelusiaro, Tenetico, Phanitico, and finally to the Mendosico. However, I achieved as little in one port as in another though I saw some horrible and enormous crocodiles. If Mercury had crept inside them - because when you are looking for him, he has a way of hiding like the polyp - I cannot say, but I can truthfully say that I met with great danger in Egypt, and yet, God's Providence did not

allow me to find Mercury. I will probably not do so till God takes pity on me and grants him to me for a good medicine, as I greatly harmed my body in my youth with traveling and laboratory works - and this blessing of God must be obtained by continual and devout prayers. What I have so far said about Egypt has not been done without a reason, as some would imagine, for the Mercury I have in mind is a true son of the Nile, which takes its origin in the mountains of Luna and flows through the whole of Egypt, Sapientis satis.

In the course of my travels, however, I came to know many kinds of fine earth and metallic stones, which are useful to me in many ways. Nor will I withhold from the kind reader the good things that happened to me. Although I did not get to know the true Mercury, I did find a mercurial liquid with which I can prepare a wonderful potable gold. It is indeed no mean arcanum, although I have so far kept it as my greatest secret and have been reluctant to reveal it to anybody. Even so, I will not withhold it any longer but communicate it to my fellowman and serve him thereby. It must be prepared with great care, however, as the spirit is so volatile that it vanishes from a glass that is not tightly closed, even if set only in the air, without the heat of the sun and the fire, at which I have often been surprised. As mentioned earlier, this liquid is so acceptable to gold that they quickly conjoin and want to stay together. How you can obtain it is done as follows:

In the gold mines there is a yellow or red earth. Have some of it brought to you. Now take some of that, powder it, pour distilled rainwater over it, boil it for one to three hours, and when there is no more water, add some more. Then suck it down slowly, filter it through paper, distill half of it off, and put it in a cool place. After a few days, mighty beautiful crystals will sprout. Remove and dry them. They taste like sour wine, almost like cream of tartar mixed with a little bitterness. If they are left for a few days in a closed glass, in gentle heat, they turn as red as blood. Now take a good amount of the aforesaid mineral or earth, crumble it and dry it without fire. mix the crystals with it, one part of crystals to two parts of the earth. Put this mixture in a retort, place a rather big receiver in front, and distill by degrees. You will obtain a beautiful white mercurial spirit. Enclose that in a phial and let it digest for 14 days in a vapor bath. Then separate the phlegma from it, rectify it once or four times in a glass retort set in sand, and you will obtain a beautiful secret mercurial spirit, of which you will not have seen much. It has a very nice taste.

Now take one part of the gold calx, prepared as I have taught in my Note above. Add as much of the mercurial spirit, congeal them together well closed, and when there are no more yellow drops, add the same amount of spirit and coagulate again. It will again become fixed in a short time, and the gold will open and become quite red. Pour more spirit over it and process till the gold turns blood red and is fireproof. You will have a medicine, the like of which you will hardly find. It can be used for all diseases and all men. You must not try to find out how it operates, for it works according to the disease, and its effect is very fast. It very quickly drives the perspiration if the sickness is supposed to be cured thereby, yet without any subsequent tiredness, as may be seen sufficiently from the few examples and experiments cited, from which the application of the medicine can be learned, also where it is required. If Nature will not have it otherwise than that a purging should be used, it must not be omitted. I prepared this medicine only once, because I can only rarely obtain the required earth, especially in view of the present menace of war.

It happened in 1624, when the Red Dysentery was raging amid the young, and I first tried it on my oldest little 4-year-old daughter. She had also succumbed to this cruel epidemic, and so much so that I doubted for her life. She had a strong fever, her pulse was rapid, hard, and strong, she had a very great thirst, her tongue was all black, and her excrements were black and green. Day and night she could neither rest nor sleep due to the cruel pain. Moreover, she could neither eat nor take medicines but vomited everything, even if it was ever so little. All these signs pointed to death. There was little hope, as the symptoms could not have been worse. Although she was not lacking in any good remedies, nothing would help her in the least.

Just then, I had this work in the fire, and although it had not yet been quite brought to its perfection, I opened the glass and took some of it out. I wanted to try what it could do in this desperate sickness. I gave my little daughter 3 drops of it in a little bullion. She kept it down and afterwards lay quietly for two hours. I believed it was an omen of death and that all her strength had gone. But, praise be to God, things turned out quite differently. After two hours, she again had a bowel movement, but not with such pain as before, at which I was very happy. As I noticed that much putrid matter was present due to the internal tumors, I considered it necessary to expel it by a little enema, which was applied and relieved her. It was made as follows:

Rec. Rad. Polypodi

Liquiritiae

Sem. Carthami cortus. an. j. Lot.

Herb. Origani

Calamint

Abrotani

Absinthii

Centaur. min.

Flor. Hypericon an. m.j.

Cort. granat. ij. Lot.

Furf. tirtic.

Hordei mundi an. m.j. coquantur in lacte caprillo vase clauso, cola & colaturae j. Unc.

Hierae colocynth. ij. Lot.

Mellis rosati j. Lot.

Salis comm. j. Lot., mixed, and this was the enema.

After this enema, the colic diminished somewhat. Thereupon I gave her another dose of this gold, and I could see with my own eyes that the child got new strength, so to speak, and improved. After 10 hours, I again gave her a dose, and a fourth after another 6 hours. With God's help and this sole remedy my child recovered completely. Later, I cured more than thirty patients with this one remedy, and most of them are still alive at this time.

The following year, in 1625, a surveyor of the waterworks in the saltworks of Sultza in Thuringia, a hard-working man, had so much pain in his left side that he could not relax day or night. He went for advice to Naumburg, but things turned out very bad for him. A severe fever followed which lasted over four hours every day. Soon after that, his thigh began to swell, and finally his whole abdomen. He sent for me, asking me to help him. I saw that it was dropsy at its highest stage. I purged him three times with Mercury, as will be described below. An enormous amount of water went from him, but he was so exceedingly tired that I did not wish to attack him further with purging. All at once the water was eliminated too frequently, removing with it much spirit and strength. As he could not take any food, I had to think of a tonic. I therefore gave him every day 3 drops of potable gold in plain water. After that, he found new strength, as he reported to me, and felt quite light all over. The swelling, however, continued, and his abdomen and legs were quite soft. When I saw that his strength was increasing, I gave him every week one of the pills, each time one scruple.

Rec. Extr. Hellebori nig.

Rhabarba

Mag. Gummi de Peru j. Lot.

Turpeti mineral. j. Lot.

Tinct. Corall. rub. ij. Lot, these mixed, and with oil of cinnamon made up the mass of the pills. they worked exceedingly well, without any discomfort, and expelled the water in a moderate fashion. In the meantime, I gave him every morning 3 grains of potable gold. The swelling subsided, and after 9 weeks he was completely free of it, so that not the least could be noticed about it. However, as he did not keep to a proper diet in eating and drinking - for he drank far too much - the same sickness returned in 1628 and he died of it, unable to obtain the same remedies as before. I believe that if he had them, especially at the beginning, he could have been cured once more. This is a great experiment, and a physician may certainly rely on it. I know for sure that he will earn praise and honor by it and be able to do away with the common saying:

Hydrops, Quartana Medicorum scandala plana.

One requires the right means at the right time, and will see that Nature is not so powerless that she cannot cure dropsy. She has enough remedies, if only we were not so lazy, and were searching for them among her subjects, and were preparing them. Everything depends on these two things provided God's blessing is added, for without it we cannot accomplish anything.

That same year, there was a school teacher not far from Sultza, called Reinsdorff. he was in bed with just this sickness. His thighs had sprung open, and much water ran out of them. Nevertheless, his abdomen stayed thick, and at the same time his genitals had ruptured, so that much water went from him. He, too, sent for me, asking me for advice, as he had heard that the surveyor in Sultza had been cured of precisely this sickness. As he could not pay for the required medicines at the apothecary, I gave him some of my own, even if they were ten times better - for God's sake. When I saw that he had become rather weak, I sent him 4 doses of this potable gold. He had to take it in cinnamon water on four consecutive days. After that, I gave him the afore-mentioned pills, each time half a scruple. They acted as a very mild laxative and eliminated much water from him. The swelling disappeared completely. I continued four times a week with the potable gold, and did this for two months. His thighs were still somewhat thick and open. I therefore prescribed the following footbath, in which he had to wash twice a day, as hot as he could stand it.

Rec. Herb. Ebuli m. iij.

Cort. Sambuci m.j.

Fol. Artemis.

Pentaphill.

Anelhi

Flor Hypericon.

Rosar. rub. an. m.j.

Sulph. vivi

Aluminis rochae an j. Lot.

Muriae naturalis, enough to boil these herbs in it. They had to boil for several hours, then be poured off and let cool. After this, he had to have iron slag made redhot and poured over by this water till it was only just so hot that he could stand it. In it he had to bathe his thighs. They became small and lithe and began to heal. When he had used this footbath several times, I also gave him some iron oil to put on his ulcers. Everything healed in a short while, and he was completely restored.

For the quartan fever it is a good remedy. In the same year, I cured three patients of it, a man and a woman of the aristocracy, and a young girl, all three in Thurigia. The nobleman had this fever for 19 weeks, and his feet began to swell. What he was using for it was of no avail. At first, I did not want to take him on, seeing that he was already swelling up and that he was losing his appetite, the longer the more. Nevertheless I agreed to try my art because of his insisting. I had the following pills prepared for him and gave them to him four times at a go, with one day's rest in between. Before purging him, I gave him the arcanum or tincture of tartar, and it will be described below under its title.

When he had used it for 7 consecutive days, one could notice a change in the urine. Before, it was yellow, murky and thick, now it was altogether black. I thought that now was the right time to resort to the melancholy humor or tartar, and began with it. The first day, I gave him 1 scruple, although that did not do much. The following day, I gave him one and a half scruples, the third and fourth day, 2 scruples each time. They achieved a great deal and eliminated so many black feces that one could wonder how so many could have been held in the abdomen. The arcanum of tartar had softened them, so that the pills could expel them. The pills were made as follows:

Rec. Extr. Helleborinig.

Gumm. Ammoniaci

Cort. fraxini an. j. Lot.

Aloes j. Lot.

Antimonii com Spir. Vitriol. praecip. j. Lot.

Tartari Vitriolyti j. Lot.

Salis Filichis

Absinthii an. j. Lot.

Tinc. Croci orientalis j. Lot.

Martis j. Lot. cum oleo Rosismarini, was the mass of the pills made.

After this treatment, the fever would not subside but the paroxysm was not as strong as before. Thereafter I gave him 6 times some of this potable gold, each time 3 grains in an extract of root of fern. The fever left and did not return, and the patient had completely recovered. With the other persons, however, where the fever had not yet become so severe, I used nothing but potable gold, 2 grains at one go, in an extract of fern, on two consecutive days. they were completely cured.

I will relate yet another case history, when I used this potable gold in a case of consumption. A noble young lady had not had her menses for a rather long time. In addition, she had lost much weight and had a fever. She continued losing weight from day to day but even so did not want to take any medicine, except what old women cooked and gave her. When then her end threatened to come on St. Matthew's Day, she tried more than ever. She had a physician fetched from Weimar. When he came, he already had enough with one look at her, did not prescribe anything, and left again. Her brother, who was a good friend of mine just as the previous patient whom I had cured of the quartan fever, looked me up and told me of her condition and how the physician had left her in despair. He begged me to look after her. I gave the same reply as the Weimar physician, namely, that they had waited too long. They, however, implored me to take the trouble of going with them to their home, as it was no farther away than one and a half miles.

When I arrived, she was lying there withered like a skeleton. I could not comfort her very much but said that I would try something with her. She was to call on God for a healing. I gave her every day 2 grains of this potable gold in rose-sugar, because I could not undertake anything else owing to her great exhaustion. ("rose-sugar" is also known as "conservé of roses"). I left again the third day, leaving her a whole Quentlein of this arcanum. I prescribed her to use it every day, and within 14 days she was to inform me of her condition. In my heart, however, I did not think that she could be cured. What happened?

After 14 days, she wrote me a letter in her own handwriting, informing me that she was feeling better and that her stomach demanded food. She wanted to know what kind of a diet she should follow. I wrote her what was required and ordered her to take the medicine I had prescribed every day. Four weeks had not passed when she got up and

learned to walk, which she had been unable to do before for 10 weeks. Of that she also informed me, and she continued in that way. I sent her more of the medicine, as much as I had. Shortly thereafter she reported to me that her menses had appeared again, though quite pale. I replied that she should be glad about this, even if they did not have the color they were supposed to have, as it could not yet be otherwise. She was to continue the treatment. After three months, she was quite hale and healthy, her weight had increased, and she recovered her natural color. Later she married, and is still alive today.

I consider this cure a miracle, for whoever would have seen her would have sworn that she could not see the third day. Nevertheless, God has blessed this medicament, enabling her to recover her full health, which should be remembered.

These are my experiments with potable gold. I have no others to write about, but the conclusion is easy to draw: If it has performed thus in the main diseases, what could it not do in the lesser ones? And as it is a powerful diaphoretic, there is no doubt that it would very well do its share for the Plague and epidemical diseases. I hope to God that it will also be a success for all those who use it, and wealthy people should try to obtain this noble medicine. I have been unable to get this mineral earth again. Not that it could not be found again, but that it could not be extracted and brought to me due to the war. Nevertheless, I hope that I can shortly obtain it again and with God's help again prepare this noble medicine, thus serving my fellowman and my family in case of need. I do not doubt that it could be used for many other things, but because I have not tried it, I will keep silent about it. Each may try it himself, then he can best judge and see what he can achieve with the virtues I have described above.

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Chapter 8.

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Chapter 8

How To Prepare A Mercurium Vivum From Gold And Other Metals

Take 4 Lots of Hungarian gold, dissolve it in salt oil, distill the salt off, and brown calx is left at the bottom. Put that into a flat glass, close it tightly and give it a constant fire, but so that the calx does not melt in the glass. Let it stand for 8 or 12 weeks, and the calx will be so much reverberated that it becomes quite malleable, like dust. Now dissolve it in oil made of antimony and Mercury, let it stand in the heat till the oil disappears altogether and dries up. Then begin to sublime with a strong fire, and the gold will sublime above on the glass like a golden ring. Remove it carefully. It can be manipulated with the fingers like an amalgam or quicksilver, except that it does not run like the common quicksilver.

ANOTHER WAY

Take subtle gold calx, calcine it with the elementary Mercury of the Sun or Moon. After the calcination, add as much Live Mercury to it and put it into a sublimatorium. Let it stand in gentle heat for 8 days till it turns into a sublimat. Now begin sublimating. Enclose this sublimate in a glass and set it to digest for some time in a vapor fire, and all the sublimate will change into a mercurial Body. If now sulphur is added to this quicksilver of gold in the right proportion or weight, and Mercury is thus prepared with the Philosophical Fire, you have an excellent medicine for healing lepra, for it cleanses the corrupt impure blood, expels the dirt of the whole body through perspiration, and rejuvenates it somewhat.

NOTE

Almost the whole world is singing of the Mercury of the Sun and other metals, and there is no laboratory worker who does not speak of this Mercury. I have also met many learned men who thought that the Mercury of the Sun was like the bride around whom there is so much dancing, but what they got was little, just like the suitors of Penelope. It is the same with this Mercury. I would like to see a man and speak with one who does not have this Mercury on his brain. But Mercury laughs at them and causes them enormous confusion. If there is one subject under the sun that causes much work for the alchemists, it is this, and many believe that if only they could prepare the Mercury of the Sun, they would be on the right way, and that no better way could be found in the whole world. This is so because the Philosophers unanimously indicate that the first beginning of the Work must and should be a work based on the rays of the Sun, as Sendivogius says. This saying has made a fool of so many and has sublimated

their brain to such an extent that for the sake of Mercury their work came to nothing and went up in the air. Even so, whenever I entered a laboratory, I saw that they were busy preparing the Mercury of the Sun. Much money has been squandered on it and strange processes have been invented, that one must rightly wonder that human ingenuity has accomplished to fathom that secret. And I say frankly, if Hermes and Geber were to raise from the dead, they would be horrified and could never do such works. And although Geber experienced many beautiful things in distillation and wrote tremendous processes himself, they are nothing in comparison with the present works, for each wants to be above the other. Each tries to show his work in a better light, and each praises his work above that of others. If they are seen in daylight, however, they all show the same result. That is, one remains a fool like another, and one accomplishes as little as another. Under the late Emperor Rudolf II, I know that more than 10.000 Ducats were spent on this Mercury, and not one Ducat's worth of usefulness resulted from it, except that syphilis, which was at that time quite common in Prague, could be cured faster. But this cure costs a lot of money, and syphilis is not worth so much, it can be cured at less expense.

I have seen how a laboratory worker had a large quantity in a glass and wanted to congeal it. I laughed at this work and asked what it was that he wanted to congeal. Since the gold had been fixed before, he would not, if the desired fixation were to follow immediately, obtain more () than there was before. But he could not get this into his mercurial brain and thought that there would be ten times more than there was before. But the tables were turned and the glass received a shock. Now the prisoner broke loose and fled in silence. He looked around to see how he could safely get away. Seeing no way or hole except the fire-wall, he fled through there, and the good plan came to naught. How Mercury must have laughed at this foolish young man when he escaped so easily from prison.

In brief, say what you like, Mercury remains a trickster, goes hither and thither, tries his luck how he can deceive the gods and men. Besides, he also has a thieving nature, carrying away the veil of Venus and Vulcan's instrument. And again, I am surprised that so much time is spent on the preparation of this Mercury and the various processes that have been invented to this end.

Our author has also described two for us, but both are not worth anything and are stupid enough for a laboratory worker such as the afore-mentioned one. For it is evident that gold accounts for the least part of it, and how then can it be called a Mercury of the Sun? Most of it is vulgar mercury and a little antimony, and if it is somehow properly treated, the common mercury can be driven off it, so that it must leave the gold behind. And suppose it stayed with it and mixed with it like one water with another, what good would it be? Because it would be a contaminated composition, and as little could be accomplished with it as with common mercury, except that in this way it precipitates somewhat faster. Aside from that, I cannot see anything else in it.

Many artists believe, as our author also does, that if they had the Mercury of the Sun and conjoined it with its own sulphur, they would have the greatest medicine in the world. Let him believe that who wants, I for my person cannot believe it. Experience has often proven that in that form the Mercury of the Sun does not except its own tincture or sulphur. If things went as the author wants, and supposing that it accepted them immediately, there would nevertheless be a separation in the right examination.

(Translator's note: Agricola speaks about the Mercury of the Sun (gold), yet the sign in the margin refers to () (silver). Likewise in Para 2 above. The sign should be () (gold).

I have seen that Herr Hasselmeyer had almost a whole pound of Mercury of the Sun. He also added its sulphur - which was blood red - but it did not except that tincture, although he had kept it long enough in the fire. Bernard Penotus also testifies that he did not succeed in doing it. There are reasons why it does not except the sulphur. When the Body () is changed into a running Mercury, there is no separation of the sulphur and the salt, but everything is simultaneously transformed into a Mercury. Consequently, it already contains all that it needs and cannot absorb more. That is also the reason why it rejects any additional sulphur, and the substance () is totally transformed without a separation. Of what use is it them to add a superfluous amount of it? Nature does not absorb more than is her due. The rest is all time, effort and expense for nothing.

Although there is something to it that the Mercury () is better than the common one, if it is processed to perfection, I do not doubt that common Mercury can also be processed to that degree by careful preparation, except, as already indicated above, one is sooner coagulated and made stable in the fire than the other. It must, however, not be infected with the common Mercury, which is only a bastard, but must be pure and perfect, otherwise it is not worth much. Whoever would like to prepare it, let him follow this process, for both of the author's processes are not worth a hood.

Take sublimated Mercury, sublimated with vitriol and salt. Make it come alive again as is customary. After that, take sal ammoniacum, as much as there is Mercury, and sublime it again. When this is done, remove it from the head of the alembic. Discard the feces, and sublime again. Repeat this sublimating till everything stays at the bottom and melts like wax or butter. Then it is enough. Now take it out and put it in a glass dish, pour over it ammoniated water of the Sun (whose preparation will be indicated below), to moisten it well. Set it in warm sand

and coagulate it. Then add again some water and coagulate. This must be repeated till it can no longer be coagulated but stays fluid like oil. Put it in a cold place, and it will turn into a beautiful bright water. This water is also used for other things, and in chymistry much can be done with it, especially as a means for refining silver.

Now take as much of this water as you like, put your thinly laminated gold or silver in it, let it digest 24 hours, and the gold will melt and become like a sponge. Distill the water off, a dirty mass will be left at the bottom. Pour warm rainwater on it and mix it well with your fingers. The whole Body will turn into a beautiful running Mercury.

By this process the Mercury of any Body can be made pure and uncontaminated. It can be used at the artist's pleasure, but to make the Lapis with it will not happen this year.

Although there are more means and ways for preparing the Mercury of the Sun, they cannot all be recommended. Most of them are quite wrong, and among ten hardly one works. Therefore I will add yet another method by which it is easier to obtain it in less time. Here it is: Take 4 Lots of gold, dissolve it in Aqua Regis, as is usually done. When everything is dissolved, distill the water off to oiliness, pour fresh Aqua Regis over it, let it digest 24 hours, and again distill it to oiliness. You must repeat this work seven times. Now give it a rather strong fire, and the gold will rise and sublimate. Remove this sublimate carefully and dissolve it in spirit of wine, strengthened by oil of salt. It will melt. Distill half of the water off and set the rest in a cool cellar. Beautiful crystals will spout. Remove them, add to them 2 Lots of salt of urine, salt of alkali, salt of tartar, sublimate of ammonia, each one and a half Lots, let them putrefy together for 14 days. Now add half a pound of crude tartar and sublimate or drive it through a retort into a receiver in which there is cold water. You will see the Mercury of the Sun rise over quite bright like common Mercury. It comes alive in the cold water. Remove it and purge it in the same manner as will be indicated regarding common Mercury. You have again a true live Mercury without the addition of common live Mercury.

Although our author thinks that many consider that by this transmutation the metal is brought into its prima materia, he himself cannot believe it but says that it is only brought into its second materia. One is as true as the other, for this Mercury is neither prime nor second materia. When the Philosophers refer to the second materia, they understand quite another materia, as Sendivogius writes in detail about it in his 12th Treatise and his Book on Mercury. If this were the second materia of Mercury, the Philosophical Materia could come out of it, but not by precipitation as the majority believe. They may precipitate as much as they like, they cannot do it, for this precipitate cannot only be revived and made volatile and evaporated like common Mercury - which I have already mentioned several times - but it cannot be turned into Philosophical Materia, which materia is universal and not specific, and it is the Soul of the whole world. Therefore all labor with the Mercury of the Body is lost, may they say what they like. Libavius believes that by adding common Mercury to this Mercury an excellent piece of art has been achieved, but it exists only in his imagination, not in the work. One has to laugh reading this fantastic trash of Libavius, when he adds: Arrige aures Pamphile, and he considers this an enormous secret, when it is actually only mere fantastic trash, good for nothing. But I will not be against it and believe that it is better for medicines than common Mercury. But this Mercury costs much money and is an expensive medicine. A much better medicine can be made by making the gold potable, as I have taught you, than by first turning it into running Mercury.

Everything that has here been said about the Mercury of the Sun likewise applies to the Mercury of the Moon. I consider them at the same level, for both are perfect Bodies which cannot be brought into their prima materia without the addition of the true Philosophical Materia, even if 12 fadders of processing were prescribed. I could certainly indicate over 300 processes for one of these matters, which cost me a great deal, though no real work could be found in them, except that I learned a fine knack for regulating the fire and boiling some water. A young student must not be led astray and must not believe anything those sophist fellows say. It is only words, and they cannot stand up to Vulcan (fire), but they and others are only being made fun of.

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Chapter 9.

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Chapter 9

How to Prepare Vitriol from Gold

Take 6 Lots of fine gold which has passed through antimony or has been purified by it. Beat it into thin plates, coat it with the artificial Mercury, called Aqua Regis by the Philosophers, and give it a gentle heat. The plates will begin to give off a crocus and color. Put that in a clean glass, then coat the gold plate again and calcine it till a vitriol or color appears once more. Continue doing this till all the gold has become one color. This vitriol is like the crocus of Mars (iron). Put everything together and pour Aqua Regis over it. When it is dissolved enough, cleanse it with Nature's water., then distill the phlegma off to half the amount, and a beautiful vitriol will sprout, which attaches to the glass like sugar. That is the vitriol from gold.

ANOTHER METHOD

Others, however, take the golden plates, beat them quite thin and fill the alembic with them so that, when the spirits rise into the alembic out of the artificial Aqua Regis, those same fiery spirits permeate the whole gold, extracting a subtle crocus which adheres to the plates like beautiful saffron. They remove it and pour over it Paradise Water, let it extract for 8 days, then decant, filter through paper, and coagulate it to a salt of vitriol.

NOTE

Here the author indicates two processes for making gold vitriol, but in their effect one is like the other. Only a menstruum, or solvent, is used, and a method of working is prescribed. It is nothing but a dissolution of gold with the corrosive Aqua Regis, which he calls "artificial Mercury". If you have a good Aqua Regis, it extracts a crocus in the digestion, but that is much better done by the spirit of Mercury. It is nothing but a dissolution that occurs when Aqua Regis is poured on the calcined gold. It is not without merit and gives you a crocus, but it is much slower and afterwards leaves you with little spirit, because, if this vitriol is given strong fire in the digestion, it melts back again into a Body. It results in a yellow spirit that is not really sour though somewhat bitter. The salt or the vitriol of the Sun can be made in another way which goes faster and also dissolves the Body better.

Distill the spirit through the alembic, rectify it three times. Then take the salt from the Death's Head, add it to the first spirit and distill till the fixed salt also goes over the alembic. When this spirit is ready, beat the gold into plates, hang it in a glass above the spirit, and it will extract the crocus in the digestion. Then dissolve the crocus in distilled rainwater, filter it, and distill it by half. Now lovely brown, sometimes also red crystals will shoot in a cool cellar. They can be dissolved again, but it will not amount to much. It is indeed no radical dissolution, be it called salt or vitriol. It is nothing but a corrosion of the Body, to weaken it so much that it can be made potable. When all these works are rightly considered, one is like another, and one has the same effect as the other.

I have already several times reminded the reader in my Notes that if one has a right dissolution of the gold - of those I have mentioned I consider only two as the principle ones - it is sufficient, and there is no need to worry greatly about the others. Care has only to be taken to choose that which is not too corrosive, so that one does not administer poison instead of a teriac. You may call it by any name you wish, it is finally nevertheless leprous calx. Thus the author's vitriol is nothing else: For it is only corroded by Aqua Regis, and nothing concerning the Art can be learned from it, although the Aqua Regis is called a Mercury, and rainwater Paradise Water. Words do not improve the work, and one should take the least possible notice of words but look solely to the operation and in what it will and should result.

If the gold is calcined first, however, as has already been taught above, it can be imbibed with spirit of urine and thus be dissolved completely. It will leave its feces at the bottom. What is dissolved is decanted, and the menstruum is distilled off quite dry. Now pour on some more spirit of urine, proceeding as has been said before, and this must be repeated three or four times. Then pour distilled rainwater, or better, distilled May Dew over it. The gold will dissolve very well and will thereafter give off its crystals and salt.

May Dew is prepared as follows: Collect a rather large quantity of it, put it in a big glass, seal the glass and set it for 6 weeks in the sun or in warm horse manure. The dew will coagulate, so to speak, but at first it becomes quite thin. The phlegma must be separated, and finally its spirit driven over with a strong fire. In this way one obtains a fine menstruum, useful for many things, especially if it is strengthened by its crystalline salt and conjoined to it. Now someone might ask for what purpose this vitriol of the Sun is made and prepared. The author does not mention it with one word, but it is easy to see why: to turn it into potable gold, serviceable for many diseases in case of need. It is not necessary to write here much about how this vitriol is to be elaborated further, for this has been dealt with ad nauseam in almost all headings and chapters.

I have seen in a noble house that a spirit was distilled from it, which was a wonderful cardiac tonic. It was quite different from the common spirit of vitriol. With it a tincture was extracted from calcined silver, more beautiful than the finest gold could ever be. It was a wonderful arcanum for epilepsy. Whether it could also be used in alchymia, I

cannot truthfully say. I heard it being discussed, however, that if the yellow sulphur of silver were conjoined with gold, it would turn into a strange combination, supposedly a real augmentation of the Sun. I have not tried it. I am not against it, as it may very well be so, but I doubt that it can be produced in large quantity, as silver does not contain much of this yellow sulphur.

So far we have dealt with many dissolutions and calcinations of (), explained and amplified the author's processes by our experience, also accomplished fine cures and experiments with it. But as to reveal my final option of this business - I do not think much of most of them, because these dissolutions are no philosophical destructions. But I have already shown above how gold is to be artificially decomposed, and it need not be repeated here. I have only examined the operations in accordance with the author's instructions and method, and have revealed how I have found them to be in the fire, in practice. I hope that the kind readers will accept my care and candor with thanks. I could have written about many other preparations and my 30-year-experience with fire. But that was not my intention. I had only resolved to analyze this author and to show how far he could be followed.

Recently I got a hold of another way of preparing potable gold, such as Herr Harianus a Mynsich, my old school comrade, describes in his *Thesaro Medico-Chymico*, although a similar one is also found in *Ustadius' Coelum Philosophorum*, and *Thurnheuser* also mentions it. That oil has greatly proven its effect. Upon the insistence of a member of the nobility, I prepared it and found its effect so good that I did not wish to omit indicating it here, so that everyone might safely work with it. Although the preparation appears to be bad, it does not matter. Often there is more art in a bad process than in one that has been colored by many exaggerations which, when put to the test, show what it is. Now we will proceed with the preparation.

Take Hungarian gold, well purified through antimony, have it laminated very thinly, then dissolve it in a right oil of the Sun (I have already indicated its right preparation and more will be said about it below under its title). When it is dissolved, distill the oil of the salt strongly off it, and a fine gold calx will be left at the bottom of the glass. Take it out, put it in a small retort, pour enough cinnamon oil on it to turn it into a pap. The gold will soon begin to effervesce and become black. Pour on it a good alcoholized spirit of wine, standing 2 fingers' breadth above the materia. It will soon extract a tincture from the gold. Pour the spirit off and pour fresh spirit on it, and continue doing this till no more tincture shows.

Remove the Death's Head, wash it with warm water and weigh it. Now pour again the right quantity of spirit of salt on it, and let it dissolve again. Distill the spirit off quite dry, pour oil of cinnamon over it, and when it effervesces, add the spirit of wine and extract its tincture. Repeat this work till the gold is completely dissolved and not the least bit of insoluble matter is left of the Body. Now pour some clear purged spirit of wine on it, distill it to oil, and you will have a wonderful medicine or potable gold. To tell the truth, if among the common dissolutions one pleases me more than another, it is precisely this one, because it operates extremely well. The person whom I did the favor of preparing it for, used it for her sickness - of which nothing need be said here - and it was of great benefit to her health. However, I made two subsequent tests of it.

In 1629, a noble gentleman was suffering from a troublesome podagra, so much so that his hands and feet had shrunk, and yet he was not yet 42 years old. Although he had resorted to great physicians and had also been to warm springs, it was to no avail. I met him by accident, and we discussed the terms. I told him that I wished to try something with him but that I could not promise sure help. First, I purged him with oil of antimony, as will also be taught later. It went through bone and marrow, as he reported to me. When I saw that it agreed so well with him, I gave it to him again after two days, and thus I purged him four times in a row. Then I gave him three times a week 6 drops of potable gold in essence of *Jva Arthetica*. I had his members rubbed with oil of *ossium microcosmi*. He continued with this from Easter to St. James's. He learned to walk again with a cane wherever he wished, while he could previously not get farther than the place where he had been taken with a chair. The bumps, however, did not disappear as they had already been hardened to the highest degree. But he was happy and thanked God to have improved so far that he could again walk anywhere in the house and grasp things with his hands. I would never have thought that this solution could have such an excellent effect. I also believe that he would have completely recovered if he had continued with this medicine.

That same year, the little 10-year-old daughter of an honest man in Sultza had long had a fever. The child was so exhausted that she lost her strength and withered. The paroxysm occurred every other day at 2 p.m. and lasted four hours. Although many medicines had been used, there was no progress, and the child's condition stayed the same. Yes, after the last medicine, she was worse than at the beginning. I was convinced that she was going to die, as no medicine would help her. When I had prepared this potable gold, I gave her three drops in the morning in some conserve of roses. The following morning I again gave her 3 drops. About one hour afterwards it looked as if she were going to vomit, but nothing happened. While she was gagging, a worm was passing through her mouth, almost twelve inches long. I was surprised. The fever went from this hour on. I continued for three more days with the dose. The little girl was hale and healthy and like newborn. From this I conclude that this solution must also have great

potential in other diseases, but as I could no longer experiment because of the war, I cannot report further about it. Whoever wants to keep his body in good health, should use this solution. He will certainly not regret it. And with this we will conclude this treatise on gold and its preparations, and proceed to silver according to our author's method.

Concerning the Material of the Stone

This treatise is the first item in MS. 3027 in the Bibliothèque de l'Arsenal. It is entitled 'De la matière de la pierre des philosophes en général'. Here it has been translated from the French by Mike Dickman.

CONCERNING THE MATERIAL OF THE STONE IN GENERAL

The primary and remote material of the Stone is triple, to wit, Mercury, Silver and Gold, in that all perfection consists in triplicity, and that all that is triune is perfect. There is but one sovereign and independent perfection and that is God, yet nonetheless within His unity, He embodies the Trinity of persons.

Spirits separate from matter are of three kinds, men are good, bad and middling, all that is most perfect loves triplicity.

The principal members, too, are three, namely the heart, brain and liver, whence spread forth throughout the body the arteries, nerves and veins, through which stream the natural vital and animal spirits, which maintain the natural, vital and animal faculties.

On the same subject, there are in humankind three sexes, masculine, feminine and hermaphrodite. And so, too, in our work, is Gold male, Silver female and Mercury the androgyne, converging the three into one single *oeuvre*. For should others such as those holding the material of the Stone to be Tartar, vitriol, antimony, vinegar, urine, menstrual fluid, semen, after-birth, blood, the celandine, moonwort, salamander or other things similar assert the contrary; either they know not the Art, or understand some other thing, which has, either the semblance, colour, consistency or at least some other similar quality.

It is thus then that those who seek the materia without the metallic genus, and in other place than within metals, work fruitlessly and in vain. May it please God that they have firmly imprinted upon their minds this axiom of the Philosophers to wit that *like engenders like*.

Has it ever been that a bull engender a lion? Do men father trees, or plants or metals? It has ever been constant that man engender man, horse or, which is the same, that man is fathered of the human seed, horse from the seed of the horse, and that from the seed of Rue springs Rue and never Sage. The same is true of Gold, which never can be produced without gold, nor yet silver without Silver; and let those who stray from this path be forcibly persuaded that they are wasting their time and their oil, and also when that they would waste upon it all of their wealth and work at it all the time of their lives. And in that there are many who spend long years at this work at great expense to themselves, I warn them that they are off the veritable path, for it needs not so much time nor excessive expense, for there is in this work almost no other thing that costs but the fire.

OF THE MERCURY OF THE PHILOSOPHERS

Now since the principal part of our work consists in knowledge of our hermaphrodite, that is to say Mercury, guard well that you take it not for the leprous, common and vulgar mercury, in no wise proper to this subject.

But where will you then - you ask - that I seek and find it? I answer that he is imprisoned and bound by many chains, and that there be none but the Philosopher can deliver him and set him free. He sees him at all times, though his dwelling he without gate or window; but the vulgar see it not nor know it at all, though it is at all times and in all places possessed by each and everyone, rich and poor, night or day. All beings handle, touch and spurn it underfoot, and yet know it never, for as is said, its prison is void of door and window.

Now, a certain one believing, having heard that it he handled, spurned underfoot, wasted and fouled by the vulgar, set course for the mountain wherein he had heard it said that four men and two women were occupied in the digging of minerals, each carrying on his or her breast that thing which he sought. Being thus persuaded of this, he entered into the mountain, and having met with the first personage who was occupied at working and digging the earth, looking attentively upon him perceived a strong and robust man in the habit of a soldier, red in colour and returned from the war, and knowing no other trade by which to earn his bread. Now he, having regarded this traveller, spoke unto him rudely and asked of him what it was that he sought, and who had made him so hardy as to venture into these realms where no-one had ventured before.

The traveller, astonished to find himself looked upon askance and addressed in tones so brusque, replied right gently:

"O Man of strength, I have heard it told that there be four men and two women who work this mountain, and that by long travail you all possess the materia of the Philosophers' Stone. And, since I, myself, burn with ardour for this hallowed Stone, I have no fear in coming to this place, traversing waters, mountains and rocky crags; will not you give me some hope of obtaining of one of you that which I seek?"

"You have well understood," replied the strong man, "that we are four men and two women, and that all possess in truth such that we are that which you seek, and could give it you, though I doubt that that will be, yet may you obtain it more easily of the one than the other. For my part, if you fight me not valiantly like with some greatly experienced soldier, only if you slay me, for I bear that which you seek in the depths of my heart, it being my nourishment and life; and so of us all such as we are in this mountain."

The traveller replied, "O man of great strength, you are hardy and robust, I should not at all like to fight with you, I should be like some puny Trojan against Achilles; and yet could I do all that David did against Goliath."

"I advise you," - quoth the robust man - "to lay neither no hand upon my neighbour and concubine, who also is most powerful in combat, and if I be lion, she surely is the lioness. Nor do I advise you to attack our Sovereign Chieftain and his wife, for they be the King and the Queen; they have too much of pomp and splendour; take care then to attack them not, though well you might them vanquish. But going further along, you shall come upon others whom if you subdue you shall arrive at your desired end."

The traveller thus continued on his way, until he met with a most comely man, well-dressed and right splendid, with whom he spoke as before. This man replied that in no wise would he give him something from which he, himself, drew nourishment and life, and that he would go not only unto his own death, but to that also of the King and Queen, were he to grant what he asked of him.

The traveller spied on every side to assure that no-one watched, for it was his intention to slay him and take from his breast that which he there had so well conserved. And since he had said that on his death depended also that of the King and Queen, he rejoiced also already, in the hope that he would kill them straight way, and take from them that which he sought.

Seeing thus that no-one appeared, he made attack on that splendid man, taking him by the throat, but he cried him mercy swearing that in that case he would reveal unto him the secret he demanded.

The traveller having thus released him, he replied, "If you go further along, you shall come upon a dotard possessing the treasure that you seek in more abundance than I, and, he being old, you shall easily overcome him. And inasmuch as he is most close to our King and Queen, as their porter and he who carries the keys, when once you have cast him down you shall easily approach unto the King and Queen, and slay them also."

The traveller thus continued on his way, and came finally upon a certain ancient, a man of poorly mien and ill-clothed, the most miserable and despised of them all in that he seemed sad and melancholy, and he held with him the same discourse as before. But the old man answered:

"O goodly man who seeks here a thing neither Kings nor Queens may obtain, it is indeed true that you may easily find it in me, and that you may also easily vanquish me in combat, for I am old and feeble and do not carry in the depths of my heart that which you seek as do the first with whom you spoke or his concubine. But do I keep it only in the ventricle, for that my body and that of others do there take ever their nourishment.

"Nonetheless must I lose my life, if you would take from me that which you seek. But, prithee, spare me for I am old, poor and despicable, and you may find better treasure in my brilliant and magnificent neighbour who is related by marriage to our Queen. Were you to vanquish him you would have a treasure more precious than from me who is so poor, for never does one find the beautiful and bright in the poor and despised."

The traveller taking pity on the poor dotard whom he might easily have slain, believed then that it would be more worth to seize the more precious treasure from the greybeard's neighbour, be it by force of arms would he not give it up voluntarily.

How so be it, as he was departing, the old man commenced to smile the more especially that being the possessor of so precious a treasure he had tricked the traveller, which same perceiving this on turning about, immediately retraced his steps in a fine fury.

"Is it thus," demanded he, "you wicked old man, that you would make mock of me? I know now that you pretend only to be poor, and that it is you who hold the greatest treasure, just as your neighbour told me. Take now the punishment for your laughter and receive your death at my hand." And thus was the old man slain.

It is easily understood by all that has gone above, where to find and take the Mercury. Now must we declare how it is to be brought to birth and taken from the corporeal belly in which it be enclosed. It is this that all Philosophers make well enough known and all books on chemistry relate to the point of importunity. Whence this saying common to Philosophers:

Mercury is to be made by Mercury,
the which being well known to many, we shall no longer tarry over it here.

ON THE PREPARATION AND PURIFICATION OF THE MERCURY

Take then your Mercury and purify it well by passing it several times through a cloth folded in three, and until it seem pure as clear and crystalline water.

All other methods of purifying Mercury, such as those making use of vinegar, salt, urine, quick lime, vitriol or other all corrosives such as destroy rather than exalt the humidity of the Mercury, thus harming more than they serve we deny.

OF THE SUN AND THE MOON AND THEIR PREPARATION

The second material of the Stone, the so-called female, is the Moon which is to be taken very pure, as it comes from the mine, the which has never been put to any other use, nor too much suffered the violence of fire, which is unmixed with any foreign body and easily malleable. In a word, let it be of the most excellent to be found of its kind, and this should you hammer into leaf of the very finest, though others again reduce it simply to a lime; that which I say of the Moon say I also of the Sun, that one take the highest coloured there may be, for as is the seed, so shall be the harvest reaped.

THE COMMENCEMENT OF THE WORK

Here note first that depending upon whether one would make the White Stone or the Red a different material is to be used. This being as it may, the manner of working for the one and the other is exactly the same and so is here said for the operation of the white should be understood as concerning also the operation of the red.

We shall speak first of the putrefaction of the materia, which is to be followed by a resurrection and exaltation, which will not occur but that the action has preceded them, the corruption of the one being the generation of the other. The seed of an herb soever, thrown upon the ground, putrefies first and loses form, following which the virtue hid within it, favoured by the warmth of the heavens, makes itself manifest, and the earth containing this seed being dampened by heavenly rain and dews, makes it to take on more noble and more perfect form, subsequently causing it to bear forth fruit in abundance.

And Nature works in like manner in all animals; they take first nourishment, then growth and finally they engender. And if such be true among men, and animals, and plants, as may not be doubted, must one not needs be blind not to see that the same be true amongst the minerals? You will say that this thing is much different among the animals, there being necessary to the production of but one animal the semen of two, to wit the male and the female. I answer that that which is performed by the twin seed, male and female joined together to engender one, single animal, one sole seed performs in the realm of the minerals. And why should it not be so? for in the vegetable realm the seed that produces them springs not from two plants, but from one alone. For let it not be fancied that the sex, male and female, attributed to plants, by cause of their mutual love, in any wise contributes to their production of like others. But let us procrastinate no longer.

PART THE FIRST OF THE WORK

Of the very pure menstruum of a prostitute woman, take 12 parts, of the perfectly washed lower body 1 part, in a long-necked and oval vessel, mix well all together until the whole materia be amalgamated. But let first there be added to the body 2 or 4 parts of the menstruum, and allow the whole to lie for 15 days or thereabouts, during which time the dissolution of the body shall take place.

Take then this materia, and press it that there comes from it the menstruum which you shall keep. Upon the body remaining after expression, place one or two parts of fresh menstruum, and let it stand it again eight days, after which time you may proceed as you did at the beginning, and continue in the same fashion until the body in its entirety has transformed into water.

All such operation is performed with the gentle fire of ashes, the vessel well sealed and corked with pasteboard.

PART THE SECOND OF THE WORK

Take all of the *aqua vitae* and place it in a sealed vessel like unto the one above, and at the same degree which is the first degree of the fire of ashes, for 8 days and 8 days it shall form upon its surface a black skin, which is the head of the crow and this you shall gather with the black powder which is beneath it, drawing off first the *aqua vitae* by inclination.

Again place this water in the vessel and continue in like manner, until blackness no longer forms.

PART THE THIRD OF THE WORK

Take all of the dead head you have gathered, and place it upon a fire of the ashes of oak, in the Philosophic Egg which same seal hermetically at the orifice, but with paste only at the joining of the two sections of the Egg, that it may the more easily be opened.

For the first 8 days more or less shall you give unto your black and moribund earth nothing to drink, in that it is yet full drunk of humidity. Then, when it be dehydrated and parched, you shall give it to drink in equal weight. Opening the vessel to this end, mix well and then close it again and leave it thus, until it be not quite entirely dried out, but only well coagulate; continue imbibition in like manner until the materia has drunk off all of the water.

PART THE FOURTH OF THE WORK

Take now this materia and place it within an Egg upon a fire of the second degree, leaving it there for several months until finally, having passed through divers colours, it becomes white.

PART THE FIFTH OF THE WORK

The EARTH being white, is near ready to receive the seed, and this because of the fecundity it has acquired through the preceding operations. Take therefore this earth after having weighed it, and divide it into three parts. Take of the ferment one part equal in weight to one of the three parts of your divided materia, and four parts of the menstruum of a prostitute woman, make of the ferment laminated as before and the menstruum an amalgam, and work the dissolution at slow heat for 14 days, until the body be reduced to a subtle lime; for we seek not here the *aqua vitae*. Take now the menstruum with the lime of the body, and the three parts of your white earth, make of all this an amalgam in a marble mortar, and in a vessel of glass upon a fire of the second degree, for a period of one month. Finally, give it the fire of the third degree until the materia become quite white, which shall be like unto a mass, gross and hard like a pumice stone, but weighty.

Thus for the operation of the white Stone. For the red, you shall operate the same, save that at the end you are to apply the fire of the third degree for longer time and more vehemently than for the white.

PART THE SIXTH CONCERNING THE PREPARATION OF THE STONE FOR THE EFFECTING OF PROJECTION

Many have made the stone without however knowing how to prepare it so as to effect the projection. Also, the Stone although prepared and achieved will make no transmutation if one does not make it have ingress into the body. To this end, break up your Stone, grind and place in a vessel well sealed with lute right up to the neck, that it may suffer great fire such as that of the fourth degree, give it fire of charcoal so strong that the sand be that hot that when one cast upon it drops of water these last make sound, and that one dare not touch with the hand the neck of the vessel placed upon the sand, by cause of its great heat.

Keep your vessel upon this degree of heat until your material becomes a most subtle and light powder; the which occurs usually within the space of one month and a half.

PART THE SEVENTH AND LAST OF THE AUGMENTATION AND MULTIPLICATION OF THE STONE

Once made, you may multiply the Stone unto infinity, without needing to make it again.

When you have the Stone made and achieved at the fifth step of the operation, one half shall you take to serve for yourself and this prepare to effect projection, and the other shall you keep for multiplication.

Weigh then that part, and if it weigh three parts, take one part not of the menstruum but of the *aqua vitae*; you shall then have four parts the which you shall place within the Egg and upon a fire of the second degree for the space of one month, following which you shall give it the fire of the third degree until the end, as above taught by ourselves in the fifth part of the operation.

FINIS

The Golden Chain of Homer

The influential 'Golden Chain of Homer', written or edited by Anton Josef Kirchweger, was first issued at Frankfurt and Leipzig in four German editions in 1723, 1728, 1738 and 1757. A Latin version was issued at Frankfurt in 1762, and further German editions followed.

In the late eighteenth century Sigismund Bacstrom made a rather poor translation of the work into English. Part of this was published in the Theosophical Society Journal 'Lucifer' in 1891. A number of manuscript copies of this translation have survived. Although the translation is more a summary than an exact translation of the original, it is an important late work on alchemy, so I have decided to include this translation here, despite its imperfections. I am indebted to Jerry Bujas for making an initial transcription.

Of the Generation of things, Part I

Chapter 1 What Nature is.

Nature comprehends the visible and invisible Creatures of the Whole universe. What we call Nature especially, is the universal fire or Anima Mundi, filling the whole system of the Universe, and therefore is a Universal Agent, omnipresent, and endowed with an unerring instinct, and manifests itself in fire and Light. It is the First creature of Divine Omnipotence.

Chapter 2 How all things proceed therefrom.

Thus God created first this invisible fire and endowed it with an unerring Instinct and a Capacity to manifest itself in 3 Principles.

1. In its Original most Universal state it is perfectly invisible, immaterial, cold and occupies no space, in this tranquil state it is of no use to us, yet in this unmoved state it is omnipresent.
2. In its second state it is manifested by motion or agitation into light. In this state it was separated out of the Chaos, when God said, "Let there be Light." Yet it is still cold. When gently moved or agitated, it manifests warmth and Heat, as in the case in all Frictions and in Fermentation of moist things.
3. When collected in a sufficient quantity, and violently agitated it is manifested into burning fire. This continues burning as long as it is agitated, and has a fit subject to act upon; when that fails, it returns to its first state of tranquil Universality. In the character of burning fire it manifests Light and Heat. Thus,
 - (a) we say in its first most Universal state it is perfectly invisible and immaterial.
 - (b) In its second state of manifestation it is visible in Light, but remains cold and immaterial.
 - (c) In its third state of Heat and burning fire it is visible, hot or burning, and becomes somewhat material as it occupies Room or Space whilst in this State.

You have seen how 3 distinct powers of the Universal Spirit, but it possesses still more and even some inconceivable powers.

We have told you that the Universal spirit endowed with an unerring Instinct, working by the most simple and nearest way, it has, also, besides its already mentioned conspicuous qualities, two occult powers, viz: attracting and repulsing, and these two powers are inconceivably great!

We see various instances of it in Thunder and Lightning, in Earthquakes, Hurricanes and in the surprising effects of Gunpowder.

When God created this Universal fire, He gave it a power to become material, that is to become Vapour, Humidity, water and earth, although that fire in its own Universal Nature, is, and remains centrally the same. Thus you see the Beginning of the 4 Elements, viz

- (1) burning fire; Vapour or Humidity mixed with Cold fire constitutes atmospheric air,
 - (2) air, which still more condensed becomes water,
 - (3) and water inspissated becomes earth.
- Originally it was but one Element Fire.

Thus the Universal fire became a Vapour of immense Extent, which by further inspissation became chaotic water, and out of this Chaotic Water the Creator separated the Light, that is: separated the Universal invisible fire into Light. Thus we see here that Universal, at first invisible fire manifested in two Principles, Light and Humidity!

Therefore out of Light and water, God has created all Things.

Water was the first condensation or corporification of the Universal fire, which water nevertheless in its center was, and remains fire, full of life and activity, and the more so, as it was assisted by its Equal, the Light, separated out of it, as much as was necessary for the creating of all immaterial and material Beings, and in success of time for their maintenance.

Of the separated Light we have spoken before, we have now to consider its first body Humidity or water. This water differs it regard to Rarefaction or Density; if Rarefied to a certain Degree it constitutes air, that is fire predominating above water, but if condensed to a degree it becomes Humid water, or Humidity predominating above fire.

Nevertheless, in both, that is in their Center lays concealed fire or the Universal spirit.

As soon as the air gets deprived of its Universal fire, which animates it and renders it elastic, it becomes immediately putrid, and thereby declines lower down, becomes Humidity, mud, earth and immoveable; it is the same case with water when deprived of fire, or of animated air, it becomes putrid, condenses still further and becomes earth, immoveable.

God has ordained it so that the Universal spirit by means of Humidity should work all things, because Humidity mixes easily with everything, by means of which the spirit can soften, penetrate, generate, destroy and regenerate all things.

Thus Humidity or water is the Body, the Vehicle and Tool, but the spirit or fire is the Operator, the Universal Agent and fabricator of all Natural Things.

This universal fire fills that immense space in the Universe between the heavenly bodies. and as it has a power to become material, it generates a subtil vapour or invisible most subtil Humidity, its first passive principle: It causes therein a gentle Reaction, and a general, gentle, most subtil Fermentation takes place Universally, and by this Reaction the Universal Acid is everywhere generated, which we can deem nothing else than a most subtil incorporeal Nitre Spiritus Mundi, outwardly cold and inwardly fire.

Thus this Spiritual incorporeal Nitre or Universal Acid; we deem the second invisible change of the Universal fire, generated out of chaotic invisible Humidity: and as this approaches the atmospheres of the heavenly bodies, it becomes gradually more and more material, until it meets an alkaline passive principle wherein it fixes itself and forms Native nitre, so that from Spiritus Mundi, it becomes nitre.

Thus we say, not without good reason, that the Solar Rays of Light, are nothing else but a most subtil spiritual Spiritual Mundi, which gradually becomes more and more nitreous, as it approaches the Earth, but Sea Salt in the Ocean; animating the atmosphere with fire or Life, and thereby giving elasticity to the air, and Life and preservation to the water. From this, every man of common understanding may learn what Nature is, and its origin.

We see that between the Firmament and our Earth continual Vapours, Clouds, and Fogs, which ascend like a transpiration of the Earth, and are sublimed upwards by the Central heat of the Earth. This Chaotic water and Vapours, contain, and are the First Matter of all Things, and although this appears very simple before our Eyes, yet it is two-fold, as it contains fire and Humidity, the Invisible in the Visible, the fire or spirit is the Agent, and the water the Patient.

Whosoever wishes to arrive at the Fountain of Secret Wisdom, let him mind this well; and let him go with this Central Point of Truth to the circumference, and for ever imprint in his memory: that from fire and water, or spirit enclosed in Humidity all things in the World are generated, preserved, destroyed and regenerated.

Whosoever comprehends this well will find no difficulty in analysing Natural things as he may easily volatilize fixt, and fix the volatile: a stinking subject he may convert into a pleasant smelling one, out of poison he can make a salutary Medicine because he knows that all things proceed from one Root; and return to that Root: The distinction is external and regards only the modification of the Matter, which is more or less digested or fixt. Therefore the Philosophers say that their Matter is in all Things, yet they have selected such Subjects wherein the Universal spirit is more abundantly contained and more concentrated, and easier to be obtained; otherwise that spirit is All in All.

Chapter 3

How all things are further generated.

We have demonstrated that the primordial Vapour, or that fire and water, are after God, the First Matter of all Things. This two-fold Vapour by inspissation is become water and this water by the action of the invisible spirit therein diffused, has begun to ferment and then to generate Matter. At first, this water was perfectly subtil and pure,

but by means of the action of the inward spirit, it becomes turbid, smelled badly and thus generated Earth. It was divided into various parts. into a Spiritual, most subtil, into a half or less subtil, into a half corporeal, and into a Body. At first it was 1 and 2, -- now it is 1, 2, and 3, likewise 4 and 5.

It was 1, as a simple Humidity;

2, as a water containing a spirit;

3, when it was separated into volatile, half fixt, and fixt, that is, chemically speaking -- into Volatil, Acetum and Alkali; Anima, spirit, Corpus;

4, when it was divided into the four so-called Elements, fire, air, water, earth;

5, when it is by Art, assisted by Nature, formed into an indestructible fiery Quintessence, thus [unidentified symbol]. When the water has attained to its term of putrefaction, we may separate one subtil after another; the most subtil will certainly ascend before the less subtil, and so one principle after another until the least volatile comes last.

God had ordained that the different modifications of the Universal spirit, in the four Elements, should continually generate and produce a Universal General Sperm, for that reason God has given to each individual thing its Agent and Patient, in order to cause a Reaction; This we see by the evaporation of numberless Subjects, who send forth whatever Humidity then have more than is necessary. This evaporation when from above is called Influence, but when from things here below it is called Effluvium.

God has given each Individual its particular Sperm. which however all depends on the Universal Sperm, as their Ruler and Conductor.

Chapter 4

How the Universal Sperm is generated by the four Elements

After God had divided or corporified the Anima or Spirit Mundi, the simple Chaos into four Elements. or predominating, leading principles; He called to them "increase and multiply"; The Heavens and the Air, both animated by the Universal fire are the Father, the Male, the Agent or Operating principles. Water and earth are the Mother, the Female or Passive principle. These four are nevertheless only two, fire and water; They are forced to engender continually a regenerated Chaotic water or primordial Chaos out of their Center, for the generation, preservation, destruction and regeneration of all Things, and this will continue until it pleases God to Calcine and regenerate the whole Earth!

These four so-called Elements, which must fabricate the Universal Sperm or regenerate the Chaos, when one Extream is considered towards the other, seem quite contrary, and indeed as contraries they cannot effect any good; yet when they meet orderly, they are fully capable to execute that what God has ordained them for.

It is a natural and philosophical Axiom "Non transire posse ab uno Extremo ad alterum absque medio," -- that is: It is impossible to proceed from one Extream to another Extream without a Medium. This Axiom every Artist ought to mind, thousands err because they do not observe this Truth.

Fire cannot become water without air, and earth cannot become air without water. If you would unite fire, as being extremely volatile and subtil, with the earth, which is corporeal and fixt, you will never be able to do it; because the most Volatile will forsake the fixt and return to its Chaos. This is so in all Natural Things, that the most Volatile principle, cannot unite with the most fixt without its proper medium. An Artist ought to observe this constantly that he may not lose his time, his Matter, and Expenses.

Therefore if you want to unite Heaven or fire with the earth, or convert fire into earth, unite it first with its nearest volatile medium and they will unite immediately, when that is done, give them the water, as a medium between air and earth, and they will also unite; then add the earth, and thus you may unite fire with earth and fix it therein; and so vice versa turn the earth into water with water, then convert it into air, and the air into fire by means of air.

The Heaven or fire is extremely subtil, the air is also subtil, but one degree more corporeal than the fire; water is again a degree more corporeal than the air, and the earth is a degree more corporeal than the water. Thus we must proceed as Nature does, and we may then obtain a Quintessentificated Operation, if we do not mind this, we can do little or nothing.

Nature has its different degrees of subtilty, and mixes the most subtil fire with the less subtil, and that with the least subtil.

When they are united, they influence into the most subtil water, then into the less subtil, and into the grossest. Then it mixes gradually with the most subtil earth, with the less and least subtil, until it becomes Rocks and Stones.

In a chemical Anatomy we see how the most subtil comes over first, and how Nature regulates her Operations, and does not confound one principle with another, but lets go the most Volatile and most subtil first, and then the next less Volatile, and so on etc. for Example:

Take an earth out of a Field or Meadow or what Earth you please, pour Water upon it so as to dilate your Earth well, then let it stand a few days and you will find that the coarse heavy earth settles at the bottom of the Vessel, you must stir it 3 or 4 times a day. The water will in the meantime dissolve the most subtil earth which is its salt, this does unite with the water, as being a Virgin earth.

As soon as this salt, or Virgin earth is extracted out of the common earth, the water cannot dissolve it any further. Now you must distil this water containing the salt, into a spiritual water, and you must cohobate so often until all the salt has come over with the water.

This water now has the power to dissolve again the next subtil earth, which can like the first salt be distilled over as a spiritual water.

With this Water you may proceed in dissolving more of the remaining earth, until by distillations and cohobations, you have dissolved the whole quantity and volatilised it into a spiritual water; This is a tedious Operation but of great moment: In the same manner Nature operates by dissolving and coagulating, until the Universal Sperm of all Things is generated, which is universal seed.

The Artist must observe that Nature proceeds gradually and regularly. and observes time weight, and measure, he must transpose the External into the Internal and Heavenly, and he will obtain more and more knowledge.

Chapter 5

In what manner the divided Chaotic water is regenerated and becomes the Universal and General Sperm of all Things, called Anima or Spiritus Mundi.

The 4 so-called Elements have been separated out of the Chaos, but they proceed all from one. The form is but one, and the Matter is but one. The form is fire, and the Matter is water.

The difference consists in their external appearance, by Fermentation fire becomes air, and air becomes water, and water is become earth; But when fire is fixed by Art or by Nature it becomes earth, and when the earth is volatilised by water it becomes air and fire.

Because one Element can be converted into the other, if this was not true they would differ centrally, but they do not. The Chaos which produced these Elements was in the beginning fire and water only, these two have been divided into four by a further volatilisation and Inspissation: By volatilisation extenuation or rarefaction, Humidity becomes air animated by fire, but by condensation in Inspissation of that Primordial Humidity the Earth has been formed with the fire turned downwards, toward the Center of the Earth. The Hieroglyphic characters of the Elements explain their nature exactly.

There is not a Subject under the Heavens, whether liquid or dry which does not contain this Universal fire, and Primordial Humidity. The first is called Innate Heat, -- the last is called Radical Humidity.

The Universal fire becomes Humidity externally, but remained fire internally; being internally extremely spiritual and volatile, it was of course extremely active and moveable, and by that primitive mobility, excited warmth and fermentation and by that fermentation the Universal vinegar was, and is continually generated, and when this meets with a proper Body, whether in water or in the earth the Universal Sperm becomes visible and Corporeal, but whilst it is only a Vapour in the atmosphere, it is then the Universal Astral and incorporeal Sperm. This is the influence we receive from Heaven by means of the Air.

The Heavens give their influence, so does the Air, Water and Earth, and with united efforts they fabricate continually the Universal Sperm of the World.

Chapter 6

Of the Heavens and their Influence.

Heaven, after the separation of the Chaos, is the first principle, and became visible in Light: It is the most subtil and the highest, as well as the most universal, when it generated Humidity it became a most subtil Vapour, pure and extremely Volatile, for that reason occupies the highest Station, or the remotest from the atmospheres of the heavenly Bodies.

This most subtil principle is full of Life and the most active for which reason we call Heaven the first Agent, the Male Sperm the Soul, a subtle air, a subtil water, a volatile earth.

Heaven and air have their influence not upwards, but downwards, towards water and earth, but earth and water ascends upwards to meet them. They mix thus in the state of vapours in order to fabricate the Chaotic regenerated, and impregnated water or the Universal, Semi-material Sperma Mundi. As soon as the air is impregnated and

animated with Heaven, it communicates immediately with water and earth to impregnate them also. This communication is done in a moment, as the Elements are gradually prepared to meet and mix with each other, by a continual circulation. There is no doubt but our atmosphere is continually loaded with Vapours, exhalations and clouds for the sake of communication of the Elements; as soon as these Vapours become condensed into Rain, Dew, Snow or Hail and fall down that same moment the volatilisations and exhalations of water and earth take place and are ready to succeed and meet those, which come down; so that there can never be no want of generation of such Vapours, which when sufficiently dilated or extended constitute our common air, which is more or less pure according as it is more or less animated by Heaven or fire.

The Heavens receive the ascending Vapours, which as they recede from the atmosphere become more and more subtil and spiritual until they are actually returned to their first Universal state of Ether or Spiritus Mundi. The atmospheric air also receives continually the volatilised water and succeeding Vapours, until it is satiated and overloaded, when the superfluous Humidity is forced down again in Dew, Rain, Hail, Snow. Thus fire and air come down into the Waters and impregnate them; the Waters dispose their thickest part and give it to the Earth; the Earth thereby becomes overloaded or saturated, which superfluity of earth and water is again volatilised and sublimed upwards by the fire, inverted fire or Central Heat, into Vapours, which ascension and descension God has implanted into the Universal fire, as the Great and only Agent of nature, or rather Nature herself which causes this perpetual circulation by its attracting and repulsing power, as we have demonstrated in the Second Chapter.

The Lover of Natural Knowledge may clearly learn here how the Effluvium of one Element becomes the food and nourishment of the others, until converted therein; the same takes place with us and our food, as, for instance, we eat Bread and drink Wine, we discharge the superfluities of our food, which are used for manure on the land; seed is sown therein and out of such superfluities grows again our food.

A Tree loses its leaves during Winter, the leaves fall to the Root, where they putrify and become humidity which penetrates to the Root and feeds the Tree again.

Observe this well and you will fully comprehend the Superius and Inferius of Hermes, and our Catena Homeri or Platonic Ring. Thus you will see a continual transmutation of Matter, that is a conditional change or modification, whilst the inward central fire of Nature remains always the same, as it was in the beginning. All things were water at first, and return to water. Apply this throughout our Book, which is no small step towards our Art.

Chapter 7

Of the Atmosphere or air, and its Influence.

Air is the second principle after the separation of the Chaos, and is the Vehicle or Instrument of the first i.e. fire; We mean here the genuine animated air. This we call Male, Manly, Sperm, and first Operator in all Things.

The Heavens or fire is the Anima and Life whilst the air or extenuated, rarefied Humidity is the spirit and Receptacle of the Soul and Principle of Life, and consequently animated fire ought to be named Spiritus Vitalis Macrocosmi, or the Vital Spirit of the Earth which we inhabit.

Air is a most subtil humid vapour or rarefied water wherein fire dwells abundantly. This is more corporeal than the Ether beyond the Atmosphere, which Ether is totally unfit for Inspiration, as being too subtil to fill the air vesicles in the lungs of animals: Air being the genuine Medium between fire and water, as it partakes of both, is therefore capable to receive the most subtil celestial fiery influences as well as the sublimed vapours from below, and by a continual motion or circulation, more and more vapours are converted into air, and more and more of such air becomes animated by fire, and as soon as it is saturated, the superfluous humidity is condensed again and comes down in the character of animated water, such is Rain, Dew, Hail, and Snow.

By this you see that atmospheric air is the first Medium to unite fire with water and earth, and without it the Heavens could never communicate with water and earth.

Thus air becomes vapour and water, and the thicker the water gets, the better it mixes with the Earth, as on the contrary the Earth by Subtilisation by means of water is again converted into air, Nature operating these perpetual changes and conversions from one extrem to the other: When they unite in Vapours they fabricate the Universal Sperm of the World Spiritus Mundi, which is partly resolved in Dew and Rain etc. and partly remains in the air for the sake of animation; the atmospheric animated Waters fall down upon the Earth, as the Receptacle of all Celestial virtues, and fertilises it, for the growth and nourishment of Animals, Vegetables and Minerals. The Earth itself is a condensed or fixed Heaven, and Heaven is a volatilised earth, air is a rarefied water, and water is condensed air. We have here to note that one Element differs from the other only in this, that the One is volatile, the Other fixed, the one is fluid or dissolved, the Other is condensed or coagulated, and yet every one is and remains centrally and

inwardly what they all were at first, -- i.e. prima materia or fire; Lastly, the Air may be called *Renes*, or the Kidneys of the Macrocosm, because in the air is chiefly found the conflux of all radical substantial. macrocosmical fluids, and the pure Extract of Essence of the World does meet there, where that ancient primordial Chaos is daily and hourly generated and regenerated for generation, preservation, destruction and regeneration of all Natural Things. What are Dew, Rain, Snow, or Hail else but a regenerated Chaos? Out of which Animals, Vegetables, and Minerals receive part of the vivifying principle and nourishment: and all this is generated in the Air.

Chaper 8 Of Water and its Effluvium

Water and earth belong together, as fire and air do, nay, all four stand in need of each other; the earth wants water, and fire cannot do without air; air without or deprived of fire becomes a putrid humidity, and water without animated air becomes mud and earth.

Water is the third principle, but the first passive Element, the Female Sperm and Menstrum of the Macrocosm, which does the Office of conveying food and nourishment to all Sublunary Creatures, and is, with the Earth, the Mother of all Things. Water is condensed air and a fluid earth. Water is a Medium between air and earth. As soon as fire is become air, and air been converted into water, Dew, Rain, or Snow, they fall down on the inferior grosser waters and earth and mix therewith, begin to ferment by means of the primogential implanted spirit or fire, and one Element operates into the other, until they have produced their Fruit from convenient Matrixes. Here the Artist may learn Wisdom from Nature, which is not satisfied with one Medium of Union, viz: air to convert fire into earth, but makes use of water also. Thus the Artist must follow Nature, if he wants to unite and fix his principles together; Let him look for a Medium of Union, which is easily found; and if one Medium is not enough, let him employ two, and if two prove inadequate, let him take three, but homogenials and not heterogenials, as minerals agree with minerals, vegetables with vegetables etc. Minerals agree also with Vegetables, and Vegetables with Animals, as the Vegetables stand between Animals and Minerals.

The difference between them all is but external, not central, as they proceed originally all from one and the same Universal spirit;

Minerals are fixt Vegetables, Vegetables are Volatile Minerals, and one kingdom is transmutable into the other, in regard to its internal qualities.

Men and Beasts make use of Vegetables for food, and by their inward nature, they change those Vegetables into flesh and Blood; now when man and beasts die, they are buried underground, and Vegetables are again produced, which receive by means of their fibres and roots mineral Vapours, which are thus converted again into Vegetables. This is the true Pythagorean Metempsychosis. Vegetables again. when they putrefy, assume a nitreous saline nature which is dissolved by rain and carried downwards through the pores, into the earth, or into the Sea. if near hand, from whence it ascends again as a mineral vapour, and thus Vegetables are frequently changed into Minerals, as well as into Animals, although more frequently into animals. Heaven and Air are Male Sperm, water is the Female Sperm and Menstrum, the Earth is the Womb or Matrix, wherein the two first, by means of the third operate every Generation.

Chapter 9 Of the Earth and its Effluvium.

Earth is the fourth and last principle of the Chaos. It is the second passive Element, the Matrix, and Mother of all sublunary Creatures; earth is a coagulated fixt Heaven a coagulated fixt water, and condensed air. The Center and Receptacle of all the heavenly Influences and of the Universal Sperm, which takes here a Body as well as in the Ocean.

Heaven by its extream subtility, is of all Elements the most moveable and omnipresent; its own motion, on account of its subtility is imperceptible, although visible in Light; This Universal fire is never idle, but perpetually active, pervading all things, although its action is generally imperceptible. This is the original cause of all Motion in Nature it moves the most subtil Air on the outward superficies of the atmospheres of the opaque celestial Bodies. This outward subtil air set in Motion, moves the next towards the region of Clouds and Vapours, yet as the atmospheres grow gradually thicker, i.e. more loaded with Vapours, the nearer to Sea and Land, the Motion is successively and gradually slower.

That the air is moved by the Ether or fire, is observable on account of the constant motion of the atmosphere; that Air set in Motion moves the Waters is well known to those who navigate the Seas and Rivers. That Water moves the

Earth appears by the Sand, Mud and Stones which the Waters move continually from one place to the other. Here the Water carries off, and in other places accumulates Sand and whole Shores: now every Motion manifests warmth of the omnipresent cold, Universal fire, where it be perceptible or imperceptible as this depends on circumstances; In living Animals this warmth occasioned by moving the omnipresent fire is perceptible enough, whilst that same Motion is imperceptible in Vegetables and in Minerals. All Life proceeds from a Motion of the Universal fire, as a total privation of action and warmth extinguishes Life. From this let the Student collect that there exists a perceptible and imperceptible warmth.

This we tell you because in all the Elements exist Innate Heat, which is sometimes observable at other times not, this is not always dependent on the collected Rays of Light, nor on the Central Heat of the Earth. Every Subject under the Sun, although invisibly small contains Life or fire, and of course the four Elements. Now if every Subject contains Heaven or fire, so every Subject has a Motion, whether visible and perceptible or not, yet there is a Motion in it.

Heaven never rests: it must have a Motion, let it proceed from what means it will; and although this principle may seem to be inactive or at rest, yet it has its invisible influences, virtues, and powers.

For instance, a plant, root, or herb, ore or mineral tore from the Spot where it grew, seems to be dead, because it is hindered from growing to a further perfection; But as Heaven is within which is never at rest, it still continues to show its powers and virtues, when that plant or ore is rendered medicinal.

The Lover of Natural Truths sees here, from whence each Concrete derives its power, viz. from the implanted Heaven within as from without, from its perpetual Motion, warmth and heat. Therefore you will look in vain for a Subject big, or even so small which is deprived of Life, that is of Heaven air, water and earth. It stands to reason that the Children resemble Father and Mother, now as all Things did proceed from the Primeval Chaos, they must partake of the same properties. This property was fire and Humidity, but fire is the mover.

Thus fire or the spirit is diffused through the whole system of Nature, so that the meanest drop of water, or the smallest atom of Sand or Earth is filled with that Universal spirit.

Observe here that the whole difference of Things consists only in volatility or fixity; that is: volatility and fixity causes the changes and different modulations of Matter, and the whole scope of Nature is to corporify and fix Heaven, in order to become useful and salutary; which, Heaven could not effect if it were not by the gradual Mediums of Vapours, as it must communicate with the Earth by means of air and water. God has ordained it wisely, that Heaven must become corporeal and be converted into all the Elements, as vice versa, the inferior Elements are by subtilisation converted into air and fire or Heaven, in order to be reimpregnated and renewed by the Celestial Influences, for the sake of generation, preservation, destruction, and regeneration of all Things. We have explained to you how Vapours are converted into air and air into fire, we will now examine the nature of these Vapours.

We have told you that there exists in the Earth an Innate Heat, which we believe to be the strongest in the Center of the Earth, by reason of its swift motion. This Celestial Heat causes a continual transpiration and sublimation of Vapours; such Vapours are Dews and Fogs; these Vapours are two-fold and four-fold. Two-fold because they consist of water and earth, fourfold as they contain the 4 Elements, which four Elements cannot do without each others assistance; that I call these Vapours water and earth is, because they contain those two Elements volatilised and subtilised, and if they ascend they are still further subtilised and converted into air and fire or Heaven.

Such Vapours have been water will be easily admitted, but that they also contain a subtilised earth, may perhaps be doubted; but note, that I have said before, that one Element is the conductor of the other, and that one Element dissolves and subtilises the other.

Fire dissolves and subtilises air, air dissolves and subtilises water, water dissolves and subtilises and mollifies the earth, vice versa, the earth condenses the water, water condenses air, air condenses or corporifies Heaven or fire, by which means air becomes animated, as we have explained before, and becomes this Spiritus Mundi.

Thus one Element is the others Magnet, solvent, volatilising, condensing, coagulating and fixing principles. You are to note here that Nature has its degrees of Volatility and Fixity; as for instance, that part of fire which is nearest to the atmosphere is not so highly pure or subtil, as that which is a thousand leagues remote from it: In the same manner, the highest atmospheric air is purer, colder and more subtil as well as dryer than that air near us, which we breathe. The superfluities of the water is also lighter, more aerial and more subtil than the thick slimy ground waters, which settle on pebbles. stones corals, and covering them with a slime or subtil mud.

The Earth has also its degrees of subtility and fixity: We have therein earth juices, sulphurs, bituminous substances, such as the pitcoal, clays, loams, minerals, ores and metals, rocks, stones, and flints, and the precious gems of a wonderful fixity.

The most volatile earth is mollified and dissolved by water, further volatilised into air and fire.

Vice Versa the lowest fire sooner mixes and corporifies itself with the air, than the remote, whilst the lowest atmospheric air sooner mixes with, and becomes water, than the pure and highest air, the Inferior slimy ground

waters become earth sooner than the superficial lighter waters.

The Volatile soluble Earth, in particular its Virgin earth, i.e., its salt is sooner dissolved by water than a pebble or Sand. The volatile water is sooner converted into the lower air than the ground waters can possibly be.

If you understand us right, we shew you here the first beginning of Nature, and the true First Matter. As the 4 Elements proceed from the primordial Vapours, they are forced to generate continually such a Vapour, of the very selfsame principles and substances, which Vapour is converted by Nature into a Chaotic water, and falls down in Showers of Rain.

In this Chaotic water is invisibly contained the Universal Sperm for the generation, preservation, destruction and regeneration of all Things.

Now we have treated of the regeneration of the Chaos or Universal Vapours: we shall further show you its power and virtue so that you may touch it with your hands, as well as see it with your eyes.

Chapter 10

Discovery of the genuine Universal Sperm in the regenerated Chaos, the corporified Animal or Spiritus Mundi.

We have demonstrated how fire water air earth be proceed from the first Chaotic Waters, and how they produce the Universal Sperm, and how they continually regenerate the Chaotic waters for generation, preservation and Regeneration of all Things. This Universal Sperm is generated by condensation and evaporation of Vapours, which are circulated in the great Alembic of the Air, until they are sufficiently impregnated or animated by fire, when they are again condensed and resolved into water.

This Chaotic Waters are commonly called Dew, Rain, Showers, Hail, Snow: But really and truly it is the true regenerated Chaos, the genuine spirit and Anima Mundi animates it, who generates, preserves, kills, and regenerates all sublunary Creatures agreeably to their original form, by means of their Seed or Sperm, and this Anima Mundi is Nature truly.

Now to prove that this Dew. Rain, Hail. or Snow is actually the regenerated Chaos, containing the Universal Sperm and spirit Mundi we must show you that they were generated first out of the primordial Chaos. We must also show, nay, we have done it before, that our regenerated Chaos contains the four Elements, and if it contains them, it must of course possess all what the four Elements contain.

We say therefore as a fundamental truth, that everything can be resolved and must return to that; what it was at first; and everything must be resolved and be returned to its first origin by that self-same principle by which it was made or generated naturally. The Elements originate from Vapour and fire, and they return to Vapour, that is Water, and from thence to fire. They proceed from fire and humidity, and by fire and humidity they return to their first origin. Now that Dew and Rain is fire and water, or such a regenerated Chaos as the first Chaos was, is proved by its visible effects, better known to Country-men and Gardeners than to Citizens: Chemical Anatomy demonstrates visibly that the four Elements are contained in Dew and Rain water.

Daily experience confirms it, that by the effects of those waters every Plant prospers and grows, Animals cannot do without it, and minerals and metals are generated by their inward fiery principle, as we shall show hereafter. Now let us examine this Universal Sperm, or regenerated Chaotic water by Chemical Anatomy. Take a quantity of Dew, Rain, Snow or Hail, which you like; but the most expeditious way is if you take Rain water from a thundershower, receive it into clean glazed earthen Vessels, and filter it in order to separate the dirt from it which intermixes from the Roofs of Houses, and you will after filtration, have a clear crystalline water, of no particular taste, in fact a fine clear water, fit to be used like any other water.

Place this collected water in a warm garret, where neither Sun nor Moon can shine upon it, cover the Vessels with a Linen Cloth, to prevent the dust getting into it.

Let it stand a month unmoved, and if the place is warm enough, you will by this time perceive an alteration in the water, because this water begins by the power of the implanted fire or spirit grow warm although imperceptibly and to break; it begins to ferment and putrefy and acquires a bad smell, and you will observe that it becomes turbid, although it was perfectly clear at first, and a brown spongy earth ascends swimming at the top, which increases daily and from its weight falls to the bottom.

Here you see a separation, occasioned by the ingrafted spirit of the gross from the subtil.

The separated earth is brown, spongy or like wool slimy and slippery, and this slimy earth is the Universal Gur of Nature.

Here the Artists may observe two things viz. water and earth, which conceal fire and air.

Here the air animated by the fire is extended in the water. Now you have two passive Elements water and earth. In

the beginning you had only a volatile water but by a gentle putrefaction in a warm place you have manifested the earth also. Fire and air we must look for in another way.

When you see now your Rain water in that state of putrefaction that the slimy Earth is separated and falls to the bottom. then stir it up with a clean wooden handle.

Separation and Distillation

Now pour your troubled water and earth in that state of putrefaction into a large Glass Body, which place in an earthenware pot, fixed into a charcoal distilling furnace, apply a large alembic and receiver and light your fire, which keep so gentle that only the stream or vapours arise. Let this all come over first as a pure water, which contains animated air, that is air and fire. Distil no more of the very volatile water over; than what will go with the gentlest degree of Heat, whilst the Subject in the body only vapours away but must not be suffered to boil, in this manner you vapour over about the fourth part of the whole, or less.

Take the receiver off with this very volatile water, this water the more so, if you afterwards rectify it per se over a steam bath is more luminous and clearer than common distilled water, which is a proof that it contains much air and fire.

Now apply another receiver and continue the distillation, raising your heat sufficiently, so as to cause the thickish water in the Glass Body to boil and in this manner you must distil all the water over, which will appear like water and in drops in the Alembic; continue the distillation until it remains in the body like melted Honey and looks Brown, but beware of distilling until it remains dry, because you would burn the young and tender Virgin earth in the bottom of the Vessel, which is not yet fixt. Take the distilled water away and put it by as the Element water. The Honey-like Matter, or the moist earth remaining in the Glass body, take out cleanly and put it into a china basin and set it in the Sun to evaporate until it is perfectly dry; then grind it in a Glass Mortar to a subtil earth. Now you have separated the Elements out of your Chaos.

Now it remains to be proved that they are truly Elements or else it must be false what I have written, that all sublunary subjects proceed from them. To produce heavenly subjects out of this Chaos, or meteors, as this water itself is a meteorical production, let no one undertake; but we will demonstrate that Animals. Vegetables and Minerals may, and can be generated, and that is what we pretend and no further.

To generate Minerals

Take your dried earth put it into a glass Body and humect it a little with a few drops of your Dist: water, but not with the Element air and fire, and put the Body in a warm room facing the South, but let not the Sun's Rays shine upon the Body; after your earth is dry, humect or imbibe it again with the Element water. then set it to dry, and this humecting and drying you may repeat several times every day and continue so doing during the whole Summer, and you can mineralise the whole Earth. You will find by your inhibitions and exsiccations, that the Earth becomes more ponderous and sandy.

NB. the Glass Body must be covered with paper only to keep the dust out, as there must be left access of air. As soon as you perceive that the earth is become sandy, you may know that it is mineralised, this sandy earth is neither Animal nor Vegetable, consequently Mineral. If you have a few ounces of this earth, try it as Glauber tries the sun containing Sands and you will find a grain or two of sun and moon.

To produce Vegetables out of your Earth.

Take your before mentioned earth dried in the Sun. put it into a Glass Body, make a mixture of two parts of water and one part of air (which you rectified in the beginning) with this humect or unbibe your earth as the gardeners do, by sprinkling only, not too wet, not too dry, place your Body (open) on the air not so that the Sun can shine upon it, and you will find several Vegetables productions spring up in a few weeks, although you have sown no Seed.

If you like to produce Animals. Take your before mentioned dried and powdered earth, pour first together, one part of water, and three parts of air, with this mixture humect your earth so copiously that it may become like liquid or melted Honey, place the Glass body which contains this mixture in the Air where it is warm, the Sun may shine on it but not too hot, nor at the Meridian, and the Glass is left open.

You will perceive that in a few days, there will be different kinds of small vermine, in the thick water ; when the earth diminishes and dries up you must humect it again, so that it may remain of the same consistence like Honey or Syrup, as before; and you will perceive that the first small vermine will die and loose themselves, and others will be produced who will feed on their putrefaction and become larger and more in number.

I could reveal here something, but as it would be abused by profligate men, I am obliged to be silent.

You may be convinced by these experiments that our water or regenerated Chaos, Rain water, or Dew, or Snow is, and contains the Mundi and Universal Sperm, out of which, all things were, and are generated. It appears from this

that this water and Earth are endowed with the principle of fertility for the three departments of Nature, as all things are produced thereof.

Few there are that know the secret powers of these things, and what it is that causes and gives fertility!

It is a spirit or fire, but as a volatile unembodied spirit, he can effect nothing in natural productions. All what is to be serviceable in visible Bodies, must be, or become corporeal with them, it must become visible and palpable: therefore this great and wonderful Universal spirit must take a visible and palpable Body, as well as the Animal and Vegetable Sperm is visible and palpable. Few know this although they handle it often enough. This corporified Anima Mundi or Universal Sperm according to its origin is but little known, although it may be got in great quantity. The cause of this obscurity is that it bears a different name from what it ought to have. According to its root and origin it ought to be called the Sperm of the Macrocosm, the Sperm of the World, the cause of Fertility. This title belongs to it as it is the concentrated corporified Sperm, and spirit Mundi in a transparent visible crystalline Body, a dry water, which does not wet the hands, an earth, a fiery pure earth, full of Light and fire also full of cold, like ice, a coagulated or congealed fire, a condensed and animated air, which is better and more valuable than all the Treasures in the World!

But that I may show You this embodied spirit and that you may touch It with your hands, proceed as I teach you.

Process to demonstrate the corporified Anima Mundi!

Take your putrefied Rain water, put it into a large glass Body cut off low, or into a china basin of a large size, which place in an earthenware pot, and evaporate this putrefied water gently, until there remains only a 1/3 part of the whole. Let the fire die away whilst it is yet luke warm, filter it through blotting paper. Pour the clear into a clean pewter basin, or into an earthen glazed dish, which place in a cool Cellar or Room, and during the night the celebrated Spiritus Mundi will shoot in Crystals and appear under two different forms.

The first is of a perfect crystalline transparent form, this shoots ah round the sides of the Basin and settles on small sticks. if you place any on the water.

The second fixes itself on the bottom of the Basin, and is darker and not so transparent.

Here now you see that celebrated spirit, the Universal spirit, the Sperm of the Macrocosm, the regenerated Chaos visible and bodily. Pour the water off gently, and let the crystals dry. Those crystals which hang all round the sides or on the sticks keep by themselves separately. Those that are fixed on the bottom of the Basin keep separately also.

With both sorts of crystals go to old Lame Vulcan and he will tell you their Names! Take some of those Crystals which hung all round the sides of the Basin, or were fastened to the sticks and throw them on lighted Charcoal, and they will tell you what they are, They are called nitre.

The bottom Crystals throw also on fiery Coals, they have a harsh voice and spit about them. They are called Common salt or Alkaline salt.

Here you have both names of the Corporified spirit Mundi!

This nitre out of the Rain water fulminates with sulphur, like any other Salpetre, and has no other, or greater effect than Common purified universal seed.

The salt cracks and flies from the fiery coals like any other Common salt, and shows the same effect in all other operations like good Common salt. By this experiment you may perceive clearly the Center and Sperm of all things, the Sperm of the World, visibly and corporified before your eyes, and you may touch it with your hands! Both generate, preserves, destroy and regenerate everything that is on Earth.

In the atmosphere it is volatile and incorporeal, and produces volatile meteors in water and earth, it assumes a crystalline Body. and produces corporeal Subjects. according to different degrees of fixity; no objects under the sun in their last resolution are found without one or the other.

Everything in Nature does consist of these two.

The one is Nitre	The other is Salt
The one is Acid	The other is Alkaline
The one is Spirit	The other is Body
This is the Father	This is the Mother
This is the Male Sperm	This is the Female Sperm
This is the Universal Agent	This the Universal Patient
Primordial Sulphur	Primordial Mercury and Salt
Fire and Air	The Magnet
Chalybs Sendivogii	The Magnet
The Hammer	The Anvil
Sulphur Naturae	Mercury and Salt Naturae

In the beginning this Chaotic water was entirely Volatile, because if you did distil it before putrefaction, every drop of it ascends like volatile water; By fermentation and putrefaction it gets a basis of fixation and precipitates its subtil earth.

The most volatile part of this water generates Animals, when it becomes a little fixer it generates Vegetables, and when it becomes quite fixed it generates Minerals and Metals. Whosoever like to generate minerals, let him take the fixest parts, such as earth and water. If you like to produce Vegetables, add to the earth and water some air and fire. If you want to bring forth Animals add still more of the most volatile, that is more air and fire, as containing more of the Universal. The vegetable department stands between Animals and Minerals. because out of them a Mineral or Stone may as soon be produced as an animal, as we shall show hereafter.

The efficient cause which has enabled us to see and feel the Universal Corporified Sperm, is putrefaction, the Principal Key whereby the Lock of Natural Subjects may be opened.

The cause of fermentation and putrefaction is the implanted spirit which is never idle whenever he meets with Humidity, his own instrument, by means of which this spirit is ever busy, either visibly or invisibly, either sensibly or insensibly, this causes fermentation and putrefaction; and out of a volatile makes a fixt, and out of a fixt again a volatile and this mutation is continued without ceasing.

This spirit breaks and dissolves Stone and Rocks, which he himself has coagulated and reduces them into Sand and Dust; this same spirit reduces Trees into Mould and earth, and putrefies Animals, and again from such putrefied substances produces Vegetables and Minerals, and this continues from one thing into another.

I have said that the Universal Corporified Sperm of the World, produced out of the regenerated Chaos of Rain water, that is our nitre and salt is not better than common nitre, and common salt, and it is truly so because they produce the same effect and operation, and there is no difference between them, except if the one should be more purified than the other, but if they were equally pure, there could be no difference; therefore let the Artist not be deceived, if anyone would tell him, this from the Chaotic water is the nitre of the Philosophers, and the other is vulgar nitre, we say that such a distinction is folly and superstition.

If Common pure nitre produces the same effects as the other does, then Common nitre is philosophical nitre; but that the Reader may be convinced that the Universal nitre out of the Rain water is not better than purified vulgar nitre, let him consider that the Universal nitre is the Father and Generator of vulgar nitre, and he must then naturally conclude that the Blood of the Infant must be like that of Father and Mother, and that it must contain the very same principles and consequently must produce the same effects as the Father, nay, it is itself the Father, and is centrally one and the same with the Father and omnipresent.

Now if out of the Universal nitre and salt all things are produced. Animals, Vegetables and Minerals, all things of course are reducible into these their first principles. and still further into Vapour. That all things proceed from universal seed is demonstrated by nitre and salt being found everywhere in all things.

Chapter 11

That nitre and salt are found in the air and in all things in this World.

As we cannot ascend towards the heavenly Bodies, we must judge of what is above by that which is below within our reach. The Firmament is full of Light, Light is nothing else but attracted and repulsed, moved and manifested fire of Nature or Universal spirit. This further agitated and concentrated produces Heat and fire. Nitre is coagulated fire concealed in air and Humidity; therefore we say and conclude, that the Heavens or intermediate Space between us and the Heavenly Bodies consists of, or is filled with a most volatile incorporeal nitre, which as it descends into our Atmosphere and probably other atmospheres of Heavenly Bodies becomes gradually more and more corporeal. Let this suffice concerning the Spiritual Heavenly nitre. That there is nitre and salt in the Air is plain by lightning, thunder and Hail. Here on Earth we cannot find another subject which fulminates, thunders, and hails besides nitre or staltuous things.

Nitre is born spiritual and volatile in the Heavens, in the atmosphere it becomes acid but remains spiritual and volatile, in water and earth it assumes a visible and palpable Body; how that happens that it inflames hails, fulminates and thunders in the atmosphere, we will first demonstrate theoretically by physical reasons, and then mechanically by practice.

Nitre does not fulminate, except it meets with a contrary agent and is excited by heat.

The more volatile and subtil the nitre is, the more vehemently it fulminates and is the easier enflamed. In the same manner volatile and subtil its contrary agent is the more vehement, sudden and powerful in their mutual operation. The Light heavenly fire and Life of all things is condensed in the atmosphere in the form of a subtil volatile nitre and this must have a contrary agent for its operation.

In order that this volatile nitre may obtain a contrary agent, there ascends continually out of the Earth, Ocean and Rivers an equally subtil, volatile, sulphureous, alkaline Earth in the shape of Vapours, Fumes, and Fogs, filled with salt alcalicum Volatile. This is the natural evaporation of the Earth excited by the Central heat of the Earth. This ascends continually to meet the Volatile incorporeal nitre, now, when they do meet in a dry rarified atmosphere they are moved by the Sun's Rays, which by those ascending Vapours are collected and concentrated, whereby these Vapours become more and more heated until the subtil nitre takes fire and fulminates with this contrary sulphureous, volatile, alkaline agent, rarefies the air all round and thunders with dreadful Explosions as we observe during hot, dry, Summer days.

When on the contrary the atmosphere is dense and loaded with humidity, these two Universal Agents meet peaceably: the subtil nitre joins itself and embraces quietly the volatile sulphureous alcali without any vehement concussions: as is the case in Winter, when Humidity and Cold prevail in our atmosphere. Humidity and Cold hinder the inflammation and, consequently the fulmen.

Take nitre let it melt in a crucible, in an open fire, add to it a volatile alkaline sulphureous nitre, such as sal ammoniac or volatile nitre of urine, which is also sulphureous, or a volatile earth. Such are Charcoal, Mineral sulphur, Vegetable and Animal Oils, and the nitre will take fire and fulminate like gunpowder; the more volatile the earth or the nitre is, but in a dry state, the more violently does the nitre fulminate, and this reaction takes place only in a dry heat, but in humidity they unite peaceably and quietly. Humidity is here a third Medium which prevents the fulmen.

If you dissolve volatile salt of urine, or sal ammoniac with nitre in water, both are dissolved without violence or alteration, but if this humidity or water is evaporated and coagulated over the fire to dryness, so that they only commence to melt, they inflame and fulminate immediately. Another evident proof we have in Aurum fulminans.

The reason of its fulmen many have sought to explain, but few have known it.

Many chemists have attributed this fulmen to the sun itself: some to compressed air, but here is the true reason:

The fulmen explained

Sun is dissolved in aqua regia, which must contain com. nitre or sal ammoniac in order to become aqua regia. The sun when dissolved is precipitated with fixt oil of tartar or with any other alcali, such as a volatile salt of urine, or so-called spirit of urine, and the Sol falls to the bottom as a Spongy quicklime.

Although this quicklime is edulcorated or washed a 100 times with water, yet you will not take its fulmen from it by washing because some of the vinegar and alkaline salt remain fixed therein so that such a sun quicklime becomes heavier than the sun employed. Now let us examine the quicklime or sun fulminans.

It is on the same foundation of nitre and sal ammoniac dissolved in, and then evaporated to dryness, with this difference, that here in the progress of the sun fulminans, the ingredients or principles are subtilised, and in the former solution only crude. The aqua regia is composed of aqua fortis and sal ammoniac or Sea salt; aqua fortis is spirit of nitre, the oil of Tartar for the precipitation is a fixt alcali. Now when the sun is dissolved in the aqua regia containing a highly volatile nitre by means of sal ammoniac as being a volatile alkaline earth it is then precipitated with the oil of Tartar, which is a subtil fixt alkaline earth, the vinegar spirit in the aqua fortis are here partly saturated, precipitated and fixed by the salt of Tartar their enemy and contrary, and as this fixt salt is more porous than the earth of sun, it lets go the sun after having impregnated it first strongly with fixt vinegar nitreous and volatile alkaline spirits, as much as the atoms of sun will receive; for that reason it precipitates the sun to the bottom and detains it as an earth. Every dry earth is greedy to receive a salt, arid as these two salts of the aqua fortis and sal ammoniac are very subtil and volatile they are easily excited and inflamed by the least motion or smallest Heat: as soon as they feel that, Heat, they fulminate and break forth downwards, as gunpowder shows its greatest force upwards. Thus the volatile nitre and volatile alcali in the sal ammoniac as powerful Re-agents cause the fulmen and explosion and not the sun.

The cause of the sun's explosion downwards is because it is a fixed earth which inclines downwards, whilst the charcoal in the gunpowder being a volatile sulphureous earth explodes upwards.

We also observe a great difference between the force of the explosion of sun fulm, and of common gunpowder, the explosion of sun fulm being three times as violent as that of gunpowder because in the sun fulm is a spiritual volatile highly subtilised nitre, whilst the gunpowder is composed of crude corporeal nitre; therefore the more subtil, volatile and spiritual the counter-agents are, the greater must be the effect.

If you precipitate to the sun quicklime, in the room of taking a fixt alcali such as the oil Tartari pr. delig. with a subtilised, volatilised alcali, such as a salt volatile urineae or a vol: salt of Hartshorn, the fulmen and explosion will be still more violent. Thus we have demonstrated that the fulmen and explosion proceeds from the Universal principles and not from the sun.

On the contrary if you want to take the fulminating power from the sun quicklime, proceed in this way; After having

well washed your sun fulm., let the humidity drain from it on blotting paper; then make a strong alkaline lye of fixed salt of Tartar and water, or of pure potash and water, or oil of Tartar and water, and boil your sun fulminans is such a lye for about 15 or 20 minutes, then wash and dry the quicklime and its fulmen is entirely gone and lost.

The reason of this phenomenon is, that the fixt alkaline lye dissolves the volatile vinegar and alkaline counter-agents, which had fixed themselves in the golden earth, and dissolving them destroys their union, and by its fixity destroys the power of fulminating anymore.

From all this it appears plain that the fulminating quality proceeds from volatile nitre and a subtil, volatile alcali or a volatile sulphureous earth, such as the charcoal sulphur, and the more volatile those agents are, the stronger is the fulmen; and the fixer they are, the less the fulminate. If you project an oil, sulphur, charcoal dust, arsenic, [unidentified symbol], antimony, etc. into fluid nitre, they repel each other and cause a violent reaction according to the volatility and oiliness of the projected agent.

On the contrary, if you project common nitre or fixed salt of Tartar or any fixed alcali, or a fixed earth, such as terra sigillata, chalk, quicklime, which contains nothing volatile into melted nitre, you will see no re-action, but they will soon unite peaceably and fix each other, without fulminating. We have now proved theoretically and practically that there is a volatile nitre and salt in the air, and that the fulmen proves it, as well as the experiment with thunder-rain water.

Chapter 12

That there is nitre and salt in all waters and earths.

That nitre and salt is in Rain water we have proved by an Experiment. That it is in all earths and waters can easily be demonstrated.

If you take any earth whether from fields, meadows, marshes, Hills or Valleys, a sufficient quantity, and dissolve as much as you can of such an earth in distilled Rain water, and then filter the solution and evaporate it, until there remains no more than a third part of the whole quantity of water employed, the pour it off into basins or dishes and let it stand to cool over night in a cold place, and you will find crystals of nitre and salt in a lesser or greater quantity, according as the Earth was less or more impregnated with nitre and salt. The Saltpetre boilers understand this best as they boil no earth but such as is rich in nitre, to pay them for their labour.

It is the same with all Waters, springs and wells, which are all more or less impregnated with nitre and salt; nay, some Springs are thoroughly saline and nitreous.

Rivers flow out of the Earth, dissolve the nitre and salt and carry it along with them into the Ocean. Why the Ocean more salt com, than nitre is because the Sun reverberates it continually, principally between the Tropics, where the Rays of Light fall more perpendicularly; this along with the motion occasioned by the Winds and Tides convert the Aereal incorporeal nitre into Sea salt; it loses its fulmen and becomes alkaline.

Experiment

Take nitre with its own earth, before it is purified, and boil it often in water, until it is dry, and increase your heat more and more as you advance with your boilings, and you will see that the Nitre loses gradually its Fulmen and becomes more and more fixed, until after 40 or 50 boilings it becomes quite fixed and alkalis'd and fulminates no more, but is converted into common salt. Therefore we say that Common or Sea salt is nothing else but nitre originally, reverberated and alkalis'd by the Rays of Light.

Fixation in Via Sicca

This fixation of nitre is done more expeditiously with quicklime viva, than by the detonation with charcoal or sulphur.

Take fiery stone lime fresh from the kiln, which reduce to powder and Nitre finely powdered [in equal parts] mix the two powders by rubbing them together in a mortar; 1/2 lb. of each. Put this mixture in a roomy crucible, in a wind furnace and begin your fire gradually (a lid must be luted on which must have a small hole in the middle) let the fire be gentle the first two hours to season the crucible, then keep it moderate during two hours more. so that the Coals lay no higher than the upper part of the ^-. after that i.e. after the first four hours, cover the crucible with Coals and keep up a good fire during four hours more, so that the crucible, keeps always glowing hot like the fiery Coals. Then let the fire go out gradually: towards night take out and break the crucible and you will find your nitre alkalis'd or fixed in a lump which is outwardly Green and inwardly Purple.

Elixivate this mass with hot water, or powder it and let it flow per deliq. (this is best).

During the first three or four hours of the operation the vinegar spirit is forcibly driven out of the small hole in the

cover and even through the Luting, and displays various beautiful colours on the fiery Cof the Generation o You may also fix nitre if you melt it with common salt [in equal parts] or with fixt nitre of Tartar [in equal parts] and the nitre becomes fixt.

If you let the mass flow per dilig. evaporate your oil of fixt nitre to a dry fat salt., and melt that, and if you project sulphur or Powdered Charcoal, it does no longer fulminate.

NB. Such a nitre fixes sulphur by degrees.

Chapter 13

That nitre and salt is found in Animals, that Animals proceed from nitre and salt, and are resolved into nitre and salt.

Whatsoever is intended to cause fertility must be saline or nitreous. or it can be no manour. All Animals are nitreous or Saline, as by their Chemical Anatomy, by distillation, we find they contain a certain quantity of volatile, and some a fixt salt and a stinking oil or sulphur. The fixt salt appears, when we calcine the ashes. That this animal oil is a liquid salt is proved by its inflammation, because it burns, and nothing can burn but what is either nitreous, or sulphureous. The fixt salt and fixt earth cannot burn. We have a still stronger proof in the phosphorous made out of animal salts.

That the Animal department is very nitreous is proved by the Saltpetre - boilers in Germany, who dig up the floors of Stables and Cow-houses in the country, such as have been abandoned, and by boiling such an earth, they find it very rich of nitre.

The same is done on old forsaken burying grounds, and they find such an earth, if it has but laid long enough, very rich of nitre; which are sufficient proofs that the animal department is nitreous, and that animal substances are reduced into nitre; and where into a Concrete is reduced, from that very principle it has its origin, and this Resolution and Mutation is performed bid the Archaeous of Nature, or Universal spirit in the air.

Chapter 14

That nitre and salt is found in Vegetables; that Vegetables consist of nitre and salt, and are resolved into nitre and salt.

That Vegetables grow by Dew and Rain out of water and earth is known to all husband-men and gardeners. We have shown you that the pure and real essence of Dew and Rain nitre and salt, and that all waters and earths do conceal either one or both. Now it is known that the Universal Sperm, that is. Dew, Rain, Snow or rather the nitre and salt concealed therein causes fertility and the growth of Vegetables; nitre and salt are found in all waters and earths if this be true, it is also true that Vegetables grow and live by those salts, as a pure or empty earth or an empty water without Sperm are insufficient for their production and preservation, and this sperm is nothing else but nitre and salt.

Experiment

Take two parts of salt and one part of nitre, melt these two together in a roomy crucible. When cold, beat the mass into a powder, and dissolved 1 lb. weight of it in 10 lbs. of Rain water, keep this for use. In this water soak any seeds, until then swell, then dry them in the Sun, and sow them in the ground. Now take some of the same Seeds not soaked in this Spermatic water, and sow them close to the others, but mark both places. You will soon perceive the sudden growth of the soaked Seeds the beauty of the Fruit and the quantity in comparison to the unprepared seeds. If you will pour about a quart of the above water to the root of a Fruit tree or Vine, and repeat that once a month, for instance in Febr: March and April, you will perceive a wonderful fertility of that Tree that Season.

That Vegetables are very nitreous in general yet some more than others, appears by their Ardent spirit, or so-called S.V., by their Vinegar, by their oiliness and alkaline salt. We see Vegetables break forth into a strong Flame when they are set on Fire.

Inflammability, Heat and Flame proceed from nitre and sulphur and from nothing else.

Is not the spirit Ardens or S.V. a subtil and heavenly nitre? It burns so beautifully like the splendour of the Stars.

That the oil contains a salt is demonstrated by their alcali, whereby they dissolve sulphurs.

We have also given satisfaction to this department and have proved that their First Matter is nitre and salt, that is, their Universal not yet specificated Matter, which when united universal seed generate all things.

Chapter 15

That nitre and salt is found in Minerals; that Minerals are formed of nitre and salt, and are resolved into nitre and salt.

The more the Universal fire of Nature approaches the earth, the more it becomes terrestrial and corporeal; the more it becomes corporeal, it becomes more fixt, and the more fixt it is, the less it is inflammable; thus nitre descends from Heaven is volatile and incorporeal, although visible in Light, and concealed in the water, out of which it becomes manifest by putrefaction.

The more terrestrial and fixer this nitre becomes the more it is alcalised, and looses gradually its fulminating power, as appears in minerals and metals; because the more it descends from its Universal Nature, the more it alters its Nature and quality, and assumes a different nature in Animals, a different character in Vegetables, and different quality in minerals and Metals; yet it manifests its fiery nature in all three, more or less, according to its degree of volatility of Fixity; in the Animal and Vegetable departments in Oils, Fats, Resin, Pitch, and in the Minerals in sulphureous substances, such as sulphur etc.

As the Minerals are of a Stony nature and descend gradually to more and more fixity, the inflammable sulphur by gradual and continued fixation is deprived of its inflammability and obtains another quality, and incombustible one. That sulphur and such like adustable substances are of a nitreous origin we have demonstrated before and proved, that all inflammability proceeds from nitre. That there is a salt in Minerals is perceived, when we elixivate a mineral with water, after having glowed it previously in the fire; but that such a mineral salt is not always found in any considerable quantity and sometimes hardly perceptible, is the reason, because it becomes more and more terrestrial, and the more earth it dissolves; the more it forsakes its original Saline nature, at to outward appearance.

We see plainly, that, if we wish to separate the firmly united mineral and metallic Bodies, we are obliged to make use of Saline and nitreous Menstrums, without which they cannot be opened, and that every menstrum is either saline, nitreous, or mercurial, every good chemist knows. Therefore as the minerals meet and dissolve in a saline menstrum it is evident that they must possess a nature which is congenial to Salt or nitre, or they could not be conquered thereby; thus they can be resolved into a Saline or nitreous Nature, therefore such is also their first origin.

After having dissolved a Metallic Body in a Saline Menstruum, if you evaporate your Solution to a third part, the solution will shoot into a salt or vitriol, which vitriol by distillation and cohobation becomes an vinegar, ponderous spirit or oil from or out of which they proceed at first; because all minerals and metals proceed originally and are generated from an acid, fermented, putrefied nitre and salt, which dissolve a suitable Earth and from vitriol, sulphur, marcasit, metal; which is done by a gradual fixation and nourishment by the original nitreous and saline spirits thus as they were generated by an acid, fermented spiritual nitre and salt, they are resolved by them and brought back to their First Matter.

Table of Generation

Anima Mundi

Fire

in

Nitre and Salt

United and fermented become

acid and Corrosive

dissolve a suitable Earth

and form

A vitriolic Soft butyraceous Gur; The above Vapours becoming more and more corrosive retain their androgynal nature of Nitre and Salt and constitute now a double sulphureous and arsenical or mercurial Vapour

this setting by corroding forms nature
vitriol, sulphur, arsenic,
and by succeeding sulphur vapours, and also arsenical
Vapours, they form and generate

When Sulphur predominates
Sulphurous Macarsites

When Arsenic predominates
Arsenical, Marcasites, Cobalt

Pyritis, Antimony etc, Wolfram etc.
Mars Venus Sun

Bismuth etc.
Saturn Jupiter Moon

When both principles are in equality
they form [unidentified symbol] cinnabar mercury

Mercury

The Body of saturn, jupiter, moon, and with more sulphur of Mars, Venus, Sun, Platina I think is of a Solar nature from its weight and fixity.

Minerals are generated from nitreous and saline waters, which penetrate into the Earth through its pores and crevices, this nitreous saline water is heated and fermented by the ascending central heat of the Earth, is resolved into Vapours and forced upwards again towards the circumference but by this continual circulation, these Vapours are resolved again into water and ferment more and more, whereby they are subtilised, rendered more acid and corroding. These fermented waters as they contain a subtil spirit of nitre and salt, they become more and more corrosive; if they were not corrosive, who could they dissolve Stones and Rocks?

Therefore this Corrosive water dissolves Rocks, Stones, and earths which is condensed and coagulated again by the gentle subterraneous Heat into Salt, but not into such a Salt as it was in the atmosphere or in the Ocean, but into a Vitriolic Salt, which by succeeding vapours is formed into a subtil, corrosive, smeary or unctuous earth, which the Miners all Gur.

This Gur is by succeeding Vapours dissolved and filled with corrosive Acidity until it is changed into native sulphur; because the more corrosive it receives, the more sulphureous it becomes; but when the Mercurial Alcaline Vapours of Sea salt predominate over the nitreous Sulphureous Vapours, the Universal Gur goes over into arsenic, which is a dry mercury. Both sulphur as well as arsenic, by fixation and succeeding Vapours become Marcasite, such as antimony, Cobalt, Bismuth, Wolfram, etc. this Marcasite is the first and nearest Matter toward Metals, and not vitriol, which is the remote first Matter of Minerals and Metals. That Sulphur is very corrosive, is plainly perceived by its Smell, which is suffocating, when received in the lungs, and by its spirit and oil which is a strong corrosive. We see that the spirit and oil of vitriol are dissolved sulphureous vinegar, if you imbibe a fixt earth, such as chalk therewith, and suffer the vinegar to evaporate strongly from that earth in an open fire, you will see an inflammation and burning like that of common sulphur. That sulphur has been a nitreous salt, appears from its vinegarspirit which is of a Universal mineral nature. When this vinegarspirit has forsaken the Body of the sulphur, there remains an unctuous earth or the First Universal Mineral Gur behind, in small quantity.

The reader may judge whether I understand the generation of Minerals or not: Let him proceed either towards or backwards in the Anatomy of Minerals, and if he works rightly, he will see what he perhaps did not believe before! Our ancestors have written that sulphur, mercury and salt are the First Matter of Metals; true philosophers understand this properly; sulphur and mercury proceed from salt and nitre, and metallic salt is vitriol perfected and fixt; we have explained how the earth in the Mines by receiving nitre, or corrosive vinegar becomes sulphur; but the more such an earth is alcalised by nitre, so that the vinegar corrosive is overcome, arsenic, mercury, or Mercurial subject is generated.

Thus it appears plain that nitre and salt are the Sperm of the Macrocosm, volatile and fixed; the visible elements air, water and earth being the vehicle or dwelling of that Universal Sperm. All minerals are generated by an acid corrosive vapour and subterraneous air animated by nitre and salt, by the ancients named sulphur and mercury, because nitre and salt contain the very seminal principles of sulphur and mercury, which vapour and air are circulated and sublimed upwards by the central fire become water and ferment, and by their corrosiveness dissolve a suitable earth and generate the Mineral Gur; and what is it else that performs this generation but the Universal fire of Nature, corporified in nitre and salt.

Chapter 16

Of the principal Gate Key to Nature, the author of destruction and regeneration of all things, called Putrefaction.

Heaven or fire; Anima and spirit Mundi is in its own Nature unchangeable, omnipresent, and immortal, but as it gradually unites with humidity, becomes the Universal vinegar and incorporeal Spiritus Mundi, it lends itself then to all those changes the matter or corporified humidity is subsequently liable to, therefore in the air it begins to ferment, and still more so in water and earth, in order to prepare the way for generation; without this fermentation

and putrefaction the Universal spirit does generate nothing.

Therefore without previous maceration, fermentation, putrefaction in gentle warmth and humidity, whether it be quick or slow, perceptible or imperceptible, no real or genuine Anatomy of Natural Bodies, whether in Universal or in specific subjects can be effected.

Dew, Rain, Snow, Hail, Frost, all without distinction ferment and thereby cause a separation of the subtil from the gross, the sign of which is, that a feeble sour smell is perceived.

1. Animals putrefy sooner and easier, and on account of their copious, very volatile nitre they emit a most intolerable smell.
2. Vegetables putrefy easily on account of their humidity, yet not so quickly as animals, nor do they smell so badly.
3. Minerals ferment and putrefy, but do not smell so badly as the former two, except mars, which when in real putrefaction smells worse than a corpse.

From this putrefaction we learn that minerals are changed into vegetables, and vegetables into Minerals, and thus Nature changes continually, converting the uppermost into the lowest, and the lowest into the highest, nay, the three Departments of Nature are changed into universal principles. Vapours ascend continually from the Center of the

Earth towards the superficies, some of these are fat and sulphureous, and serve the Mineral and Vegetable Departments, and when they penetrate the superficies of the earth, they ascend in Fogs or Mists, and ascending still higher they are Universalised. Exhalations from decayed Trees, leaves, or Vegetables, ascend as well as those from putrid Animal substances and are circulated in the Atmosphere, there to receive the Spiritus Mundi for Reanimation and Chaotisation, which afterwards in the character of regenerated atmospheric air return to Animals by Inspiration, to Vegetables by a magnetic attraction, and to Minerals by their own penetration and assuming a corrosive Nature, as we have explained before.

Few amongst the adolescent Philosophers as well as common self conceited Chemists will put faith in what we say here, but we ourselves are thoroughly convinced that we write the Truth.

Putrefaction or Fermentation are the wonderful Fabricators, which out of earth, produce water, out of water, air, out of air, fire, and convert fire into air, air into water and water into earth earth into Gur, vitriol, sulphur, arsenic, Marcasite, and Metals Nay, the Metals themselves are dissolved and retrograded into vitriol and salt. This mutation is continued, until it will please God to calcine the whole Earth and vitrifie it into Glass.

Chapter 17

What Putrefaction is.

After God had created by Divine Emanation the Universal fire of Nature, which on account of its essence, being a simple unity not composed of parts, and consequently omnipresent and immortal and which has since time immemorial been justly called the Soul or spirit of the Universe but One in essence, but Threefold in manifestation, resembling its Divine Origin, its Creator; To this Universal Agent, God has given a Power to act by three differently manifested principles.

1. In its omnipresent invisible, most Universal state it has a Universal power of attracting and repulsion, and thereby is the first cause of every Magnetism in the World and of every Celestial Body's keeping in its proper place, as well as of gravitation and falling Bodies in general.
2. In its second manifestation of Light, it has Power to generate Humidity, the first step towards materiality, to move and ferment that Humidity and thereby to generate the Universal vinegar and to become cold incorporeal Spiritus Mundi, inwardly fire, therewith to animate extended or dilated Humidity, that is atmospheric air, and further to enliven the whole Creation.
3. In this third manifestation of concentrated Light into Warmth, Heat, and burning fire, it does and performs every necessary action what it could not accomplish in its second and first state, nevertheless remaining Centrally always One and the same and omnipresent.

This Universal fire, endowed with an intelligent instinct, called the Universal Agent of Nature, since its first emanation from God, has never been inactive not one moment and produces one alteration after the other, and although it seems to cease in one creature, or recedes from a deceased subject, that same instant it is occupied in producing something else out of such a death or temporal corruption, for which reason the Ancient Philosophers have said "Corruptis unius est generatis alterius." The corruption of one thing brings forth the generation of the other.

This universal fire is the Author and mover of all changes in Natural Things and the Almighty can do with it what He pleases, either for the preservation or destruction of His Creatures.

This Universal spirit begins by Fermentation or by Putrefaction, by this the spirit causes a separation of the pure

from the impure, of the most Volatile from the less and least Volatile, of the Subtil from the Gross, when that is done, that same fire unites the pure Volatile again with the less and least Volatile, and rejects what is not wanted for its present purpose.

The above spirit is the Generator, Preserver, Destroyer, and Regenerator of all Things.

When this fire descends into our corporeal Elements, it is detained by them and obliged to assume Body, wherein it appears in a White, cold, crystalline, transparent form nitre, outwardly cold, but inwardly fire; When it inflames, and if there was a sufficient quantity of it and its Enemy should meet him, he would become so irritated, that he would overset an break not only Rocks, but the whole superficies on the Earth.

If its Sister, cold, fixed, Alkali salt, its Venus, whom it loves dearly, which alone can overcome and tame it, was not coexistent and always neat at hand, it nitre would long ago have destroyed the whole Earth.

Its Sister, or Wife, when they embrace each other in Pluto's Fiery Palace does not permit him to do mischief much longer, but lays hold of him by his very Center so that he must convert his Anger into Love and Friendship.

As soon as he has embraced his Venus and is tied by ties of Love, he forgets his passion totally, so that his Enemies approach him and even lay hold of him he does not show the least inclination to hurt them, on the contrary enters into permanent and everlasting Friendship with them.

This fire or spirit which is all in all Things is distributed in all Creatures, and non can do without it.

Therefore Putrefaction is the First Key and Gate, by means of which the Universal spirit opens to us the Palace containing Natures Secrets.

This spirit is never idle but is continually in action, by action and motion, a warm propriety is communicated; this warmth whether perceptible or not, opens the Pores of all Things, so that the implanted spirit can penetrate everywhere, whether it be corruption or Generation, for Death or Life; after this spirit has penetrated everywhere, it begins to dissolve, and continues until the whole substance is dissolved; the subtil volatile particles evaporate, according to the degree of warmth, and emit a smell, by which we know clearly that the spirit is operating and employed to open the Body by this natural Digestion or Fermentation, and this continues until the proposed end is attained.

This spirit was in the beginning concealed in Vapour and water, and to this moment forms all Things by means of Vapour and Water, and without Humidity of water he generates nothing, because water or Humidity he wants absolutely for his operations, mixings and solutions, as all things mix easily with Humidity or water.

This spirit generates Animals out of Humidity, as Animals consist of humid and soft particles and after the extinction of the fire of Life, they are resolved again into Shine and Humidity, by means of Humidity. It is with Vegetables exactly the same, their juices may be compared to the Fluids in Animals, and their woods and roots to Bones and Cartilages.

Much in the same manner does the Universal spirit generate Minerals by a corrosive water, and removes them again into water by a corrosive water.

The Anima Mundi in its Most Universal State is invisible, and when unmoved, for instance in the flint and steel, and in all things where tranquil, is a cold fire. In its moved volatile state becomes visible in Light, but remains cold, except it is concentrated and further agitated. In its visible state of Light it is called Firmament or Heaven, volatile incorporeal nitre, Ether, Anima, Agent, Male, air; when concentrated and agitated it is Heat fire. When inclining towards corporification it is Universal Acid. When corporified, but remains volatile it is called water, vinegar, Spirit, nitre, salt, vitriol, sulphur, etc. But when it inclines towards fixation it is earth, patient, Body, salt, female, Magnet, and when fixed it is called Alkali, Female Magnet, Void.

This is the true meaning of the Universal spirit and its various forms.

In the beginning it was a simple Vapour or water, animated by fire, which like Protheus assumes various forms and shapes.

Thus we have explained what is the cause of Putrefaction, viz. the implanted fire, the moving, altering, warming, heating, inflaming, separating, omnipresent, simple and homogeneous spirit, but in a double twofold appearance, causing a conflict between Acid and Alkali, sulphur, mercury, salt, Anima, Spirit, Corpus.

Rosicrucian Aphorisms and Process - Bacstrom

Elsewhere on this site I have included a transcription of an admission of membership into a Rosicrucian Society organised from London by Dr Sigismund Bacstrom. Bacstrom had been initiated into a Rosicrucian society by the

Comte de Chazal on the Island of Mauritius in 1791. The Comte de Chazal was connected with the French stream of Rosicrucianism probably linking back to the Comte de St Germain.

The text of the admission of membership was taken from the copy made by a Scotsman, Alexander Tilloch, contained in the Ferguson collection, and it has appended to it the following most interesting section of *Rosicrucian Aphorisms and Process*, which I transcribe in its entirety. This process seems of great value as it is in the tradition of earlier alchemical texts, concealing its prima materia and yet explaining all the subsequent stages in great detail, while using the exact chemical terminology of the 18th century. Thus, for example, it has precise measurements of temperature for the stages of the process, using Fahrenheit's thermometer, and precise measurements of quantities. Such quantitative details are often missing in early alchemical texts. It also uses a great deal of Hebrew nomenclature and parallels with the creation story in Genesis.

It is remarkable that this work, written at the end of the 18th century, should remain in the same archetypal mold as works of some three centuries earlier, and this I believe shows us the inner integrity of this alchemical process of the red and the white tones through the nigredo, putrefaction and peacock's tail stages, with the final potentisation through multiplication of the tincture. This process, a source of alchemical inspiration for half a millenium and more, contains mysteries that have still to be revealed and I hope that this further piece of material might help to make this process more clear.

**In Nomine Dei Omnipotentis,
qui nobis elementia sua tanta Dona largiri voluit!
Cui sit gloria et laus sempereternus
Amen.**

APHORISMI

Operis maximi Antiquorum Sapientium

1. The soul of Man as well as all rational Spirits (the Angels) consist (according to their primitive Essence) of the Spirit of the World or Anima Mundi and the power of reasoning. They are Unities and most simple, and consequently in their very essence immortal.
2. In the Beginning God created the Universal Spirit or the Universal Agent of Nature, the Soul of the Universe. This is the first emanation of Divine Light; it is a unity and immortal, capable of manifesting itself, when moved or agitated, into Light and Fire. It is multipliable and yet is and remains but one. It is Omnipresent and yet occupies no visible space or room, except when manifested or multiplied in its third principle, Fire. It has the power of becoming material and of returning again to universality. This is the subject of the Stone or Medicine of the Philosophers. The more you take this in its simple, universal, unspecified or unmarried state, the easier, simpler and greater is your work, but the more this subject is already specified the more troublesome prolix and expensive is your process.
3. Our Magnet to attract it (although every subject in Nature is Magnetical) is Man, and principally (Hadamah, the Dust, red earth of Man), which in the months of March, April and May, the Sun in Aries and Taurus is abundantly found in the blood of a healthy man; the Spirit of the Universe during this season residing therein most abundantly, universally and unspecified. Hadamah signifies the first man Adam or Red Earth, which appears when the subject is dried up. In Hadamah lies concealed the blood that precious fluid wherein dwells the Universal Spirit, attracted by inspiration, and the Dust of the Red Earth, left by itself when the Universal fire nature quits it. This Universal Fire is truly Nature.
4. The happy success depends on the subject being good, from a young man, if possible of a Jovial Temper or Choleric, in good health, collected in a proper season, which is in March, April and, at farthest, in May, while the Sun is in Aries and Taurus: best after Northerly winds have prevailed.

PROCESS

This is the first of all Works, the most simple, the least expensive, the easiest and the greatest in its effects. There are various works and different processes, but this is the oldest.

1st. The subject contains fire, air, water and earth, and requires no addition of any foreign matter, except when introduced into the metallic department.

It contains the fire of Nature, or the Universal Spirit, with Air its vehicle it contains Water, which must be separated from it in the beginning of the work and also earth which remains behind in the form of caput mortuum, where the fire has left it, and is the true Red Earth wherein the fire dwelt for a while.

The subject, duly collected, should not be less than eight nor more than sixteen ounces: place it in a china or glazed basin and cover it loosely to keep the dust out.

2nd. In five or six hours time the first natural separation is made: the water is carefully poured off as useless and pernicious.

(This water is called the Waters of the Deluge, which are not easily dried up.)

The cold subject is placed in a double piece of clean linen in a clean china basin, in order that the superfluous water may be soaked up or absorbed by the linen, and that the cake may become dry, in a cool shady place, free from dust. This superfluous water would retard and hinder putrefaction, which is the key to regeneration.

3rd. As soon as the Cake is freed from all superfluous humidity, cut it to pieces with an ivory knife (do not touch it with any metal) and put it by means of a glass funnel into your Globe Glass.

4th. The globe glass is immediately to be shut with a stopper made of oak, which fits nicely, in order that the superfluous remaining humidity (the phlegm) may, during the putrefaction, penetrate and evaporate through the pores of the oak.

The joining of the neck and the stopper must be luted with something that is able to resist outward warmth and moisture.

5th. Place your luted globe glass or glasses (for it is most prudent to work with five or six glasses at once, from as many different good subjects) in a hogshead or wine pipe, filled two-thirds full with horse dung already in proper fermentation, so as to show a degree of heat from 120 to 140 or 150 degrees by Fahrenheit's thermometer. The greatest heat is in the middle, where it is generally from 140 to 150 degrees: less heat is round the staves where it varies from 90 to 100 and from that to 120 degrees.

Your horse dung must be procured before, as it takes sometimes five, six or more days before it ferments and gives the necessary heat. This is soon discovered by the steam arising from it, and by the thermometer buried in it nine or ten inches deep.

You must have two hogsheads or casks, in order to prepare a second before the fermenting heat has entirely left the first; which heat seldom lasts longer than three weeks; as your work must never become cold one single moment.

You must cover the top with clean straw pretty thick, and also all round the casks, especially in winter, or the work will be too cold and your operation will be very much retarded, if not fail.

6th. Your bath thus previously prepared, and your glasses well luted and varnished all round the joining of the neck and stopper, except the surface of the oak, bury them in the bath all round the cask, where the gentlest heat prevails, deep enough that only the upper part of the neck and stopper, that which is luted, may be in sight or level with the surface of the bath. If they were buried in the middle in the beginning of the work your subject would dry up instead of liquefying and putrefying.

7th. Every morning and night take out your glasses and shake them gently every one, by a circular motion, in order to promote the solution of the red earth, which is generally effected in two or three weeks time. The whole earth dissolves into a deep ruby-red liquid, called by us Aqua Permanens or Chaos.

After this liquefaction is accomplished the glasses are shaken no more, it being then unnecessary.

8th. In this manner, pursuing this most simple process, moving your glasses from one cask into the other, as often as your heat ceases, you must proceed with your horse dung bath during eight or nine months time, sometimes longer, as the exact time cannot be ascertained by any one (the philosophers say "coque nec desine coquere") taking care never to suffer your work to become cold, so that the glasses may feel cold, not for one moment, as in that case your labour would be lost.

The surface of your oak stoppers will turn black and moist from the penetrating flegm. This causes the stoppers to swell and will burst the neck of every one of the globe-glasses, if you have not previously secured those necks with strips of linen pasted round them, and harpsichord wire wound over the linen, with a varnish over the whole, and with lute where the stopper joins the upper brim of the neck. This lute may be sealing wax dropped on (all round) by a burning candle, or rosin, or quick drying varnish, thickened with filings of iron, or any other good luting that can withstand warmth and moisture; but take care to keep the bottom of the stopper in sight, by not covering the neck of the glass quite so low as to hide it.

9th. After liquefaction of the subject, putrefaction takes place immediately. At first you see veins resembling Mercury running down from the neck to the permanent ruby water. After those veins or streams are vanished the Peacock's Tail begins to appear all round the globe, sometimes coloured like the Rainbow, sometimes purple, green, nay Gold and Silver colours, most wonderfully beautiful, present themselves.

10th. During putrefaction, which generally lasts 150 days, sometimes longer, the subject smells through the stopper like a human corpse; sometimes so strongly as to be smelled all over the house; and the colours variegate most beautifully.

11th. After this putrefaction, which is called the Raven's-head, and which generally lasts 150 days or longer, has continued its time, the stench diminishes gradually, and the subject becomes a dry brick-red coloured earth, red earth, or dust, which remains settled at the bottom of the glass. This must not be moved nor disturbed.

12th. Then sublimation takes place. the Universal Spirit forsakes the dead body the red earth, ascends and descends invisibly and now produces general colours of large extent; one day the globe is black, some days after it becomes olive-green; after that sky-blue and beautiful parrot-green; then again purple or violet and crimson, mostly in general colours all round the globe. with beautiful small gold, silver, green and purple spots in the neck, like a Peacock's Tail or a Rainbow. Sometimes it looks like polished copper, then like polished steel, and sometimes like bell-metal.

13th. After eight or nine months all appears white or, rather, like running mercury, of a metallic colour, and the Universal Spirit sublimes and fixes itself at the bottom of the oak stopper in the neck, and remains there for three or four weeks, as white as Silver; and is the regenerated Universal Spirit, corporified in a sweet fusible salt of Nature, above half fixed.

Below remains a foliated earth of a grey colour, called by us Terra foliata, which is of no use if you choose to take this white salt or sublimate out for multiplication, in order to make the White Medicine; but if you prefer continuing the Digestion, you must by no means open the glass nor meddle with it.

This white sublimate from one glass will not be more than three, four, five or six grains at most.

You have now in your possession the Corporified Spirit of the Universe, the Regenerated Fire of Nature, the Saviour and Regenerator of matter, or the White Medicine in its first infant state, the Urim or Regenerated Light. This is already a universal medicine for the animal creation, but it is to be carried further, to greater perfection.

This sweet salt or sublimate looks like copelled silver, or like the Moon in the Morning.

**Process for the Red Medicine,
or Perfected Salt of Nature.
Thummim i.e.. Consummatum est Perfectio.**

14th. The glasses are now to be removed to the middle of the bath and kept there, as the work now requires more heat. (By Fahrenheit's thermometer the heat in the middle at the depth of 10 or 12 inches is generally from 130 to 150 degrees.)

Continue the digestion, coque nec desine coquere, renewing your horse dung every fortnight or three weeks, a few days before your heat ceases; removing your glasses from one cask into another from time to time as your heat may require.

Your White Sublimate fixed at the bottom of your stoppers, will descend again into the red earth and from thence re-ascend, and will pass through all the former colours several times more, until it fixes itself once more at the bottom of the stopper (by us called querca domus) and becomes first of a saffron colour, but in the course of a few weeks more of a fiery-red colour.

This business from the White to the Red, requires sometimes three or four months, but the exact time cannot be determined.

Now you are in possession of Thummim, Consummatum est, of Moses and Aaron.

15th. During the first and second digestion the subject dries and liquefies several times and undergoes many changes of colours, which appear all round the globe and in the neck of the glass, and never cease until the red sublimate is brought to perfection.

There remains again an earth, the Dust or red earth which is of no further use, being now totally deprived of fire, which is life.

(Admire the simplicity and truth by which the subject and this primitive dust is plainly declared in the words 'The dust or red earth of Man' as well as the Magnet.)

**First Multiplication of the Red Medicine
in Quality and Power, by the Metallic
radical humidity; and its specification
towards Mineral Nature
for Transmutation.**

16th. There are only three Universal passive fluids or humidities in Nature. These three, centrally, are very

analogous to each other.

For the Animal Kingdom the animal fluid or Blood is appointed, for the Vegetable Kingdom water, and for the Mineral Mercury, which is the radical humidity of metals.

Each of these three fluids contains fire, water, earth - Soul, spirit and body, sulphur, mercury, salt. From each of these fluids, if properly treated and duly animated by the Universal Spirit a Universal Medicine may be made.

Now in order to specify towards Metallic Nature, your Universal regenerated Spirit or Salt, the White or Red Medicine, proceed thus:

17th. Take four parts of the White or the Red Medicine, and ten parts of highly purified Mercury (best revived from Cinnabar) and make an amalgam as follows:

Put the very accurately weighed ten parts of Mercury in a small china tea cup, or in a small smooth crucible, on a gentle charcoal fire, and let it stand until the Mercury begins to fume. Take it that moment from the fire (avoid breathing the fumes) and at the same instant add the four parts of the White or the Red Medicine (previously enveloped in softened wax) to the just fuming hot Mercury. Stir it with a clean solid glass rod and you will have an amalgam.

The multiplication is performed according to the table of Pythagoras [the Tetractys]; the ratio of one side of the equilateral triangle to the whole figure, thus. That is, 4 parts of the Medicine to 10 parts of the metallic water.

Process of Digestion with the Metallic Water or Ferment.

18th. This amalgam is put immediately into a small globe glass, of sufficient strength (the neck previously secured with linen, wire and varnish to prevent it from bursting), not above 2 inches in diameter, or of such a capacity that the amalgam may fill no more than one fourth part of the globe in height. If the globe, however, be a little larger there will no harm: it is better a little too big than too small.

Secure your glass with an oak stopper, and lute it exactly as you did before.

19th. Place it in your bath, but now in the middle, where the greatest heat is, in 140 or 150 degrees. Bury it in the horse dung so deep that the stopper may be a little under the surface of the bath.

20th. Do not move it except when you are obliged to place it in the other cask.

By degrees the Universal Medicine unites radically with the Metallic water, and becomes in two or three months time, if the white sublimate has been employed, a silver white tinging Medicine, a dry substance extremely fusible, in one solid mass, after having passed through all the colours: but if the Red Medicine has been employed it becomes a Red tinging Metallic Medicine, which looks in the dark like a glowing or fiery coal.

This is the more perfect and multiplied Urim if the White, Thummim (consummatum est), if the Red Medicine.

Aaron wore them both in his breastplate.

21st. Both these medicines, the White as well as the Red, when perfectly fixed remain at the bottom of the globe-glass, and must be carefully separated from the earth or caput mortuum of the Mercury underneath it, sticking to the bottom of the glass under the medicine. It is necessary to break off the neck of the glass.

22nd. Both Medicines once multiplied or fermented with the metallic radical humidity (Mercury) do not require any further fermentation with gold; but tinge already, after this first multiplication.

One part of the White Medicine tinges 10 parts of mercury, lead, tin, copper, and iron into pure silver of 16 fine.

One part of the Red Medicine, once multiplied, tinges 10 parts of Mercury, lead, silver, tin, copper and silver into pure gold of 24 carats fine.

The metallic medicines tinge each metal in proportion as they abound in Mercury, therefore Mercury itself in the greatest quantity, with very little loss, lead the next with a little more loss; then silver and tin; tin with more loss than lead; and lastly copper and iron with a great deal of loss and a large scorification of external metallic sulphur, as these two last metals contain but a small proportion of Mercury, which is the only metallic principle that is ameliorated and fixed.

23rd After the first multiplication with the metallic water, the White Medicine is the Urim in its first multiplied state, tinging and ameliorating the inferior metals into the purest and softest silver. The Red Medicine once multiplied with the metallic water is the Thummim in its first multiplied state - the Exalted Universal Medicine striking at the root of every acute and chronic disease of man and animals, and tinging the mercurial principle of all the inferior metals and minerals into the purest and softest gold of 24 carats.

Both medicines are soluble in rectified spirit of wine and even in water.

AUGMENTATION of the Medicines in Quantity not in Quality nor in Power.

24th. If the White medicine, once multiplied, be melted with pure silver - one part of the Medicine to four parts of pure refined silver - the silver becomes a white, brittle, glassy substance. The medicine is in this way Augmented in quantity only, but not in quality nor in power, as it now tinges no more than ten parts, in the same manner as before; but you thus obtain a greater quantity of the same medicine, for Transmutation only.

25th. If the Red Medicine, once multiplied with mercury, be melted with pure refined gold, 1 part of the Medicine with 4 parts of pure gold, the gold becomes a brittle, deep orange coloured vitreous substance, and the Medicine is augmented in quantity, but not in quality nor in power; it tinges only as before, 1 part tinging ten of inferior metals into most pure gold, but you have more medicine in quantity.

The White and the Red Medicines thus fermented with silver or with gold are no longer soluble in Rectified Spirit of Wine, and much less in water, and therefore are no longer medicinal for the human body or for animals; on the contrary, they are now highly pernicious, corrosive and destructive to animal life, and also to vegetable; and they cannot be multiplied any further by the metallic humidity.

Second Multiplication of the Medicine viz, in Quality, by the metallic waters.

The Second and every subsequent Multiplication of the medicine, with the metallic water (Mercury) in quality and power, is done exactly like the first, according to the table of Pythagoras, as has been mentioned and explained before.

26th. Make your amalgam as before, with the same accuracy and precaution - 4 parts of medicine to 10 parts of pure Mercury - put your amalgam in a globe glass, so that three or four parts at least remain empty; lute the neck with the oak stopper, and bury it again in the middle of your bath where the greatest heat prevails.

This process will be finished in a much shorter time than the first; and every subsequent multiplication is sooner accomplished than the foregoing, because the Multiplied medicine increases wonderfully in fusibility, the power of penetrating, and fixity, and therefore it is sooner multiplied than before.

It passes again through all the colours, dies and is regenerated as before.

This can also be done over a lamp provided your heat is nicely regulated so as to imitate that necessary, gentle animating heat of horse dung.

During the first labours of liquefaction and putrefaction, we prefer the horse dung to the lamp, as the most natural, though divers philosophers have used divers means.

27th. You will again find your exalted medicine at the bottom of the globe upon a small caput mortuum or mercurial earth, from which Earth you must carefully separate your medicine; which is easily done as the substances are distinct enough.

Now you have the Medicine of the Second Order, more fiery than the first, and ten times more powerful. One part of this medicine tinges one hundred parts of the inferior metals into silver or gold, according as you have employed the white or the red medicine.

28th. This Medicine, infinitely more soluble, more fiery, more penetrating and powerful, can no longer be administered in substance to the human body, being too great a fire for our constitution to bear.

The Medicine of the First Order may be administered in substance, 1/4 of a grain or less for a dose; but we will give you our method how to dissolve and administer our medicine with safety.

29th. The third, fourth and fifth Multiplication, always with the pure metallic water or Mercury, is performed exactly in the same manner as the first and second, but each succeeding multiplication is sooner performed than the foregoing.

We do not know that ever a philosopher ventured so far as the Fifth, as we truly believe that so fusible, ingressive and penetrating a substance, which is actually fire and Light, would run through every glass.

30th The Medicine, whether White or Red, of the First Order, of the First Multiplication with Mercury, tinges ten times its weight.

The Medicine after the Second Multiplication tinges one hundred times its weight.

After the Third multiplication one part tinges one thousand parts.

After the Fourth Multiplication one part tinges ten thousand parts.

After the Fifth Multiplication one part, one hundred thousand parts; that is, one single grain would produce 171b 4oz of silver or gold.

(Who can comprehend the incalculable fire of Nature! infinitely multipliable!)

Method of safely administering the Medicine to the Human Body.

31st. Take four ounces of the purest, most highly rectified Spirit of Wine (not Corn spirit) dissolve therein, without heat, or at most only in the Sun's heat, one grain of the First, Second or Third multiplied Red Medicine, and, observing well the colour of the Tincture thus formed, add a second or a third grain (according to the power of your medicine) and fourth or fifth, or more, until your Spirit of Wine becomes tinged of a translucent Ruby colour, like Burgundy Wine - then cease to add any more of the Medicine.

The Medicine of the Third Order will sooner tinge the Spirit of Wine sufficiently deep than that of the First.

This Heavenly Essence is the Highest and most Universal Aurum Potabile of the earliest ages.

With this glorious Essence we tinge a pint of Madiera or Lisbon or good old Rhenish Wine, dropping our Ruby Essence into the White Wine until the latter become of a deep orange or pale Burgundy, or deep Malaga colour, and appears so in a two ounce phial.

This medicinal wine may safely and without the least danger be given to both sexes, and of all ages in every disease whether the disease be hot or cold, acute or chronic, makes no difference.

A teaspoonful may be given for a dose, once or twice in 24 hours, in dangerous acute, or obstinate chronic diseases, cancers and the like; but in slight cases one dose only will effect the cure.

32nd. The Red Medicine, thrice multiplied, placed in a glass globe, with a stopper luted in, and suspended in a room, gives light in the dark like a fiery coal.

33rd. The White Medicine, after the First Multiplication, coagulates and fixes a tumbler or glass full of clear water into a rock crystal. Put grain after another into the water until a disturbance is observed to take place in the water; then cease, and in half an hour the glass will break leaving the crystal fixed.

34th. The same White Medicine projected on glass in fusion, leaves the glass, when cold, perfectly ductile and malleable.

35th. With the Red multiplied Medicine, glass fluxes or crystals are fixed into diamonds, rubies, emeralds and other precious stones.

Concerning the Globe-glasses.

The glasses are globular digesting glasses, of five, or at most six, inches in diameter, with a neck five or six inches in length and wide enough to admit your thumb or at least your middle finger.

You must make stoppers of fine grained, very dry Oak, to fit nicely into the necks which should be ground in the inside a little way so as to form a nice round hole for the stopper: the stopper should go into the neck one inch deep, and should leave one inch above the neck.

The globes for multiplication are about two inches in diameter, with necks three or four inches long and wide enough to admit a finger.

All the glasses should be made of considerable strength - at least one eighth of an inch in substance.

SUPPLEMENT to the foregoing Aphorisms.

If the globes containing the subjects be three, four or more times electrified in the beginning, before you put them in the bath; so as to introduce the Electrical Universal principle, or the Universal Spirit of Nature into the subject by motion, the same spirit in the subject will be greatly strengthened, the operation will be accelerated and improved, and you will obtain an increase of the first White salt or sublimate below the Oak stoppers.

Above I have faithfully communicated our Aphorisms.

London 5th April 1797

Sigismund Bacstrom
M.D. F.R.C.