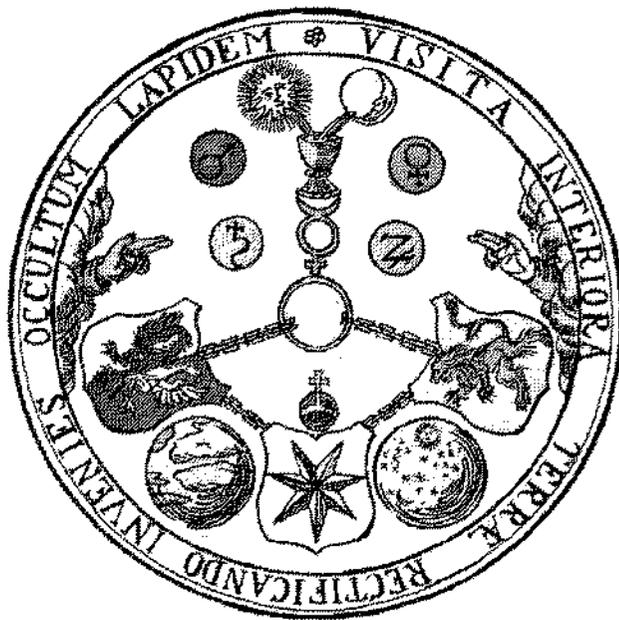


MINERAL ALCHEMY

(A PRACTICAL COURSE)

VOLUME 3 OF 4
LESSONS 49 - 72



WRITTEN BY
JEAN DUBUIS

TRANSLATED FROM THE FRENCH BY
BRIGITTE DONVEZ

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Dear Friend,

THE EXTRACTION LIQUIDS

This lesson's goal is to remind you of, and to complete, certain elements concerning extraction liquids. This study will take place according to the Figure # 1 page 10.

This figure is divided into two parts:

- the first, made of 4 columns, deals with wine spirits, which yield volatile elements;
- the second, made of 3 columns, deals with vinegar which fixes tinctures.

THE VOLATILE

First remark: it begins in column 1, it is in fact a progressive purification of the liquid.

COLUMN 1: It is a sequence of simple distillations. The percentage of alcohol gradually increases according to the material and the operator's skill. Around the 6th or 7th distillation, the oils of death have been drawn out and we obtain the true spirit (*eau de vie* - the water of life) whose maximum percentage is 96%, or 96.5% depending upon the altitude of the location where you operate. This extraction liquid is quite appropriate for spagyric tinctures or elixirs.

COLUMN 2: It begins either after the fourth distillation of column 1 or, for a more refined work, after the oils of death have been drawn and removed. This column is that of vacuum distillation and the percentage of the alcohol can reach or even go beyond 99.5%, but we should not forget that vacuum distillation requires a good amount of skill. This wine spirit, if it does not contain the oils of death, may be appropriate for the circulatum minor or the plant stone.

COLUMN 3: It is the column of the wine spirit distilled on tartar (as the Ancients say). We can, as before, take the wine spirit of column 1 after the fourth distillation, or after the oils of death have been removed. The wine spirit is set to digest with the calcined salt of tartar and then it is distilled. This operation must be performed three times to allow us to enter the 99.99% "area". Of course, the salt of tartar (potassium carbonate) is calcined again after each digestion. For certain operations, it is preferable to complete the three digestion process with a digestion on quick lime. The wine spirit obtained in this way has performed an alchemical extraction on the salt of tartar so that it is thus mineralized and no longer meets the requirement of any spagyric operation.

COLUMN 4: It is the column of Kerkring's menstruum. The sal ammoniac is sublimed at least three times until no black faeces remain after the sublimation. The salt is then set to

digest with the 99.99% spirit of column 3 during 90 days; then it is distilled three times (make sure no moisture penetrates into the set-up). This menstruum can operate extractions in the plant kingdom, in the mineral kingdom on antimony and on most metallic limes (oxides in modern language).

THE FIXED

All the tinctures extracted with vinegar are fixed. The vinegar can fix the tinctures in kingdoms different from their original kingdom.

COLUMN 5 : It is the column of the simple distilled vinegar. With each distillation, the first part of the distillate is not kept; it represents close to 1/3 or 1/2 of the volume. As soon as the color appears, stop the distillation. The residual honey is then dried and calcined. And the vinegar is distilled on its salt to make it nitrous.

COLUMN 6 : In this case, the vinegar has been concentrated by having been frozen two times in a row. Then, one or two distillations will eliminate the phlegms. With this method, we can obtain a vinegar containing 60% of acid; it may or may not be nitrous, depending on whether the distillation has been done on the salt or not.

COLUMN 7: Radical vinegar. The vinegar of column 6 is digested on the copper oxide obtained from the calcination of the metal (ancient term: Lime of Venus). The dry distillation of the acetate after its coagulation yields a 100% acid vinegar and a red oil. This vinegar should have extracted the seed of gold existing in the copper.

APHORISMS

Concerning

THE UNIVERSAL SALT OF NATURE

(Continued)

45.

The genuine subject contains every thing, that it wants for its perfection, therefore it can be perfected by its own principles.

46.

Our Salt generated by the powers of Nature, contains the 4 elements; it must be fixed by the assistance of Art.

47.

Who soever knows how to fix and concentrate the \cup or \triangle in the Salt of Nature, possesses all and understands our Art.

48.

The \cup of the genuine \ominus of Nature perfects and fixes himself and his own Body, if assisted by Art.

49.

If the Center of \odot is turned outwards by Art, and is reunited with its body most intimately, and is then fixed, its power is entire and perfect as you read in The Emerald Table.

50.

The powers of the whole substance must remain together, and must neither be separated nor weakened.

51.

Nature is exalted by its own \cup .

52.

If you wish to see the Body ameliorated by the \cup , that \cup must not be expelled or forced from the Body.

53.

The $\underline{\text{r}}$ which ascends in the glass, when excited by gentle Heat, is THE AGENT who does all.

54.

You must take away the Volatility of the $\underline{\text{r}}$, by locking them up closely, and it will be in time, what you look for.

55.

The $\underline{\text{r}}$ is fiery, the Body is cold (so says BASILIUS, vide De La Brie manuscript).

56.

Most Chymical Artists err by not knowing the genuine acting \triangle (i.e. the $\underline{\text{r}}$ in the matter). The exciting \triangle is outwardly applied, but the operating \triangle is Within the glass.

57.

\triangle In our whole Art and Labour is, besides the external gentle \triangle , only the internal Secret to be minded.

58.

TO BOIL is the whole Art; Nature BOILS, Art MUST BOIL also.

59.

In our artificial boiling, the external heat must not exceed the Internal.

60.

The external Heat must neither be too Strong nor too gentle.

61.

The Heat must be managed nicely, in such a manner, that one may be able to suffer the hand on the glass constantly, without burning it.

62.

Nature and Art must assist each other to perfect the Works; Art operates without and Nature within the glass.

63.

The preparation is performed in a closed Vessel, that nothing may evaporate.

64.

☉, The genuine metallic Salt can, by another process, be perfected IN 3 DAYS into Spiritual and be made into a Tincture.
(A Hint confirming Mr. GARDENS' operation in a ☿).

65.

In a Certain Thing is WHITE and RED, ☽ and ☉ spiritually; turn the Inside out and the outside in.

66.

The pure Salt of Nature, which appears under A WHITE SHINING FORM, is by the Solar power brought to a purple Colour, under which Form it becomes a Tincture for men and metals.

67.

Whosoever can change the White into Red, digest, boil and maturate, knows the Art.

68.

The Body of the Salt is cold, the ☿ is fiery.

69.

☉ is a Cold △ (alluding to the COLD, Tranquil Elect: △ or ☿ mundi, in the animated △). The ☿ is fiery (when moved or agitated, becomes △, enclosed in the universal ☿ Humidity.)

70.

Whosoever can cause a RADICAL UNION between the Cold Body (the alkaline Basis) and fiery ☿, obtains a most powerful Essence.

71.

The ascending ☿ in the Vessel, excited by Art, is the internal agent, who does all.

72.

Observe! As soon as the External Heat ceases, the operation within the glass ceases also, but whenever the external Heat is too great, the ☿ within will want to escape, bursts the glass, returns to the Air, and leaves the Body dead.

73.

As soon as the White has appeared in the glass, after Blackness is past, and when you see that it sublimes no more, increase the Heat a little, and continue the Digestion, until it is red.

74.

The surest way in the Cure of Diseases, is to comfort and strengthen the — of Life in the human Body, by a pure celestial ⊙.

(This is exactly what BEANME' and LAVOISIER call PURE VITAL △, I call it PURE △ or ETHER ANIMATED BY SPIRITUAL, VOLATILE, INCORPORIFIED NITRE; that is: ELECTR: △ INCLOSED IN AERIAL ⊙, which has not yet corporified itself upon an alkaline body. △ deprived of that Vital △ inclosed in celestial ⊙, becomes HUMIDITY, that is SUCH ▽ AS IS DEAD AND INANIMATE and therefore inclines to become putrid immediately for want of Life, like a dead animal Body. But in my opinion such inanimate △ or Humidity is soon impregnated again with △, by means of the Spiritual Medium, the Aerial ⊙, and that by a perpetual Circulation of the Elements, △ acting constantly upon the △, and by the medium of △ on the ▽, and by △ and ▽ upon the ▽, and vice versa the central △ in the Earth acts upon the Subterraneous ▽s, sublimes them into Vapours and △, to be impregnated by the — mundi manifested in the Spiritual, incorporeal, aerial ⊙ or universal —. See AURAE CATENA HOMERI.)

75.

Whosoever has it in his power to strengthen animal Nature by a pure celestial ⊙, may live to a great Age.

76.

Nothing in Nature is so proper to cure diseases with, as that principle which is the Life of all things.

77.

By means of the Astral Salt, all things live on earth, because all things receive Life from the △.

(Sendivogius says "in the △ is a Secret Food of Life.)

78.

In the △ is the — and Food of Life, which also descends in Dew and Rain.

79.

The astral Salt, which is a heavenly Salt, is very volatile, sweet, white, brilliant like fine , and is a sweet mercurial .

80.

The Salt of Nature is above, in the middle and below; it is in the , in , in the  and in all Things, as IT CORPORIFIES ITSELF WITH HUMIDITY, with , with all Vegetables, and in all Things.

81.

One and the same power nourishes the whole world, and FROM DEW all things grow, on account of its containing heavenly Salt, which proceeds from the Sun and the Moon.

82.

DEW is a Spiritual  impregnated with Sol and Luna.

83.

In DEW are the powers of Sol and Luna. (Might not DEW be the key to open the , to purify and to regenerate it?).

84.

A Well digested DEW is deemed the best .

85.

THE SUPERIUS is the Life and nourishment of the Inferius.

86.

The Superius is the Life, the Terrestrial is the Body, without the  the Body is dead.

87.

Nothing is so proper to infuse the universal  into subjects, as the s which fall from the heavens.

88.

The celestial s are full of heavenly powers.

89.

The heavenly salt in the terrestrial body is a genuine power of life: the Centre of the heavenly ∇ s are the same.

90.

The $\underline{\text{r}}$ or power in the ∇ which is a subtle \ominus , is not seen until the ∇ is become a solid body.

91.

When I saw that the ∇ became gradually thicker and harder, I rejoiced, because I knew that I should find what I looked for.

92.

When the $\underline{\text{r}}$ or the power of Nature in the ∇ is become a \ominus , it is already a Medicine.

93.

Salt is a corporified $\underline{\text{r}}$.

* *
*

Ora et Labora!

Enclosed Figures

- # 1 : The extraction liquids
- # 2 : The signs of the Zodiac and alchemical signs

THE EXTRACTION LIQUIDS

FIXED

VOLATILE

MENSTRUUM



Figure # 1

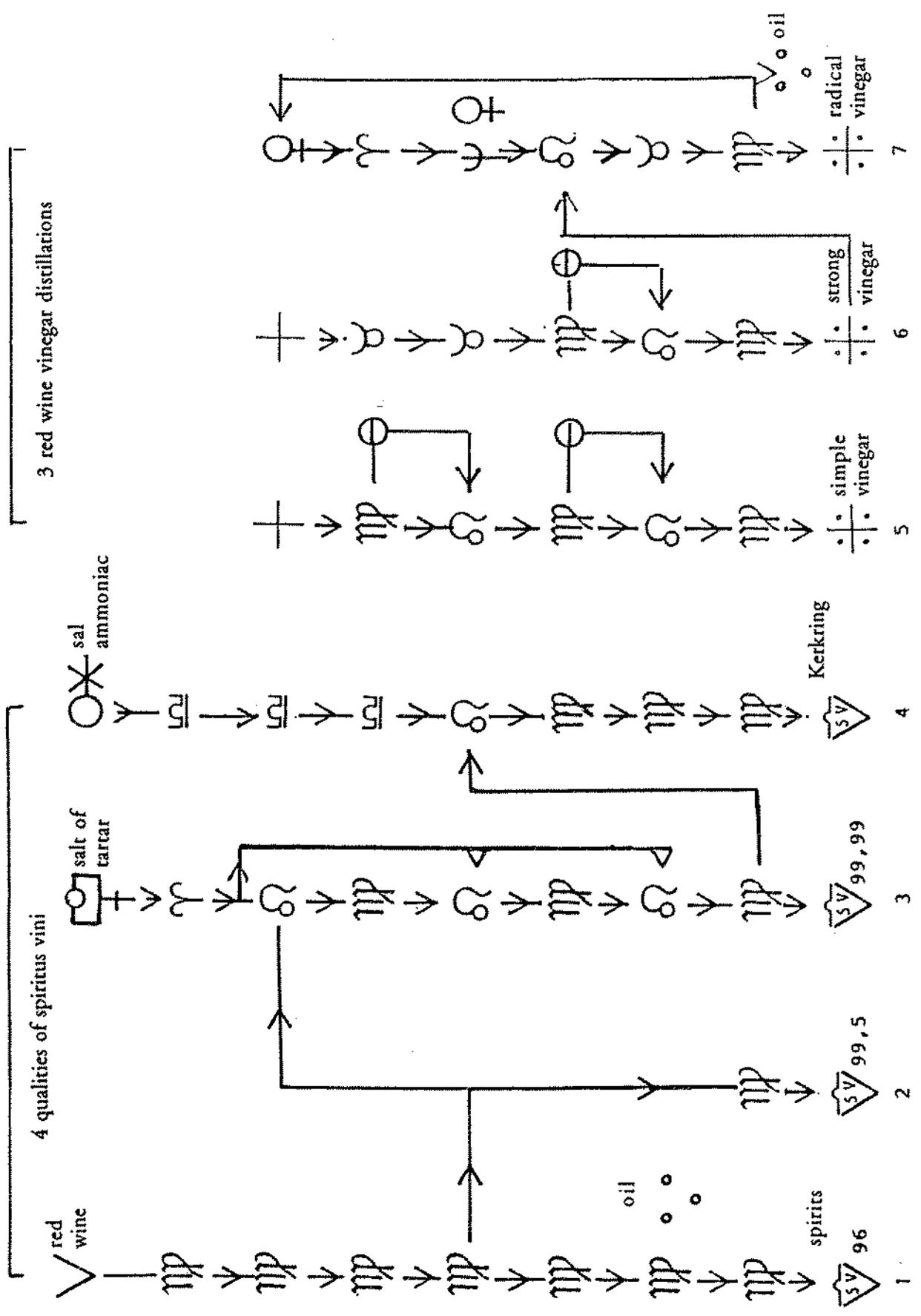


Figure #2

THE SIGNS OF THE ZODIAC AND ALCHEMICAL SIGNS

Aries	Calcination	Antimony
Taurus	Freezing	Asphalt
Gemini	Fixation	Sal ammoniac
Cancer	Dissolution	Silver
Leo	Digestion	Gold
Virgo	Distillation	Red orpiment
Libra	Sublimation	Roman vitriol
Scorpio	Separation	Sulfur
Sagittarius	Incineration	Allum
Capricorn	Fermentation	Feather allum
Aquarius	Multiplication	Salt Niter
Pisces	Projection	Mercury

Dear Friend,

Let's go back to the four methods described in Mineral Lesson # 46.

The first, the "Antimony Tincture of Paracelsus", is based on the production of algaroth powder or Mercurius Vitoe. The three other methods are based on the deliquescence of antimony butter.

For those of you, who have not yet made or distilled the butter, to use the first method, the following way is possible:

- buy the butter (antimony trichloride) at a chemistry supply store;
- pour the butter in a fine layer, as described in pages 1 and 2 of Mineral Lesson # 46 (with all the precautions specified in the text).
- allow the deliquescence to proceed during day and night until all the butter has been reduced to Mercurius Vitoe. At the end, you may add some distilled water in order for the residual butter to precipitate.
- recuperate the whole thing and load it in a soxhlet thimble; cover first the thimble bottom with as fine a fritted glass sheet as possible;
- fill the extractor flask with a sufficient amount of distilled water (preferably rain water);
- perform the circulation-extraction very slowly because the powder mass is not very permeable to water. A white flocculation appears very quickly (after having primed the siphon two or three times) in the water of the flask. This water later takes on an emerald green color and the flocculation disappears;
- cease the operation by the 10th siphoning; then, drain the thimble and put all the green water aside for a later study. Clean the extractor and dry the drained thimble summarily with a hair dryer;
- set up the extractor again with the fritted thimble and fill the flask half-way with very strong distilled vinegar, or better still, with radical vinegar. By the third or fourth siphoning, the vinegar is golden yellow and becomes reddish gold;
- continue the circulations as long as the powder level diminishes, and if the butter has been well distilled, nothing should remain. At that point the eighth phase (see Mineral Lesson # 46 p. 4) has been reached, but one day of extraction -circulation replaces the 40 days in the incubator.

- recoup the radical vinegar through distillation but it must be marked with the sign  on the container and another  sign must be added each time you use it. We calculate that by the 3rd use the seed of the vinegar has been exhausted.

Note: After the first use, this vinegar cannot be used on any matter other than antimony.

* *
*

Notes on the distillation of the antimony butter:

After each distillation, some white lime remains in the flask. It is in fact the Mercurius Vitoe produced by the atmospheric vapors, in the time elapsed between two butter distillations. An air-tight flask, and following the precautions for use (operate in a dry location) will diminish the amount of lime. This Mercurius Vitoe can be used in a manner similar to the one advocated in the beginning of this lesson. The characteristic feature of the end of the distillations is the fact that the distillation flask no longer shows any blackish brown marks.

In a later lesson, we shall present the results of an attempt at extracting on antimony glass that has been bought in the market and of a new method to obtain the red oil of antimony; a method whose principles are conform to those of the Ancients.

*

ADDENDUM TO BASIL VALENTINE'S

TREATY ON SALTS

"About the Preparation of Antimony Salt"

Reduce a good Hungarian antimony to a powder as fine as flour, and calcine it on a moderate coal fire, as is usually done. Meanwhile, keep stirring with an iron rod, until everything is white and no longer smokes, and can endure a strong heat without trouble. Then place it in a crucible and melt it until you obtain a clear yellow glass; pound this glass to obtain a fine powder; place it in a glass retort and pour onto it a wine vinegar that has been distilled several times. Leave it to rest in a gentle warmth, and the vinegar will extract the tincture of ☉ and will take on a bright color, with the tincture; or you can prepare the ☉ extract later on and use it as an excellent remedy. (See Basil Valentine's trium mag.)

When the tincture has been entirely extracted, and no longer tinges the vinegar, thoroughly and perfectly dry the powder which will have turned black. Pound it with a large quantity of yellow ☿, put it in a crucible, and after it has been luted, set the crucible under a strong enough heat, until all the ☿ has been burned up. Then pound the remaining matter to a very fine powder and pour some new distilled vinegar onto it again. Extract the salt in this manner, and then, by a series of distillations, eliminate the vinegar's acidity. Clarify the salt with the wine spirit until it becomes shiny, clear and white. If you have operated in the right way, you'll have obtained an entirely fixed and active salt of ☉, although there is another way to prepare this salt of ☉, which shall be explained elsewhere.

Dose: 4 grains. It is equivalent to the salt of ☉ and cures all diseases. (AND EASILY RETURNS TO THE STATE OF ☉).

About diseases; the salt is good for gout, weaknesses in the joints. It purifies and cleanses the blood, strengthens the heart, and the balm of man's body, when it is drunk with a spoon of spirits. It gives back lost strength, opens all inner suppurating tumours. It cleanses all manner of ulcers when sprinkled onto them, or when correctly spread on them with good salves or unctions. Dissolved in well distilled wine vinegar, it quickly ameliorates incurable and malign diseases, to every one's surprise and praise. Drunk with wormwood or blessed-thistle tea, it cures all deeply rooted and cure-resistant fevers, particularly quartan. Drunk with mint or wormwood tea, it stimulates digestion, when drunk with rose hips or agrimony tea¹, it restores the memory.

This salt is used in alchemy - or in the transmutation of metals into gold - if you add to it the grease that drops from the Sun's chariot, when the alchemical Phaëtons undertook to drive it, as poets explain in their poetic fictions.

Because the excellent fictions, produced and written by poets about celestial gods, are nothing but metaphores to keep the arts and mysteries of alchemy a secret. The same holds true for the story of Apollo who killed the Python serpent; and the story of Mars and Venus' adultery. And it will be proven, according to me, that chemical operations are revealed in the fictions of poets, when they write about the love and love deeds of gods and goddesses. It is the same when

¹Note: Both these plants are of the same family, the rose family, and therefore have some chemical similarity.

they introduce various marvellous transformations and metamorphoses. Indeed if we decide to understand the tales literally, we are prejudicing the Wise Ancients. So do we when we believe that people as intelligent and wise as they were, could really believe or write about the numerous and immoral deeds of the gods.

About the use of antimony salt:

This antimony salt has a prodigious effect; for it can have the same influence as the salt of gold, when it is administered in the same dosage. It cleanses the entire human body, purifies the blood, expels demons, burns up all ill humours, the source of all ulcers that needs its use. It cures syphilis, when taken in doses of 4 grains with a drachma of distilled guaiac water and causes profuse sweats, each day until complete recovery has been achieved.

The guaiac water is prepared in the following way: first crush and pound the wood finely, and damp it with a good wine spirit in a well sealed container. Leave it to rest for several days under a soft heat. Then pour onto it a good quantity of fumitory or scabiosa water. Digest for 14 days in a water bath, and distil. Keep the aqueous part and the oily part separate in well sealed flasks. Use the aqueous part with the salt of antimony. It has also been successfully used against other illnesses, which we have previously mentioned. However an enlightened physician knows well the virtues of guaiac, and the benefits it brings to the treatment of illnesses. There are other ways to distill the aqueous and oily parts of the guaiac wood, but it would be useless to mention them here.

In the text, the reference to the return of antimony salt to the state of gold is to be compared with the return of ΨS to gold under the influence of the red oil of antimony, as seen in a previous lesson.

* * * * *
* * * * *
* * *
*

Ora et Labora!

Dear Friend,

If we compare the three texts by Becker, Paracelsus and Bacon, such as they are presented in the previous lessons, we would find, if not a similarity, at least a strong convergence. From a practical standpoint the important thing is that these texts complete each other in the experimental domain.

THE RED OIL OF ANTIMONY

(from the acetate, without any intense-cold producing device)

In the previous lesson, many points of detail have already been dealt with, in what concerns the dry distillation of the antimony acetate. We are adding here a new method:

heating:

- it takes place in a sand bath, or with a flask heater whose heating mantle has been protected by a thin layer of fire clay - a very important point so as to be able to preserve the flask heater and to use the flask 2 or 3 times;
- because of the cost, the flask is not ground at the neck, but the neck is 8 to 10 cm high so that the silicone top joint may resist.

set-up:

- the flask is linked to a straight condenser through a large diameter distillation bridge (16 to 20 mm on the inside);
- the condenser is cooled down by a running water system. Ice condensation is not necessary;
- at the lower part of the condenser there is a vacuum tap, on which a ground glass flask has been set up; several flasks should be prepared for a possible quick flask exchange during the distillation process;
- the central tube of the vacuum tap will be lit in back lighting so you can check the color of the liquid;

- during distillation, you should change the flask each time there is an important change in the temperature at the top of the condenser and each time the color changes. The lower flask is changed and hermetically sealed;
- the side tube of the vacuum tap is linked to another tube that goes deep into a flask, on the top of this flask another tube is coming out and goes deep into the next flask, and so on in such a way that this sequence of flasks represents about a ten-liter capacity for each half-liter capacity of the dry distillation flask. If you have a ten-liter flask, place it first for example, then place 1 or 2 flasks of a 1 or 2-liter capacity. The outlet tube of the last flask is left open. It is understood that these flasks are extremely clean and dry and that it will be possible to close them hermetically later on preferably with ground glass.

distillation:

- the first phases of the dry distillation yield several liquids depending upon the way the acetates had been previously treated;
- when the viscous white gas appears it fills up the first flask and it may fill the other ones in sequence. The gas remains stable in the flask it is filling up, up to the top of the outlet tube;
- when the production of gas ceases, the tubes are quickly put apart and the flasks are hermetically sealed and left to rest for 2 or 3 days at room temperature (less than 20 C - 68 F);
- after some time, between 12 hours and three days, a small red oil puddle is formed and condensed at the bottom of the flask and clear drops form a deposit on the walls of the flask: the gas is condensed;
- open the flask and pour 99.99% absolute alcohol into it, (about 100 cm³ for a ten-liter flask). Put the stopper back and move the flask so that the alcohol may dissolve the red oil and gather all the drops from the sides. As the flask has been hermetically sealed the neck is placed down so that in a few hours all the alcohol is at the bottom;
- a simple water-bath distillation is good to recoup the oil. The separation of the white will be the subject of another lesson. This dissolved oil is used

according to Mineral Lesson # 46, note 12 and the following ones in the text entitled **Antimony Tincture of Paracelsus**. The oil is red for antimony and lead, and white in the case of copper.

Today we believe that note 15 in the same text is not valid for lead or copper. We believe it could be valid for iron and tin but we have not made any experiment to this effect with these two metals.

Ora et Labora!

THE BOOK OF FORMULAS

**A Collection of Choice Spagyric Preparations,
Predestinated to the Cure of Disease and
The Conservation Of Health: Including
Some Of The Rarest And Most Val-
Uable Secrets Of The Ancient
medical And Hermetic
Philosophy.**

**Collated and rendered intelligible,
with explicatory Annotations,**

By John Halzelrigg, F.H.S.

PREFACE

I take the pleasure in here presenting to the earnest few of beneficent and uplifting purpose this collection of valuable forms and medicaments, culled and transcribed into more lucid phrase from the chemical and Hermetic writings of such learned worthies as Paracelsus, Faber, Quercetan, Hartmann, Rulandus, Mynsicht, and numerous other philosophers in the Spagyric Art. That these preparations - and many similar ones which I hope to treat in a subsequent work - have remained absent from the officinal category is not a matter for wonder, chiefly because of a recognition by their authors of specific powers and potencies in natural processes of too arcane a nature to be apprehended by the dense self-sufficiency of the materialistic and incredulous mind; and partly by reason of the fact that while dealing with obvious principles, though only occultly understood, they were couched in terms the meaning of which was wisely veiled from those of disrespectful and antagonistic attitude.

The importance to the occult chemist of working in harmony with astral law, that thereby the natural and artificial qualities of all things from the Universal to the Particular might be properly attained, may be the better appreciated in this extract from Salmon, an astro-philosopher and physician of the Middle-Ages:

- 1 - The time of the preparation ought to sympathize with the native production of the thing to be prepared; which is in respect of qualities manifest or occult.

- 2 - As to the Manifest Qualities, that time is to be chosen in which they naturally flourish: wherein you are to choose a hot and moist season for dissolution, digestion, and fermentation; a cold time for coagulation; a moist time for distillation and melting; and a dry time for exsiccation and calcining.

- 3 - As to the Occult Qualities, the preparation is to be begun when the planet governing the thing is strong and vigorous in his house or exaltation, and in good aspect of Sol, Luna, Jupiter or Venus, or all of them.

- 4 - The place of preparation must be the laboratory, which must be hot, cold, moist, dry, airy, close, etc., according as the nature of the matter to be prepared requires."

The significance of planetary influence, and its relation to the astral potencies involved in all natural operations, is too complex a subject to enter into her, except to say that the truth of the above brief imitations has been amply verified in the writer's experience. Nor when the rationality thereof is once understood, through careful study and investigation of the stellar hypothesis, will one marvel that it should be so.

Likewise, in dealing with the spiritual principles of things physical, the Spagyric artist was enabled to perceive the admirable analogies that helped verify the oneness of method throughout the spheres of manifestations, and its identity with those of the Higher or Causative realm, and thereby the necessary interaction and dependence of the one upon the other. Proceeding thus, under the logical assumption that the One Law must express itself similarly upon all planes of activity, they demonstrated the reality of a physical trinity - spagyrically classified as Salt, Sulphur, and Mercury - that corresponded with the Body, Soul, and Spirit of the noumenal world, or the Father, Son and holy Ghost of the devotional school; also the fact that these three primal principles embrace and comprehend the four elements, Earth, Fire, Air, and Water, the separation, purification, and inseparable conjunction of which constituted a fifth, of the purest potency, which they termed a Quintessence. This on the spiritual plane, as embodied in the esoteric teachings of the ancient religious mystics, is identical with Regeneration, a process the meaning of which the modern churchianity knows a little of as the material scientist does of the above trinity in nature. With this attainment in chemical processes all poison has been eliminated from the matter operated upon, and the spiritual or curative faculty is exalted to the highest degree, as is shown in some of the formulas which make up this

collection. The antimonial prescripts of Basil Valentine and the mercurial preparations of Paracelsus were not those which pass to-day as medicines, but which in reality are poisons most dangerous to the vital principal in the physical organism. the alchemists scorned the use of remedies that yet remained in such imperfect guise.

In a later treatise I hope to elaborate more fully and practically upon the Hermetic Philosophy as concerns the preparation of metallic, mineral, and vegetable medicaments, their spiritual bases, and whereby their different faculties may be developed into the highest vital energies.

With these concise hints by way of introduction, I commend the contents of the following pages to those of earnest mind, and particularly to such whose object is the mitigation of human physical suffering - one of the grandest missions to which an earthly pilgrimage can be consecrated.

John Hazelrigg

MENSTRUUMS

According to Dr. Johnson, the use of the word menstruum originated in the notion of the old chemists respecting the influence of the Moon in their preparations - a fact that contains the essence of truth such as the modern chemist, unfamiliar with the astral principia, is both indisposed to concede, and unable to apprehend.

In all the formulæ contained in this book the practitioner is advised to use only such menstrua or dissolvents as are made by private laboratory, for those of commerce are undependable, generally by reason of the impurity of the substances used, or else through an utter disregard of the spiritual principles involved. A perfect exaltation of medicines can never in any wise be accomplished through adulterated or imperfect mediums.

Divers chemical experiments delivered by the ancients have been believed false, only because the menstruums employed in the unsuccessful trials of them were not highly rectified, or otherwise as exquisitely depurated, as those that were used by the deliverers of those experiments; as that oftentimes the fault of a bad menstruum is injuriously imputed to a good artist. Many such purchased in the apothecary shop are wholly unfit, barely by their not being sufficiently freed from their weakening aquosity, as is very often the case with spirit of wine. On the other hand, while some processes fail to succeed according to expectation because the menstruums employed about them were not pure enough, so some miscarry because such menstruums are but too exactly depurated. Again, while the purity of these is a prime desideratum, one principal regard is as to their fitness for the particular purpose to which they are designed. thus, an aqua fortis that is proper in one operation, must be differently complexionated for the better success of another. For which reason the different solvents, as here given for use in the succeeding formulas, are successively numbered, and so referred to therein in brackets, that the essential one may be utilized.

In most instances of digestion and putrefaction, and more especially where a quintessence is the end to be attained, a homogene menstruum - as the spirits, phlegm, or water of the subject matter itself - is absolutely a requisite, that the astral principles inherent therein be not fatally disturbed, or their efficacy impaired. As saith Paracelsus - "Every fruit must die in that wherein is its life" (Archidoxies).

Modern chemists, for the sake of expediency and convenience, and largely through ignorance of Nature's interior methods, operate with mediums foreign to their matter, and thereby injure its natural or curative potencies.

I give here careful and complete directions in the medicinal formulas that follow.

Dear Friend

THE BUTTER OF ANTIMONY

We reiterate our advice for the making and the distillation of the antimony butter.

After each operation, examine every part of the set-up: the residual sulfur of the stibnite may cause the gas exhaust tube to be clogged. In this case, excessive pressure may result along with the possibility for acid vapors or antimony butter vapors to escape. Be cautious, contact with butter and even with the vapors may provoke burns on the skin, which take a long time to heal.

To diminish the risk of obstruction and to force the butter to condense on a greater length or surface, you can place two straight condensers, one on top of the other. The first, in which the gases emerge is not cooled by any water circulation. A straight tube, with ground glass at the end, is quite appropriate instead of a condenser.

If the butter vapors infiltrate the ground glass and glue them strongly, you need to heat them with boiling water to take them apart. In order to avoid such additional work, it would be a good idea to cool down the set-up at the end of the distillation, in the following way:

- first, switch off the heat of the HCl gas generator;
- about quarter of an hour later, when all boiling has ceased, switch off the resistance in the tube containing the antimony;
- watch the bubbler as soon as the flow of gas is reversed, a sure sign that the whole set-up is under low pressure;
- with heat proof gloves, separate the two parts of the ground glass - the butter is still not solid - and insert a small piece of paper to prevent the two ends from being glued to each other again;

Do not breathe the vapors, if any, during this operation.

If the butter has been produced with the method of the nitric acid on salt, we obtain, during distillation, the following result: the antimony trichloride distils normally, but the antimony nitrate produced by the nitric vapors decomposes. At the end of the distillation, we have in the flask a powder or needles of antimony regulus.

The acid, produced by the decomposition of the nitrate, dissolves part of the butter, therefore the liquid at the bottom of the condenser must be distilled again; it provides a good quantity of butter.

In the next lesson, we will resume the problem of the deliquescence of the butter and particularly the issue of "spirit" distillation . If you have already produced some butter, you can proceed with the deliquescence preferably, but not necessarily, in March, April, May, June. Later in the year, a rather important quantity of "spirit" is needed. Each deliquescence, giving off a rather small amount of "spirit", must be kept in an airtight container, at a low temperature, without light; of course, after having been distilled, and in a refrigerator but in the warmer section.

Experiments on antimony butter and the set-up of the material require some time, therefore we should take advantage of this "free" time to give some very interesting elements of a general alchemical culture for those of you who would like to devote themselves to spagyrics.

In the previous Mineral lesson we have presented the Book of Formulas by J. Hazelrigg. The reading of this book requires a knowledge of alchemical symbols, some of which are not too common. We provide hereafter a repertory of the symbols used in this work.

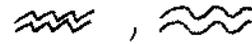
Ora et Labora!

TABLE OF ALCHEMICAL SYMBOLS

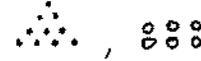
A

Acetum (Acid, i.e. vinegar, acidum)	
Acetum distillatum (distilled vinegar)	
Aes Ustum	
Air	
Alcohol (i.e. spirits) (an old definition is Antimony!)	
Alembic	
Alkali, common	
Alkali, salt	
Aludel	
Aluminum (Allum)	
Amalgam	
Ammoniac, Sal [Ammonium Chloride, NH ₄ Cl but formerly it was Hartshorn or powdered Antler-Ammonium Carbonate, (NH ₄) ₂ CO ₃]	
Ana (equal parts of each)	
Annus (year)	
Antimony	
Antimony, Oil of	
Aqua	
Aqua Fortis (1/2 nitric Acid + 1/2 Vitriolic Acid)	
Aqua Regia (1/2 Nitric and 1/2 Hydrochloric Acids)	

AQUARIUS (Multiplication, sal nitre)



Arena



Argentum
(Silver, Luna)



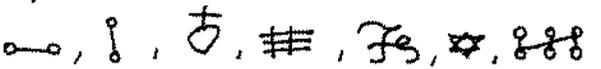
Argentum Vivum



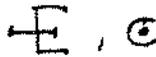
ARIES (Calcination, antimony)



Arsenic



Ashes



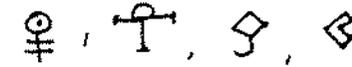
Asphaltum (congelation)



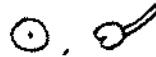
Aunus



Aurichalcum



Aurum (Gold, Sol)



Aurum Pigmentum



Aurum Potabile



Azoch



B

Balneum Mariæ
(BM, Water Bath, Mary's Bath)



Balneum Vaporis
(BV, Steam Bath)



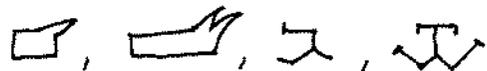
Black Ink



Bone



Borax



Brass



Brick, pulverized
(Latera)



Bull



C

Calcination

γ, A, ρ

Calcine, to

⊙, ⋈, ⋈

Calx

C, G, W, Ψ

Calx Vive

♄, ♀, ↗, ↘, ↙, ↘, ♀

Camphor

⋈⋈⋈⋈, ⋈⋈⋈⋈, m

CANCER (dissolution)

♋, ♋

CAPRICORN (fermentation)

♏, ♏

Caput Mortuum

♁, ☉

Carbonate

—x

Cera

♄, ♀, ♀

Ceruse (lead acetate)

♁, ♁, T

Chalk

C

Ciment, to

⋈

Cineres Clavellati
(Crude Potassium Carbonate)

♄

Cinis (ashes)

♁, ☉

Cinnabar

♁, ♁, ♁, ♁, ♁, ♁

Coagulate, to

♁, ♁, ♀, x x

Cool

∞

Congelation

♁

Cohobate

♁

Copper (Venus)

♀, ♀

Copper, Burnt

♁, ♁, ♁

Cornua Cervi (Hartshorn,
Ammonium Carbonate = Sal Ammoniac)

♄♃, CC

Crocus Marti

♂♂, COE, ♁, ♁

Crocus Veneri

♀, ♀, ♀, ♀

Crucible

▽, ⊞, ⊕, ⊗

Crystal

♀, ♀

Cucurbit

o, 8

D

Dies (Day)

♁, ♁

Digerere (separate)

♁

Digest, to

♁, ♁

Digestion

♁

Distill, to

♁, ♁, ♁

Distillation

♁

Dissolution

♁

Dissolve

E

Dissolvere (loosen or destroy)

▽, ♁

Drachma (1/8 ounce)

♁

Drachma (1/16 ounce)

♁

Drop

gt

Dust (Pulvis)

♁

E

Earth

▽

Element

♁-E

Evaporate



Extract



F

Fermentation



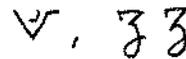
Ferrum



Feu De Roue



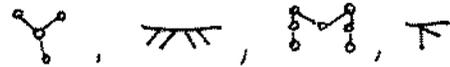
Filter, to



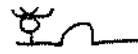
Filings or Iron



Fimus Equinus
(horsedung or gentle fire)



Firune



Fire



Fix, to



Fixation



Fixed



Flask



Flegma (Phlegm)



Flores



Flucre (fluidic, fluxing)



Furnace

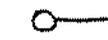


G

GEMINI (Fixation)



Glass



Glass Container



Goat

☾, ☽

Gold

☉

Gold Pigment

☉

Glass of Talc (Specula)

☉

Grana (grain)

gr

Green of Copper
(Copper Chelate)

⊕

Gum

☉, G

Gutta (drop)

gt

H

Handful (Manipulus)

M_s.

Hart's Horn (see Ammoniac, Sal)

☉

Hematite (Iron, Slate Ore)

☉

Herb

JB

Hora (Time or Hour)

☉, ☉, ☉, ⇒

Half of any quantity

s.s.

I

Ignis (Fire)

△

Ignus Circulator (Furnace)

⊕, △

Incineration

→

Ink

☉

Ink bottle

☉ ☉

Iron (Mars)

♂, ♀

Iron Filings

☉→

J

Jupiter (Tin)

4, W, ⊗, X, R, E

K

L

Lapis



Latten or Laton

SSS, ddd

Layered

Lead (Saturn)

5, h, h, P

Lead Acetate

⊕

LEO (digestion)

∞

LIBRA (sublimation)



Libra (scales or pound)

tt

Limatura Martis

○→

Lime (Calx)

C, G, W, O ⊗

Lime, Quick

ψ, ♁, ↗, ↘, ↙, ↚

Litharge (Lead Monoxide)

7, ∞

Lixivium (Liquor)

□

Lodestone (Magnet)

∞, ↗, ~

Lute, to

N, L

Lute of the Wise

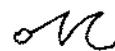
IIII, X

Luto Lutrine
(mud of the Otter)

2

M

Magnesia



Magnet

Manipulus

Marcasite

Marriage

MARS (Iron)

Materia

MERCURY

Mercury, precipitated

Mercury, sublimated

Mercuriam Rubificati

Miny (Read lead oxide)

MOON

Month (Mensis)

Multiplication

Martial Regulus of Antimony (our Luna)

N

Nitre
(Saltpetre, Potassium Nitrate, Soda)

Not Fixed

Nox (night)

O

Oil (Oleum)

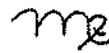
Orichalcum (Brass)

¹Mercury of Saturn

Orpiment



Orpiment, Red



Oxide of a Metal (Flore)



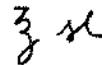
Oxide, Lead



Oxide, Zinc



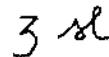
Ounce, half (see Uncia)



Ounce, eighth (Drachma)



Ounce, sixteenth



P

PISCES (Projection)



Pitcher (Amphora)



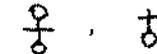
Plumbum (Lead)



Porous (Poras)



Potable Gold



Potassium, Crude (Potash)



Potassium Bitartrate (KHC₄H₄O₆)
(Tartar, Cream of Tartar, Algal, Weinstein)
(Adjective of color is red or white depending on color of wine it came from)



Potassium Carbonate (K₂CO₃, Salt of Tartar)
(Salt of Wormwood, called Pearlash if pure, makes "Angel Water")



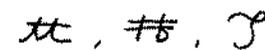
Potassium Nitrate (KNO₃, Nitre)
(Nitrate of Potassa, Saltpetre, Stone Serpent)



Potassium Sulphate (K₂SO₄)



Pound



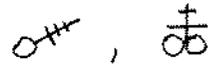
Precipitate



Projection



Powder (Pulvis)



Purify, to

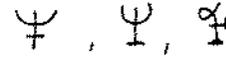


Putrify



Q

Quick Lime



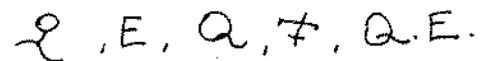
Quick Silver



Quick Sulphur



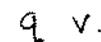
Quinta Essentia



Quantum Satis (sufficient quantity)

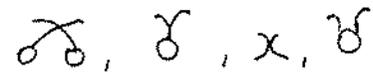


Quantum vis (as much as you like)



R

Realgar



Receiver (Vas Recipiens)



Red Lead Oxide (Miny)



Regulus



Retort



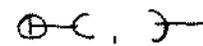
Roots (Radices)

S

Sacharum (Sugar)



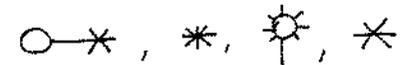
Saffrons of Mars



SAGITTARIUS (Incineration)



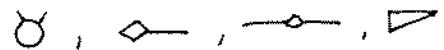
Sal Ammoniac (NH4Cl)



Sifted Tiles (flowers of tiles)



Sal Gemma
(Pure Salt, a salt mined in Poland)



Sal Prapuratum



Sal Prunella
(Fused Nitre or Saltpetre)

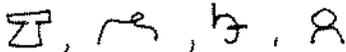
Sal Tartari



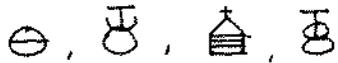
Sand



Salt, Alkali (Salt of Kali)



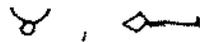
Salt, common



Saltpetre



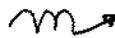
Salt, rock



Salt, Sea (Chelamus)



SCORPIO (separation)



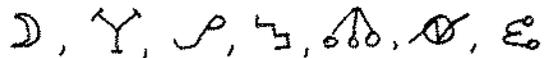
Scruplus (1/24 ounce)



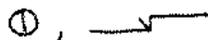
Scruplus (1/48 ounce)



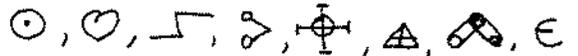
Silver (Moon, Luna)



Soda



SOL (Sun, Gold)



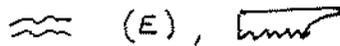
Sodium Biborate



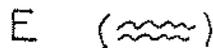
Solid or solidify



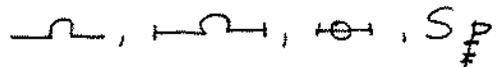
Solution



Solvere (weaken, dissolve)



Spirit



Spirit of Wine



Spiritus Vini Root



Stannum (Tin)

24, 3

Steel

♂

Stratum Super Stratum

SSS, ooo

Sublimate, to

≡, ♂

Sublimation

≡, 4, ☉

Sufficient Quantity

qs

Sulphur

♁, ♁, ♁

Sulphur, Black

♁

Sulphur, Quick

♁

Sulphur, Sophic

♁

SUN (Sol, Gold)

☉, ♀, ♁, ♁, ♁, ♁, ♁, ♁, ♁

Supo (Soap)

♁

T

Talcum (talc)

X

Tallow

♁

Tartar
(White from white wine
[coat on inner barrel] red from red wine)

♁, alc, ♁, ♁, ♁, ♁

Tartar, Calx

♁

Tartari, Sal

♁

TAURUS (Congelation)

♉

Terra

♁

Tigillum (small beam)

F

Tin (Jupiter)

♃

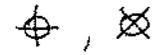
Tincture

♁

Tuna (a vessel for liquid)

☒

Tutty (Tutia)



Twins (gemini)

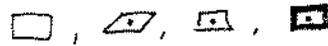


U

Uncia



Urine

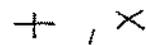


V

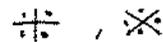
Vas Recipiens



Vinegar



Vinegar, Distilled



Ver-de-Gris (green of copper)



VIRGO (Distillation)



Vitriol



Vitriol, Blue



Vitriol, White

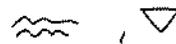


Volatile



W

Water



Water Bath (BM)



Wax (Cera)



Wick



Wine

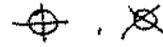


Work Completed



Z

Zinc carbonate
(Tutia or Tuccia Preparatum)



Dear Friend,

THE KEYS TO THE WORK

Some of the association members find the Mineral course less organized than the course on plant spagyrics. It is true that the mineral course is somewhat more complex, and cross-referenced, in the sense that one lesson will shed light onto another, as we move along. For example, in the beginning of this course, we deemed the way of the acetates satisfactory, not knowing anything about the time it took to complete it. The results we obtained proved to us that this way is, on the one hand, appropriate for whoever has time; and on the other hand, that some of the stages implied are useful for other ways. However, to the way of the acetates, we prefer today a quicker way, of which a synthesis will be presented below.

After the study of this lesson, you will be able to read Arterphius more clearly, understand the advantage of the three ways suggested by Urbigerus and get an idea of the incredible interest of Mineral Lesson # 46. In addition, we will give some complementary information from the book by Lapidus: "The Pursuit of Gold" and from "The Open Entry to the Closed Palace of the King" in its "genuine" edition by Philalethes.

In the way we are interested in, we can single out three main steps of the Work. The first, "the Herculean Works", consists in the preparation of the star martial regulus of antimony and the preparation of pure iron. From the very beginning of this first step, we have to make a choice: either we make the regulus or we eliminate the "Herculean Works" by buying 99.9% pure regulus and iron powder. As the seed of gold of the stibnite no longer exists and that we need to recoup it, the third step will require gold.

The second step of this way requires a knowledge of the secret fire and more still a knowledge of handling it. The principle of the second step is the dissolution of the regulus and the iron, into one and only liquid, so the latter may transmit its sulfurous energies to the antimony.

The practical dissolution of the mixture can only be accomplished with aqua regia, the royal water; however, the reaction is brutal and the matter ceases to be philosophical because of the temperature which, already at that stage and later on, should not go beyond 40 C (104 F). The secret fire, it is written, is a saline fire composed of 2 salts: the sal ammoniac, or ammonium chloride, ClNH_4 and dew salt, or ammonium nitrate, NO_3NH_4 . These two salts, mixed together, and appropriately soaked with water, will slowly react one upon the other and yield: $\text{HCl} + \text{HNO}_3 + \text{NH}_3$, that is to say, there will be a release of ammonia on the one hand, and on the other, nitric acid and hydrochloric acid will form, or a nascent aqua regia. Be careful, in this preparation, the dew salt is explosive.

The dissolution occurs very slowly and without destroying the alchemical elements. It requires several months, possibly more than a year, always at a temperature of 38-39C (100.40 to

102.20 F). When it is complete, a careful distillation of the liquid will yield Philalethes' Philosophical Mercury, the King's Bath, or the liquid which will dissolve the gold or the silver in the form of a cream.

The third step, described in a number of books, is the fermentation of this cream-like product.

The set-up needed is an incubator at a temperature of 36-38 C (96.80 to 100.40 F), and a special furnace providing a temperature from 60 to 400 C (140 to 752 F) roughly. These two pieces of equipment should be able to function during several days, even several weeks without interruption.

The method which avoids the "Herculean tasks" and the dissolution step is described in Mineral Lesson # 46. The work on antimony butter took on a practical turn with the description, in previous lessons, of a fabrication method using stibnite, sea salt and an acid.

Be careful, when you read aphorism 16 of this text, in Philalethes' method the Mercury has already been distilled.

Silver or Gold can be dissolved in the King's Bath or the Sophic Mercury of Count Trevisan.

If we do not possess the gold, we can follow Paracelsus' method of the antimony tincture (Mineral Lesson # 46). Stop at line 25 and dissolve into the King's Bath previously obtained.

Philalethes' text leads us to believe that the seed of gold may be obtained from copper. We shall come back to this subject, and to the use, in this system, of the red oil of antimony obtained through the way of the acetates.

In what precedes, we are using four salts:

- Saltpeter: preparation and purification of the regulus;
- Sal ammoniac] dissolution of the
- Dew salt] martial regulus;
- Sea salt: preparation of the butter of antimony.

"The Hands of the Philosophers" by Isaac Hollandus says that sea salt is the key. Chlorine, the green gas, gives to the nitric acid its power of dissolving gold.

We continue here with the very interesting reading of the Book of Formulas.

Ora et Labora!

THE BOOK OF FORMULAS

TO PURIFY ☉

The ordinary way of purifying all salt is by simple solution, filtration, and crystallization. But note this in the purification of all ☉, that after solution and filtration you must ☉ for a medical month (40 days), beginning at the wane of the Moon, when putrefactive processes are more easily carried forward, then evaporate and crystallize. This ☉ is necessary before the solution can properly be separated from the fæces. Repeat the operation till no more fæces will settle. According to Paracelsus, ☉ it in ☉, filter, and evaporate, till a crust appears at the top, place in a cold place to crystallize, evaporate the ☉ again, and again set to crystallize, which repeat thrice more.

Common ☉ and ☉ are purified by solution in ordinary ☉ followed by filtration and crystallization, without the ☉.

COMMON AQUA FORTIS (*AF. communis*)

(1) Rx Dried Hungarian ☉ (prepared as for ☉ of ☉) lb ii. mix and put into a retort two-thirds full, with a large receiver, place in a little reverberatory ☉. Proceed with the first degree of ☉ till the phlegm disappears; when the red vapors fill the receiver, then increase the ☉ by degrees till the spirit is drawn off. This should take twelve hours or longer. It is known by its yellowness, or greenish color, and its stinking smell. This is a dissolvent for ☉ and ☉.

Note - The HNO₃ of commerce lacks the essential disintegrative potencies of the above, and will be found of doubtful utility for the purposes needed. Out of ☉ and ☉ undephlegmated lb i. you may have ☉ xvi. of AF. For certain other operations, AF. is made of ☉ p.i. ~~☉~~ p.i.

AQUA REGIA (*Regis Communis*)

This passes in the modern dispensatory as nitro-muriatic acid, and as chloro-nitrous acid (NCl₂O₃), this latter being merely a mixture of chlorine and hyponitrous acid. While it dissolves gold, platinum, etc., it does not extract the spiritual tincture. Like many other chemical preparations of commerce, it fails in the purpose for which designed. A common AR. that will dissolve ☉ is thus prepared:

(2) Rx. AF. lb i, common ☉ decipitated ☉ iv. ☉ with a strong ☉ three or four times till all the ☉ comes over with the spirit; in every ☉ iii. of which ~~☉~~ thrice sublimed ☉ i.

Or thus: Rx. Spirit of ☉ ☉ iii ~~☉~~ ☉ i., digest. Or,

(3) *Aqua Regia Tenzelii*, The Golden Dissolvent of Tenzelius.

Rx ☉ lb i., powder of flints lb iii, distil the water from them by a retort; from the *caput mortuum* extract the ☉ with hot water; with the remaining ashes mix ~~☉~~ lb i., distil by a retort in a naked fire, so have you AR.; which distilling in BM. or ashes in a glass alembic, will yet be clearer. Or,

(4) *Rx.* Dissolve \ominus $\frac{3}{4}$ vi. in A.F. lb i. Or, according to Basil Valentine, the alchemist of the XIVth century,

(5) *A.R. Basili*, Basil's Dissolvent of Gold.

Rx. \ominus , \ominus A. lb ii., powder of flints lb iii., distil by a retort red hot with a pipe. Schroder saith, the ordinary way is by an iron pot, on which is placed an earthen cover like an alembic with a beak, set into a naked fire with a large receiver. This not only dissolves \ominus but carries it with it through the receiver.

OF SAL \ominus

The ancient chemists denominated this under various names, viz., *Cerberus*, *Salt of Hermes*, *Anderonæ*, *Anatron*, *Cabalatar*, *Infernal Salt*, Basil called it the *Earthy Serpent*. That of commerce comes principally from Chili and Peru, and is often adulterated by mixture with common \ominus , a fact that can be detected by burning, for being fired upon a red hot tile or stone if it all fly away it is pure, if anything remains it is common \ominus . It is purified by solution, filtration, and crystallization in common water, according to the usual way.

(6) *Spirit of \ominus* .

Rx. Pure \ominus lb i. Potters Earth p.v., mix them, with which fill up to the neck a glass retort, well luted up to its neck, place it in a close reverberatory furnace, with a capacious receiver; give it fire by degrees to the highest for the space of 24 hours; the phlegm comes first with white vapors, then the spirit in red vapors, which will make the receiver as red as a ruby.

Note - See that the receiver be well and close luted to the retort, lest the vapors should exhale, as their malignancy is very hurtful to the brain and nerves, tending to paralysis. The phlegm that is mixed with the spirit will do it no injury, because it will be so small a proportion to the spirit as to make it lose none of its energy or force.

(7) *Bezoardic Spirit of \ominus* .

Rx. Rectified Spirit of \ominus , butter of \ddagger , *ana*, \mathcal{M} in a retort, so have you the Bezoardic Spirit of \ominus . The *caput mortuum* serves to make Bezoár Mineral of \ominus . If the above be strongly forced the spirit will be red, and be able not only to dissolve \ominus , but also to volatilize it.

The Bezoardic spirit of Common \ominus is made similarly to the above.

OF COMMON \ominus

This is purified by solution and crystallization till it be without faces and sweet. Salmon says that \ominus should first be decrepitated, lest being put into any hot vessel it should break it. And Basil calcined common \ominus thrice with lime, mixing with it every time as much fresh quicklime.

(8) *Common Oil or Spirit of _____*.

Rx. Of French or Spanish Bay \ominus as much as you will, dissolve it in water and filter it; mix with this brine (in a copper vessel) fine powder of tiles or brick, double or treble the weight of the \ominus before dissolution, set it in an equable heat and let the water evaporate away (continually stirring it) till it be very dry; then put the powder into a glass retort, well luted to a

large receiver, and give a naked fire by degrees to the height, so shall you have in the receiver Oil or sharp Spirit of ☉; rectify this liquor in sand by separating the phlegm, according to art; then keep it in a vessel close stopped for use.

Note - There are a variety of ways of preparing this oil or spirit, according to the opinions of various men. Some take common ☉ and distil it alone in a retort, whence comes first a sour water, secondly a phlegm, then the ☉ being taken out and sprinkled with water and distilled again, you have thirdly an acid spirit, which you may repeat till all the ☉ is turned into spirit, which rectify in BM. Some to ☉ p. ii. take of clay, brick, sand or earth, p. iii., which they make into balls and then dry, and distil as before in a retort. Others to ☉ p.i. mix clay, sand, earth, etc., p.v. and (without making of it into balls) fill a glass retort with it, luted up to half the neck, then set it in a close reverberatory, fitting to it a large receiver, thence giving fire by degrees, coming as soon as may be to the last degree, which is to be continued 24 hours or until the recipient feels cold, the retort being violently hot. By this rule you may extract out of lb i. of ☉ near $\frac{3}{4}$ x. of oil or spirit. In these processes the ☉ ought not to be decipitated or separated from its phlegm, nor the matter made red hot in the fire; the phlegm coming first helps the acid oil or spirit, and is a vehicle to it, and without which you would attain to no acid spirits. This spirit is made strong and pure by dephlegmating of it in a sand heat.

This Oil or Spirit of ☉ is an antidote against the plague, and resists all manner of corruption, both inwardly taken and outwardly applied; it is a specific against malign fevers, whether continual or intermitting; mixed with a little water it whitens and preserves the teeth wonderfully; it is a powerful diuretic, and the most formidable enemy to the scurvy; it opens all obstructions of the stomach, liver, spleen, bowels, reins, and bladder, thereby dissolving the stone and gravel, and expelling of it; is good in jaundice, gouts, etc.; it quenches thirst wonderfully, and consumes by corrosion without pain all corruptions in ulcer or other old sores, fistulas, etc. It is transparent, and almost of a citrine color, and is of an acid taste. Dose *à gut.* vi. *ad xv.* or xx.

(9) *R.* Volatile ☉ of ☐ (lb. i.), common ☉, ☉~~x~~, and ☉~~z~~, *ana*, mix and put to them spirit of ☉, digest in a luted vessel for an hour, then in ashes distil to dryness; to these salts thus dried lb. x. add tripoli lb. xxx., and draw a spirit by a retort with a strong fire. This is used as a menstruum in the making of the ☉ and ☉ that enters into the formula for *Tinctura Antimonii cum Auro*.

Note - There are many other preparations of ☉, of rare value as medicines, and by which gold is not only dissolved, but volatilized and made potable. The hydrochloric acid (HCl) of commerce is of no utility in these processes.

OF ☉

(10a) Spirit and Oil of ☉

R. Powder of white ☉, distil it with a glass retort in sand (or a naked fire); first you have a phlegm, then a spirit like a cloud, and lastly a thick oil, which separate from the spirit. The spirit you may rectify by three cohobations upon colcothar, or by distilling it four times in BM., always washing the still in a strong lixivium. The oil is rectified by adding to it a good quantity of water or distilled vinegar, and distilling in BM. Separate the oil, and mix with it again good rose-water; distil, separate, and keep the oil for use.

Note: The spirit is sudorific, diuretic, antiscorbutic, and anodyne. It cuts, attenuates, dissolves, and opens all obstructions, and is wonderful in dropsies, gout, scurvy, palsy, scabs, itch, leprosy, or French-pox. Dose à gut. xx., ad ̄ ii.

(10b) *Philosophic Spirit of ̄*

℞. ̄ of ̄, which reverberate 24 hours upon a refiner's test (but melt it not), and the ̄ will be blue; add distilled ̄ three inches above it, ̄ till the ̄ is very red, then filter and coagulate; do this four times with fresh distilled ̄. Mix these four salts with rectified SV. and extract a tincture till it ceases to be colored; ̄ the ̄ remaining in distilled ̄, extract its tincture with SV., gather all these and ̄ them in BM. in a still with an alembic and a funnel; pour in again the SV. distilled at the funnel to the tinctured ̄, and cohobate 15 or 16 times, till you see red drops fall; then cease and ̄ the liquor gently by a retort in sand. So have you the Spirit of ̄ of ̄, cloudy with red drops and a red powder at bottom.

This spirit cures quartans, and powerfully provokes the Terms being stopped, at the third or fourth time it is taken. Dose, à gut. iv. or vi. in wine. This spirit will dissolve ̄.

(11) *Oleum ̄ri per deliquium.*

℞. Let ̄ of ̄ melt in a cellar or dissolve it in water, filter, and coagulate to the just consistency. Or, ̄ of ̄, or best of ̄ calcined white; put it in a cotton bag, and hang it in a cellar or in some moist place to dissolve.

Note - A little of ̄ mixed with any menstruum facilitates putrefaction, and makes it extract the virtues of any vegetable the easier.

OF ̄

Attention is here called to foregoing remarks upon ̄, as also what is said concerning its purification. ̄ is either native or factitious, the former being taken out of the earth either in its own form or in water. The factitious is made out of ̄ or ̄ severally or conjunctly. Of these kinds it will be good to choose that which has more ̄ than ̄ in it, the Hungarian being the best, which rubbed upon bright iron makes it look red.

(12) *Oil of ̄.*

℞. As much of native Hungarian or English ̄ as you please; melt it in an unglazed earthen pan, and exhale away all the humidity, continually stirring it till it is brought into a yellow powder, which place in a retort that will endure a strong fire, filling it about two-thirds full. Place on an open fire, which give by degrees for three days, or until the receiver (having been full of fumes) becomes clear, and the spirit or oil comes; rectify the distilled liquor, separating the phlegm by a small retort in sand. Note, in distilling, the phlegm comes first by a very small fire, then increase by degrees to the highest, which continue till you perceive black veins to trickle down the recipient; which then remove, decant the phlegm, and fit the receiver again without luting, to take the oil. The phlegm being separated in distilling, what comes after it is spirit and oil; separate in a glass cucurbit luted to a receiver, drawing off about one-half part, which is the volatile and sulphurous spirit of ̄, which keep in a vial close stopped; what remains at the bottom is the caustic oil of ̄, or the true spirit dephlegmated.

This spirit or oil put upon ̄ transmutes it in a little time into ̄.

(13) *Spirit of ☉ of Tenzelius*

Rx. Hungarian ☉ calcined white (in the sun, with a burning glass¹, called philosophic calcination) lb. i., ☿ calcined black, a half lb.; add to them (being in powder) SV. Distil in an alembic with a strong fire, cohobate it, and separate the SV. from the spirit of ☉, by rectifying it in sand.

OF ☐

Of this is prepared some very rare dissolvents of singular force. I include here only those needed in our praxis.

(14) *Spirit of ☐.*

Rx. Fresh or new-made boy's ☐ that drinks wine, distil by an alembic in BM., cohobate it, and you have phlegm and spirit; separate this according to art (which is done by a small retort in sand), and elevate the spirit in a glass body, so shall it be very volatile and white, but exceeding stinking. This is a notable lithontriptic, and will dissolve the stone if injected into the bladder with a proper syringe.

(15) *Oil of ☐.*

Rx. Of that gritty and tartareous matter which adheres to the bottom and sides of the urinal, calcine, dissolve, coagulate, and then dissolve again *per deliquium*. This, if given ☽ i. in a convenient vehicle, perfectly dissolves the stone.

(16) *Volatile ☉ of ☐.*

Rx. The ☐ of a boy or young man, SV., *ana*, mix and evaporate to the consistency of new honey; put it into a long-necked glass, and distil it with so small a heat in ashes or sand that it may condense in the alembic, and there will come forth into the alembic a white spirit like snow, which in the cold will coagulate. If this spirit be joined with the salt of the *fæces*, and volatilized by often cohobations, it will be a notable menstruum to draw the vitriol of metals, chiefly of ☽; if yet it be digested with common ☉, and purified by often solutions and coagulations for about ten days and nights in BV., it will resolve; and by the addition of rectified SV. and ten days' digestion, it will be a good menstruum to dissolve ☉.

OF ✠

That of wine is best, and yet better if vitriolated. The modern chemist is of the opinion that alcohol cannot be acetified, if any essential oil or pyroligneous acid is present. ✠ of metheglin is best for the dissolution of metals, for it has both an animal and a vegetable spirit, and so has the great power of dissolution, and is therefore called Philosophic ✠.

(17) *Distilled ✠.*

Rx. Put it into a glass still in BM. or ashes with a gentle heat, draw off the phlegm without taste, which will be near a quarter part; change the receiver, and force over the spirit. If it be for physical uses, you must take heed of burning it lest your extracts smell of it. If for metals,

¹a magnifying glass

draw off the phlegm in a gentle heat in BM. then in sand distil violently till a red spirit ascends, and all be come over.

(18) *Spirit of ☩ of Clossæus*

℞. Six quarts, and distil in a luke-warm BM. till but a quart remains; then in ashes draw off the remainder to dryness, cohobating two or three times upon the fæces. If you would have it yet stronger, make balls of the crystals and bole, and drive it through a retort, so have you spirit, which rectified will be fiery and corrosive.

(19) *Radicated or Alcalized ☩ of Sennertus*

℞. Fæces of distilled ☩, calcine them dry, then add distilled ☩, and draw it off again in sand, cohobating so often till all its common or fixed ☰ ascend with the ☩.

OF SV.

As has been intimated, the SV. of commerce is generally lacking in potency by reason of its aquosity, and it is best here, as in all the foregoing preparations, to have resort to one's own laboratory. One of the best ways to test its strength and purity is to dip it in a cotton wick like that of a candle, and setting it on fire; if the flame fasten on the wick it is a sign of the goodness of the spirit; but if it does not it is weak and not sufficiently dephlegmated. That known as Canary is best for these purposes.

(20) *Common SV.*

℞. Distil by a vesica till the finest parts are ascended (which is known by the taste); let it be several times rectified in BM. drawing off the half, third, or fourth part, till the spirit is high, and no humidity will remain that will flame. Where note, that the orifice of the still being covered with a four-fold thin paper or thick cloth, the spiritual parts only will penetrate, and the watery fall back again; and if you have a still with a long neck or serpentine glass (worm), you will rectify it the better.

(21) *Tartarized SV.*

℞. Of SV. lb. ii., ☰ in powder $\frac{3}{4}$ i. Distil in a bath full of sawdust or straw moistened with water, so that the drops may fall leisurely, which cease when the phlegm begins to come; but if the phlegm ascend with it, rectify it. Before rectification you may repeat the former work, with the addition of an ounce more of ☰. Sennertus says, if you rectify the spirit upon the same ☰, with several cohobations, making a strong fire at the conclusion (casting away the phlegm that comes in the middle), you shall have SV. tartarized.

Boyle, the experimental philosopher and Hermetic chemist of the XVIIth century, gives the following process, which is to be recommended, as it dispenses with frequent rectification: "Put about an inch thick of ☰ calcined to whiteness (for I find it not necessary to reduce it to a salt) and very dry into the bottom of a tall and slender glass body, and pour on it as much SV., but once rectified, as will, when they have been shaken together, swim above the ☰ a finger's breadth, and then the head and receiver being carefully fastened on again, in a gentle heat draw off the SV., shifting if you please the receiver when about half is come over, and if need be rectifying once more all that you distil upon dry calx of ☰ as before ... and therefore this alcohol of SV. we peculiarly call the Alcalizate SV., and the rather because SV. *Tartarizatus*, which perhaps may be thought the properest name for it, is employed by eminent chymical writers to signify a different

thing." (G.B.'s Note: For certain authors of the XVIIth century, "Tartarized Spirit of Wine" meant alkahest of tartar)

(22) *Spiritus* Ox .

\mathcal{R} . Ox p.i., ashes p. iv., ___ by an alembic in sand, so have you a spirit, which rectify in a long still. Or thus: quench red hot brickbats in the solution of Ox in fair ∇ , till such time as all the ∇ is drunk up, then \mathcal{M} in a retort. Or thus: which makes a wonderfully piercing spirit due to the vol. \ominus of \square : Impregnate ∇ with Ox , as much as it will hold, in which imbibe leaves of brown paper made into balls; put them in a still, and with sand or a reverbatory draw an acid spirit of a golden color, which rectify till it is white or clear. Or thus: Mix the \ominus with clay and make it into balls, then \mathcal{M} in a retort as with common \ominus ; add by the third time some O , some \mathcal{F} and \mathcal{A} in equal parts; finally, wash it with luke-warm water until soft.

This powder is considered a universal medicine against all diseases; it opens all obstructions, provokes the Terms, cures nausea, colics, small-pox, intermittent or any other kinds of fevers, gout, dropsy, etc... Dose: \mathcal{Z} 1/2 *adi*.

Dear Friend,

Having reached the step we are at, four issues may hinder us or stop us on the alchemical path:

- 1 - Impatience, "patience" being the key word to success;
- 2 - Misunderstanding of the philosophical side of things;
- 3 - Misinterpretation of the theory;
- 4 - Minor practical difficulties.

Let us look at the second issue: "Misunderstanding of the philosophical side of things". For example, let's take the word "putrefaction". In our modern language, this word is a synonym of rotting, or at least it does evoke such a state. It is one of the meanings encountered in alchemy but it is not the only one. Thus, in the plant kingdom, it may mean alcoholic fermentation or acetic fermentation or any other fermentation. The fact that in the old days nothing was known about yeast gave this issue a general scope. The methods used were mostly empirical ones, or ones obtained through inner revelation. On the other hand, in the metallic kingdom, the word putrefaction takes on an entirely different meaning. Here putrefaction cannot have anything to do with rotting and in this domain, only the philosophical meaning of the term is valid. It means, in this case, a change in kingdom for the vital energies of matter, or a loss of these energies. In vegetable putrefaction there is a release of the vegetable energies which can then be recuperated if an appropriate support, or "magnet" is available. On the other hand, when the Sir of Violette says: "put the lead sugar 40 days in fermentation", he means that, in lead acetate, the vital energies of the wine vinegar are to be transferred into the lead during that time; if a gentle heat is continuously provided and the acetate is not in a solid state. A dissolution with absolute alcohol is necessary to obtain honey; as the energies transfer can only occur if there no longer is any free acetic acid which fixes them. The alcoholic dissolution, on the contrary, facilitates the transfer.

Another example, the words "fixed" and "volatile". In alchemy, these words taken in their philosophical meanings, are not linked to the boiling temperature of bodies. The vital energies that cannot be released and that are imprisoned in the body are fixed. And the vital energies which are free and can be transferred or released from the body, either in a solid or liquid form, are volatile.

In the experiments, each alchemist must know the theory of the process he is using, particularly for the following reason. In an experiment of chemistry, such as it is practised today, the results are always more or less the same. First, because the operator has little or no psychic influence upon the experiment; secondly, because the bodies used are dead, non philosophical. Consequently, the vital energies present at the time of the experiment won't react with dead bodies. The result of the experiment will be independent from any subtle intervention, whether of a psychic, astrological or of any other nature. Conversely, in an alchemical experiment, this subtle interventions, will cause different results when the material conditions remain identical. Only a deep knowledge of the alchemical theory will enable us to understand the phenomena and how to organize them in order to obtain the desired result.

The first principle is that in alchemy nature cannot be contradicted. All the operations must obey the life in the three kingdoms, and even more so if the life has changed material support or if it has been transferred into another kingdom. This energy of life can only be used in the evolutionary sense as willed by nature.

The evolution of bodies may be obtained from two essential methods and provided that the purification has been made. One of the two methods is evolutionary through the change in kingdoms undergone by life: transfer of vegetable life into metal (way of the acetates); and transfer of animal life into metal (way of the antimony butter). The other method is the one which uses the germinative powers of the three kingdoms, hence the name: Agriculture given to this way by several alchemical schools.

Behavior of the elements during purification:

Among the four elements, two are active, Fire and Water, and only they possess a purification power, but generally, they cannot do it without the intervention of Salt. Fire and Air are the vital energies. Water and Earth are the energies of matter.

In the Salt-tincture circulation, the Salt fixes the pure energies in the form of Sulfur $\triangle + \triangle$. This fixed Sulfur is Fire resistant so that the fire of calcination will move away the inharmonious energies but leaves there the Salt enriched with its own Sulfur.

Conversely, the water included in the Salt $\nabla + \nabla$, if it is in harmony, will remain in the Salt. It won't be evicted by the water of the Solve-Coagula; but through this last operation the inharmonious waters and earths will be evicted from the Salt.

In our next lesson, we will examine the fourth issue, "minor practical difficulties", particularly with regards to the ways of antimony. We hope that this will save you some time, equipment, and products.

Very important note to all those who make metallic tinctures:

Whatever the extraction liquid of the tincture, it is never certain that the toxic part of the metal has been totally eliminated, particularly in lead and mercury. Never ingest these tinctures nor the oil of antimony, even a drop of them. When the tincture has been obtained, it is appropriate to cohobate it with absolute alcohol, in order to transfer the vital energies of the tincture into the alcohol, which generally occurs after 10 to 20 cohobations. We must judge the amount of drops of the tincture in cohobation and measure the quantity of alcohol used; example, tincture: 10 drops, alcohol: 50 cm³; the test dose is 5 cm³ of alcohol diluted in a glass of water.

We are giving next a following of the Book of Formulas.

Ora et Labora!

THE BOOK OF FORMULAS

SEVEN UNIVERSAL MEDICINES OF THE ANCIENTS

While there were many medicinal preparations of the Spagyric chemists and philosophers which they termed powerful and universal, there were seven particular ones, enumerated as follows: *Aurum potabile*, *Tinctura Auri*, *Precipitatus Aureus*, *Aurum Vita*, *Hercules Bovii*, *Manna Mercurii*, and *Bezoarticum Solare*. These were accounted notable remedies in the treatment of most if not all diseases, and are here given in full and demonstrable manner. Different methods of procedure were generally observed by different authors, some of which were very complex and obscure, but the analogies and purport of the various processes were obvious, and the results to be identical in all cases.

(1) AURUM POTABILE

Rx. Dissolve leaf \odot $\frac{3}{4}$ ss. in AR. (4), precipitate it by the affusion of *oleum F^ri per deliquium* (11), so will it look white like lime; then wash off the salts with common ∇ , and dry the Ψ gently by itself or in the sun, for if dried in an oven heat it is liable to explosion. In this form it is *Aurum Fulminans*.

Take of this Ψ (reverberated to the highest brownness and porosity, or often ∇ with AR.), \mathcal{N} in spirit of \square (14) with a gentle heat, in a close luted vessel, for a month, or until there is a red tincture like blood; decant and add fresh spirit, and repeat this work till there is no more tinged. Put the solutions together and \mathcal{N} for 20 days or a month; then with a gentle heat in BM. separate the spirit or menstruum (to be kept for the same use), and at the bottom there will be left a red tincture like oil, which will dissolve in any liquor, and is *Aurum Potabile*.

Dose, in sack or SV. \mathcal{D} i. at a time for several days, or may give 4 to 8 drops in any other vehicle. Paracelsus says \mathcal{D} i. This is a strong sudorific.

Rx. Another way: Ψ of fine \odot made by AR. (2 or 4) and perfect reverberation, add volatile \ominus of \square (16), which \mathcal{N} 40 days in a gentle and equable heat in a vessel close luted, and the menstruum will become blood-red; decant and reiterate with fresh menstruum, and again repeat, put the solutions together and \mathcal{N} for a philosophical month, and proceed as in the above.

Aurum Potabile Clossæi, Potable Gold of Clossæus.

Rx. \odot $\frac{3}{4}$ i. Ψ $\frac{3}{4}$ vi. make an amalgama, which beat with as much common \ominus melted; evaporate the Ψ with a gentle Δ ; wash away the \ominus with warm ∇ ; beat the remaining Ψ with common $\$$ $\frac{3}{4}$ iii. which cement 3 or 4 hours in crucible with a hole at the top, till all the Ψ is vanished. Repeat this seven times with fresh ∇ , till the \odot be like a red sponge, which \mathcal{N} with eight times as much \ominus , till it be the color of a sandarach, which sweeten by washing; then take SV. xiii. p., spirit of \ominus of Ψ (10 b) i.p., mix them, and \mathcal{M} together; into which put either the aforesaid spongy Ψ , or Ψ sublimed, and \mathcal{N} till it is dissolved. If you abstract the SV. you will have a yellow powder. The virtues of this are almost innumerable.

Aurum Potabile Quercetani, Potable Gold of Quercetan

Rx. A light spongy Ψ of \odot , from which with spirit of \blackcross (18) draw a tincture by \mathcal{A} in BM. which exalt by circulation with SV. This is also called *Aurum Vitæ*, and is, as Quercetan says, of incredible virtues for almost innumerable diseases.

Aurum Potabile Grulingii, Potable Gold of Grulingius.

Rx. Ψ of \odot made by reverberation to the highest tenuity, upon which put a menstruum made of equal parts of volatile \ominus of \square (16) and rectified SV. (20) digested 12 days in BM. with an equal and gentle heat; being mixed in a glass vessel, seal up the Ψ and menstruum hermetically, and \mathcal{A} them 40 days, till the tincture rise red as blood, which work often repeat. Put these general tinctures together and \mathcal{A} eighteen days, then by \mathcal{M} with a gentle heat separate the spirit, and the \odot will remain in the bottom in the form of a moist red oil. This solution \mathcal{M} by a glass retort in sand so often till the tincture of \odot come over of a most blood-red color, and there remain in the bottom nothing but a dry, spongy, black earth.

There are many other preparations of Aurum Potabile, but these will suffice here. This formula of Grulingius is of especial virtue, is used as a universal remedy, fore it restores and preserves the radical humidity both in quantity and quality entire, and frees the powers of the whole body from the malignity of diseases, keeping it safe from corruption during the term of the natural life. it is excellent in apoplexies, epidemical diseases, pestilent fevers, palpitation of the heart; it provokes the terms, causes speedy delivery in child-birth, yet prevents miscarriage; takes away the malignity of cancers, causing their speedy healing; restores in consumptions. These medicines are strongly sudorific, causing a sweat that carries away with it the seeds and roots of malignant and poisonous affections. it is in vain to enumerate in particular all they are capable of doing, so universal are their curative faculties.

(2) TINCTURA AURI

Tinctura Auri Basiliana, Basil Valentine's Tincture of \odot .

Rx. Of the Ψ of the most fine \odot , made by dissolution in Basil's AR. (5), which volatilize with spirit of \ominus (8) acuated with spirit of \ominus (22); precipitate with oil of \mathcal{F} (10a), or by a gentle abstraction reverberate with flowers of \mathcal{F} , then with rectified SV. and spirit of \ominus extract the \mathcal{F} of \odot , which \mathcal{A} , and abstract gently the spirits; then \mathcal{A} it again in the aforesaid AR. and volatilize with SV.

This is a golden Liquor of great force, having all the virtues of Aurum Potabile. Another formula, given by Quercetan, and which he says is of almost incredible virtues for innumerable diseases, is thus:

Rx. Spongy light Ψ of \odot , draw a tincture by \mathcal{A} in BM. with spirit of \blackcross (18), which exalt by circulation with SV. Another formula, given by Salmon:

Rx. Aurum Fulminans (see first formula for Aurum Potabile), well sweetened, p.i., volatile spirit of \mathcal{D} , p.iv.; \mathcal{A} in a warm bath for 40 days or more; put it to SV. (Canary) with white \mathcal{F} , and in a gentle heat extract to the color of a ruby, which \mathcal{M} and bring to a consistency like powder; wash of the SV. with \mathcal{M} ∇ , and you may \mathcal{A} it in any convenient vehiculum.

Note, if you have not the aforesaid spirit of O you may use this: Rc O lb. i. O $\frac{\text{z}}{\text{v}}$ vi. M a spirit, which mix with equal parts of SV. and draw off the mixtion from a great alembic.

(3) PRECIPITATUS AUREUS

Rc . Leaf O , or filings of fine O $\frac{\text{z}}{\text{v}}$ ss., O it in AR. without Ox ; take glass of $\frac{\text{z}}{\text{v}}$ ss., O it in AF. (1); $\frac{\text{z}}{\text{v}}$ cleansed $\frac{\text{z}}{\text{v}}$ iii., O it also in AF.; mix all the solutions and draw a ∇ by an alembic; then add fresh AR., draw off the same often, till the precipitate fumes not when laid on a red hot iron; R all, that the AR. may be spent; then M from it SV. six times and P the matter gently.

it purifies the whole mass of blood and the whole body; it cures jaundice, scurvy, dropsy, gout; it provokes urine, dries up all moist humors, and opens all obstructions; it cures the epilepsy, colic, quartan, and all cancerous and malign ulcers. Dose, à gr. iv. ad v. This is called the Golden precipitate.

(4) AURUM VITAE

Aurum Vitæ Sennerti, Aurum Vitæ of Sennertus

Rc . $\frac{\text{z}}{\text{v}}$ purified $\frac{\text{z}}{\text{v}}$ v., fine plates of O $\frac{\text{z}}{\text{v}}$ ss., make an amalgama, and wash it with K till all the blackness be gone; then put it into a retort, and add AF. (1) one pint, O in ashes or sand, that the $\frac{\text{z}}{\text{v}}$ and O may be at bottom in a powder; then M and increase the Δ at the end, that the bottom of the retort may be red hot, and all the corrosive spirits come forth; the vessel being cooled powder the matter and pour on the abstracted AF. again, and cohobate, and there will be a red powder at the bottom; which keep, casting away what was sublimed at the sides of the retort; then heat an iron red hot and sprinkle on it the $\frac{\text{z}}{\text{v}}$ al powder, not only to dry it but to evaporate what is volatile, then keep it in a closed glass vessel.

Sennertus says: This is one of the most noble medicines yet this day known in the world, and will do as much as any whatsoever. it will easily, safely, and speedily cure any old, malign, and deplorable disease. it is a wonderful Arcanum in the dropsy, pox, and gout, as also in the jaundice, all manner of defluxions, scurvy, leprosy, scabs, itch, plague, poison, all fevers, and all obstructions in any part of the body. it begins, continues, and perfects the cure alone. It is a great diaphoretic, and may be given à gr. iii. to vi.; if to purge, in purging pills; but if to sweat, in some cordial essence, elixir, or electuary.

Aurum Vitæ Hartmanni, Hartmann's Living Gold, or Gold of Life

Rc . Fillings of O $\frac{\text{z}}{\text{v}}$ i. O it in AR. $\frac{\text{z}}{\text{v}}$ iv., keep the solution hot; take $\frac{\text{z}}{\text{v}}$ $\frac{\text{z}}{\text{v}}$ xii., O it in a pint and a half of AF. communis, mix them till they are black, M in an alembic in sand with a gradual fire till the still and that at the bottom is red hot; then R it with a red hot iron, till the spirits of the AF. are gone, wash it with ∇ , and M SV. often from it by cohobation, so have you Aurum Vitæ. Note: The AR. for this work is thus made: Rc . AF. of O , O , O , A. $\frac{\text{z}}{\text{v}}$ iv. Ox $\frac{\text{z}}{\text{v}}$ i., M them in sand and in an alembic.

It has the virtues of the above; dose, the same.

Dear Friend,

Let's go back once more to the deliquescence of the antimony butter.

Experiments confirm that the clear sky condition indicated by Basil Valentine had to be imperiously met. If it rains at night, if there is any mist or fog, the air's humidity is then too great, and as a result, a great part of the butter is transformed into Mercurius Vitæ, which can be used for another way. However, the transformation of the Mercurius Vitæ into butter is not easy - or at least it is bothersome - through the method of dissolution in HCL and distillation.

Set-up

We now use the same equipment for the distillation of the butter and that of the "spirit" (here "spirit" is the liquid resulting from the deliquescence of the butter). After several attempts and experiments, the following solution seems the best (a solution provided by the research group meetings).

- The flask used is small, 250 cm³, and with ground glass;
- Add on top of it an elbowed extension making an angle of 105 degrees (ref. Prolabo catalog 09476297) with an exit for a thermometer;
- The flask heater is slanted in such a way that the thermometer and the two condensers that have been set up on the extension are vertical. The thermometer is a 350 C (662 F) type;
- The first condenser is not cooled by any water circulation and instead of a condenser you can use a simple tube with 2 ground glass endings, one male, one female 29/32. But if you use a condenser, it will be like the other one, a straight type;
- Below the second condenser, which this time is cooled by water circulation, install either a two entry-flask or a tube with a so-called vacuum outlet with a lateral outlet. This outlet, or the second opening in the flask, will be linked to a bubbling tube containing water saturated with potassium carbonate.

The "spirit" distillation occurs in several phases. In the first, the liquid condensed in the flask is milky, and contains a white precipitate, which must be dissolved in the second phase of the distillation. It is then necessary, if this has not been done in the beginning, to cover the upper flask and the extension up to its vertical part, by a fiberglass mantle enclosed in a thin aluminum foil. As soon as the temperature increases beyond 130 C (266 F), the butter comes over and condenses in the condenser which is not cooled, generally on a rather lengthy surface, which prevents the tube from getting obstructed.

If the distillate has not resumed a clear transparent color or if it has an odor of hydrochloric acid, the distillation must be performed again in a clean flask, but after the butter has been recouped from the condenser(s). Push it with a plastic knitting needle into a clean flask directly set up at the bottom of the second condenser. This butter is generally very beautiful and must be again set to deliquescence. The "spirit" must be kept at a low temperature as long as you do not have a sufficient quantity of it to attempt "fermentation".

In the making of the butter, in its distillation, or the distillation of the "spirit", it is practically impossible to recoup all of the butter. When the distillation set-up for the butter or the spirit is used, distil 50 cm³ of absolute alcohol which will dissolve all the residual butter. If the set-up for the making of the butter is used, use the same method. But if nitric acid has been used for the making of the butter, make sure that there is none left in the set-up or at least barely, the mixture alcohol-nitric acid being an explosive one.

Be cautious, distil this alcohol very slowly if you want to recoup the butter.

Important reminder: use gloves and goggles to work with the butter. In addition, in case of incidents, on your arms for instance, pat the area in contact with butter with a piece of cotton cloth soaked with ammonia.

In the next lesson, we will give the description of the furnace that will enable us to perform the sequence of the four temperatures of Mineral Lesson # 46 and we will specify the incidents which have occurred during our experimentation. We will also give a description of the incubator of 30-40 C (86-104 F) which has been giving us satisfaction, on a continuous basis.

Hereafter, we give the following of the Books Of Formulas.

Ora et Labora!

THE BOOK OF FORMULAS

(5) HERCULES BOVII

Hercules Bovii, Hercules of Bovius

Rx. Fillings of fine \odot $\frac{3}{4}$ i. Ψ cleansed $\frac{3}{4}$ iv. \ominus both asunder in AR., \mathbb{M} both together with a gradual fire, and after in the end with a greater, in a retort; then with fresh AR. \ominus the precipitate at the bottom and the sublimate in the neck of the retort, and \mathbb{M} so long till all become a precipitate; then Ψ it on a red hot iron to fix the corrosive spirits, and sweeten it by ablution in SV.

Bovius saith, It is the best of all purges; it kills all worms, cures the French disease, smallpox, plague, leprosy, quartans, and many other diseases otherwise incurable. Dose, *à gr.* iii. *ad* iv. with sugar of violets, broth, or in purging pills.

(6) MANNA MERCURII

Manna Mercurii, or Golden Panchymaggon

Rx. Of Ψ *dulcis*, q. v., elevate it by often $\frac{3}{4}$, till it turns to fixed crystals, which \ominus into a liquor; of which take $\frac{3}{4}$ vi. and of \odot Ψ ed $\frac{3}{4}$ ii. mix and Ω for 40 days; cohobate till it melt in the still like wax. *Mercury dulcis* is the sweet sublimed Mercury, or Tamed Dragon, of Quercetan.

It is a great specific and secret against the French-pox, and all manner of venereal evils. By this Ψ is brought to the highest degree for physic, and is made of wonderful virtue for curing vertigos, megrims, and other diseases of the brain. It is in no ways inferior but contains all the virtues of *Aurum Vitæ*. it is a good sudorific, and cures chiefly by sweating. Dose, *à gr.* iii. *ad* viii.

(7) BEZOARTICUM SOLARE

Bezoarticum Solare, or Solar Bezoar

Rx. Tincture of \odot (extracted from the oil-like solution of \odot , and sweetened by abstracting often from it strong Ψ) $\frac{3}{4}$ ii. butter of \odot ed in spirit of \ominus (8) $\frac{3}{4}$ xiv., mix them, unite by cohobation, then Ψ , where note that the tincture of \odot is extracted with the menstruum of Basil (5), Ω ing them in a month. Thus Tentzelius.

Or thus: *Rx.* Butter of \odot lb. ss. \ominus it by pouring on it gradatim spirit of \ominus (8); then take fine leaf \odot $\frac{3}{4}$ ss. \ominus it in AR. (2), mix both, and abstract the menstruum by degrees, and pour it on again; add fresh spirit of \ominus , abstract, reiterate it often, wash, dry, and fire the Ψ with rectified SV. Thus Crolius.

Or thus: *Rx.* Spiritual \odot (spiritualized by the bezoardic spirit of \ominus , 7) $\frac{3}{4}$ ss., \ominus it in AR. (2); \ominus in the same butter of \odot rectified $\frac{3}{4}$ iv. or vi., mix both, abstract the menstruums by a retort by often distillations; then with a gentle Ψ bring it to a violet-colored powder, or with a strong Ψ to a purple, which is better than the former. Thus Schroder.

Or thus: ℞. Spiritual ☉ (*ut supra*), add to it butter of ☽ dissolved in spirit of ☉ or in AR.; unite and fix them by often distillations; then abstract, and by ♃ you will have a Bezoardic ☉ of purple color and great force. Thus Hartmann.

This is a wonderful medicine, and is the seventh Medicament in name, number, and nature of those which may be called powerful and uni it is a great sudorific, and may be given from gr. ii. to gr. x.

G.B.'s Note about the chapter dedicated to the Seven Universal Medicines of the Ancients.

Upon reading this chapter, we can immediately note the importance of obtaining a good quality AURUM FULMINANS. This lime of gold thus obtained is extremely unstable and the explosions it may produce, when subjected to the smallest heat or friction, are of a particular characteristic, when compared to the black powder. It is said that the students of the last century used their lab time in chemical classes to prepare some AURUM FULMINANS and use it as flies trap. The contact of the flies' feet with the very dry powder was enough to cause an explosion.

Some ancient authors do indicate a way of removing the "fulminans" characteristic from the lime. It is to circulate the AURUM FULMINANS with a good distilled vinegar for a natural day.

It is probably a trap for the more timid ones. Indeed, if you treat lime in this way, it becomes definitely fixed and you must relinquish your hopes of seeing gold volatilized and "come over through the alembic" according to the appropriate wording, whatever the menstruum used.

There is however another way to obtain the lime of gold which has been indicated by Johannes Agricola in his "Chemische Medizin" of 1638 (not to be mistaken with Georg Agricola, author of "DE RE METALLICA" published in Basel about a century earlier).

The best is to quote Johannes Agricola whose basic method is based on the properties of the Volatile Salt abundantly found in harts' horns. Here is what he says:

"Take of the best purified gold the amount that pleases you and have a jeweller transform it in thin layers; the finer the layers, the better. Cut them to the dimensions of a thaler. Then slice a hart's horn of the length and thickness of a thaler. Take a cementing crucible of the same dimension as the hart's horn, just big enough for the slices to get into it. You can have them made from a good clay, at your convenience. Place at the bottom of the crucible very clean sand or better still some talcum, about the thickness of one finger, place on top of it a small piece of hart's horn, then a layer of your gold, then again a slice of hartshorn, then gold, and so forth STRATUM SUPER STRATUM (SSS) until the crucible is filled or your gold has run out. Cover the whole with talcum; make sure to lute the crucible well and wait for the luting to be well dried. Then set the crucible over a "feu de roue" that you light progressively at first and finally completely so that the crucible remains incandescent for one to four hours. Let it cool down, then open the crucible and you will find the gold calcined, having taken on a flesh-pink color. Repeat this work three times in sequence and the gold will have become completely friable and you can crush and triturate it. You must then triturate your gold with calcined hartshorns, reverberate it but not too strongly in a cupella for an entire day; the gold will become close to brick-red; then it will be well calcined and be sure that you won't achieve a better calcination; the

gold will have become very subtle and it will be ready, without further preparation, for the cure of a great number of illnesses, because this lime is quite sweet and is not soiled with any corrosive.

The translator would like to note here that grated harts' horns can be easily found (which is the same for this use) at the company VALLE in Maine-et-Loire (France) for a very cheap price, around 5 \$ a kilo in 1984. The translator is ready to provide the address of this company or to offer free of charge some from his own personal reserve to anyone who requests it, and who justifies that they are to use it for laboratory experiments - GB).

CHOICE SPAGYRIC PREPARATIONS

Abstracted from the Teachings of the Ancients, and Transcribed into Clear Formulas of Practice

THE VULNERARY OF ☉.

Rx. Pure rectified oil of ☉ (12) ℥ i. SV. rectified, lb. ii. Mix and ℥.

This is the greatest secret in ☉. It cures most diseases of the head, as the megrim, epilepsy, apoplexy, vertigo, etc., and is a wonderful thing in all manner of sores, ulcers, cancers, and the like, and cures green wounds at one dressing. Inwardly it cures coughs, colds, asthmas, ulcers of the lungs, consumptions, pleurisies, stone and gravel in the reins and bladder, and all sorts of fevers, whether continual or intermittent. It opens all obstructions of the stomach, bowels, and kidneys, purifies and sweetens the mass of blood, cures the scurvy, French-pox, and other ill-habits of the body. Dose, à ℥ ii. ad ℥ iv., any proper vehicle.

THE STAR OF ☿ (Stella Mercurii)

Rx. ☿ seven times ~~and~~ and as often rectified with quicklime, with a gentle heat ☉ it in spirit of ☉ (8), abstract the spirit, sweeten and boil the ☿ in distilled ☿ (17), and wash it with ~~the~~ rain ☿, dry it, and ☿ it in SV., which with a gentle heat drive through a retort, increasing the ☿ (what remains keep to make a ☉ of), abstract the SV. in BM. and you shall have at the bottom a fragrant sweet oil, which according to Basil is the Star of ☿. The ☉ of ☿ is made thus:

Rx. Of the body that remains after the preparation of the Stella ☿ put upon same its fragrant oil, ☿ and extract the ☉ of ☿; to the decanted extraction put SV., ☿, and abstract in ashes; and after it you shall have an oil of ☿, and the ☉ at the bottom, which possesses all the virtues of the oil.

It is a diaphoretic, and is a proper specific in venereal troubles, in which it is a great secret, though it be ever so old; its cleanseth the blood and cures all scabs, tetter, and ulcers, although old and malign. Dose, of the oil, gr. iv.; of the ☉, à gr. i. ad. iii.

THE ALBION POWDER (Pulvis Anglicanus)

Rx. Of the best ☿ q.v., ☿ it alone; then take of the aforesaid ☿ and ☉ ana lb i. white ☿ lb. ss.; mix and ☿ till the detonation is over; repeat this last work again, and the third time, adding ☉, ☿, and ☿, ana; lastly, wash it with hot water till it is sweet.

It is accounted a universal medicine against all diseases; it opens all manner of obstructions, provokes the terms, cures surfeits, colic, small-pox, all sorts of agues and fever whatsoever, gout, dropsy, etc. Dose, à ʒ ss. ad ʒ i.

TO VOLATILIZE ☉.

℞. ☉ leaf ☉, or filings of ☉, in the Bezoardic Spirit of common ☉ (7), rectified e.e. of ☉ (8), AR., or e.e. of ☉, by a gentle heat (lest the spirits should ascend too fast), abstract the menstruum and add fresh, repeat it four or five times, till it is oily; then ℞ this solution in a glass retort with a strong ☉, to force away the spirits, cohobate and repeat this work till the ☉ be blood-red. Lastly, having freed the solution from all corrosive spirits, cohobate with SV., wormwood, or any other vegetable spirit, and ℞ by an alembic; let the cohobation and ℞ be often repeated, and the ☉ will come over in a liquid form, and have all the virtues of the most exquisite *Aurum Potabile*.

THE ANODYNE MAGISTERY OR ☉ OF ☉.

℞. ☉ of ☉, or the best Hungarian ☉ lb. i. ☉ it in a sufficient quantity of rain-water, which filter; then take filings of pure ☉ or steel, and often moisten or sprinkle them with the aforesaid ☉ ☉, as often drying them with a very gentle heat, repeating this so long till the filings are reduced to a rubicund mass, which beat in a subtle powder, upon which affuse spirit of ☉ (17), so much as may overtop it the breadth of five fingers, in a great and large glass. ☉ with a sufficiently intense heat till the ☉ is tinged, which, whilst warm, decant; affuse more fresh spirit, which repeat so often till the new affused ☉ will be no more tinged red. Mix these solutions or tinctures together, and with ☉ per deliquium (11) precipitate the yellow ☉ of ☉, from which decant the supernant liquor, and edulcorate with many affusions of fair ☉ warmed, till there be found no taste either of ☉ or ☉ to remain; which then dry, put into a bolthead, seal it up hermetically, and in sand ☉ it to redness, which will be done in a short time.

Note - If you would have the ☉ inflammable, you must instead of common ☉ take the ☉ of ☉, prepared according to art, and use it aforesaid upon the filings of steel, not precipitating it with oil of ☉, but evaporating in BM.

from this Magistery or ☉ with SV. and ☉ of ☉ is prepared a noble medicament and essence of so great virtues that they exceed the sphere of my commendations; performing all and more than any preparation of opium can do, and with far greater safety. it is a perfect cure for the falling sickness, vertigo, madness, melancholy, gout, and other chronic and radicated diseases. Dose, à gr. vi. ad x. or xii.

MAGISTRY OF ☉
(According to Sennertus)

Rx. Spirit of ☉ rectified with the oil (12); with the phlegm draw a ☉ from the ☺, which separate from the ☉ by *M₂*. often cohobating and digesting. Take of this p. ii., of the aforesaid spirit and oil p. i. mix, and exhale the humidity in BM., which so long repeat till the ☉ has sucked in its equal weight of oil. Then decant in a luted glass matrass for eight or ten days; lastly coagulate in sand or ashes, which will be done in sixteen or twenty days.

This is a great diuretic, breaks and expels the stone, opens all manner of obstructions, chiefly of the spleen, cools the heat of fevers, and cures dropsy, scurvy, etc. Dose, à gr. iv. ad vi.

OIL OF THE ☿ OF ☉

Rx. ☿ of ☉ $\frac{3}{4}$ iv. ☉ of ☿ $\frac{3}{4}$ ii. mix and *M₂* by a retort, at last make a Δ of suppression, so have you a red oil. If you drop spirit of ✠ (18) upon this oil you have a pectoral powder, which edulcorate and dry.

Both oil and powder open obstructions of the lungs, and cure almost all diseases afflicting those parts; externally it cures wounds and ulcers. Dose, à gr. v ad x. From this powder you may make an essence or tincture, for which see following.

ESSENCE OF THE ☿ OF ☉

Rx. Precipitate the oil of the ☿ of ☉ (*ut supra*), Δ in SV. in a hot place in a close vessel for eight or ten days, so the Essence will swim at top like oil, which *M₂* from the SV.

This Essence is sweet, and according to Hartmann is of as great power and force as the Tincture of Antimony. Given with essence of balm and choice canary wine it doth wonders in the art of healing. it expels all bad humors by sweat, cures dropsies, consumptions, and the stone; it strengthens the womb, take away barrenness, and causes fruitfulness in both sexes. Dose, à gr. i. ad iv.

Dear Friend

Since Mineral lesson # 46, we can chose several ways for our work. However, the ways using the martial regulus of antimony are still closed to those of you who do not know how to make this product. Therefore we developed a relatively simple method to this end, that does not require expensive material.

The first thing you will need to obtain is an enamel kiln, and it would be best if it had the following features. The oven muffle should be about 150 mm deep and have an interior height of 80 to 90 mm. It needs to be able to reach a temperature of 1000 C (1832 F), which means it needs an electrical power of 1000 to 1500 watts. However, this kiln does not need to have a heat regulator, because in this case, it will always be used at maximum capacity.

SET-UP OF THE KILN

- The kiln will be installed either under a fume hood, or outside, or in a large fire place. A good air circulation is necessary because of the fumes, as these are toxic during certain phases of the work.

- The kiln will be placed "on its back" in such a way that the door is on the upper side. Place wood blocks or insulating bricks under the kiln so that the back part gets air circulation. This is to avoid overheating of the electrical plug and connections.

- The muffle must be protected by an inner coating covering the sides and the back surface. A sheet iron of a thickness of 1 mm does not last more than 8 or 10 pours, but, even in the state of black oxide it does insure some protection of the muffle.

- The crucible should be made of Paris clay or of grog, and be of an oblong to long type. It is blocked by pieces of insulating brick. One of the pieces should be placed under the crucible but make sure that when you close the door, there is still a space of 1 to 2 mm. Manipulation of the crucible is possible in all safety only with good pliers, enabling you to hold it firmly, and thick asbestos or insulating gloves.

For the pour, you need a metallic cone, preferably made of stainless steel and smooth on the inner part, if you want to be able to remove the regulus from the mold easily.

OPERATION:

As now everything is ready, start to heat the kiln, crucible inside and door closed. While the temperature increases, prepare one of the five mixtures of the following chart:

MATTERS USED	WEIGHT in grams				
	Stibnite	160	120	100	100
Crude red tartar	110	80			55
Potassium sodium tartrate				50	30
Potassium nitrate	55	80	40	40	40
Iron	30	60	30	30	25
Tartaric acid			50		

If you have a thermocouple, you can watch the temperature increase (be careful, the thermocouple must be protected by a quartz casing). Otherwise guess the temperature according to the color of the crucible. The temperature is appropriate around 900 C (1652 F). You need then some space to move around, and you need to be protected by goggles and gloves.

Put the chosen mixture in a dish, near the kiln. With one hand, hold a stainless steel spoon filled with the mixture; with the other hand, open the kiln door and pour the powder into the the bottom of the crucible as deep as possible. There is a spark, a big flame, and smoke. Close the kiln door. As soon as smoke no longer escapes through the closed kiln door, start again, until the crucible is filled up to 2 or 3 cm from its upper edge.

Be careful, if you use one of the mixtures containing potassium sodium tartrate, a skin is formed that rises up in the crucible and that you must burst it with a steel rod. Leave the door closed and wait until the temperature reaches 100 C (212 F) or more if it can. If you don't obtain such a temperature, the scoria won't be flowing and the regulus remains intermixed with them.

Then open the door, take the crucible out with pliers, and pour its content into the cone.

Once the pour is complete, you must, as quickly as possible, scrape the scoria out of the crucible with a metallic blade and place it back into the kiln and close the door. This reduces the thermal shock of the crucible and might lengthen its existence.

With a hammer you can easily separate the pour from the cone, and the scoria from the regulus. This regulus is crystallized, has often a good appearance but is not starred. When you do several pour, put all the slags back into the crucible.

The fusion of the regulus occurs at 630 C (1166 F), and the temperature of the kiln, for a good pour, will be around 850 to 900 C (1562 to 1652 F). As soon as fusion is reached, use the same method as previously, but the spoon only contains potassium nitrate. Two to three spoons, five minutes apart are sufficient. Do not open the kiln any more because, as long as the pour

temperature has not been reached, the regulus tends to volatilize. This loss must be reduced to a minimum. The pour is done and the regulus starts to crystallize in the length. A third pour of the previous regulus, broken into pieces, gives the starred martial regulus.

If you grease the cone before the pour, do it with grease rather than oil. The greasing must be very slight otherwise there can be projection of the molten regulus.

This operation does not present any risk when all the precautions mentioned have been carefully applied.

Hereafter, you will find the following of the Book of Formulas.

Ora et Labora!

THE BOOK OF FORMULAS (continued)

THE ENS OR BEING OF ♀. (*Ens Veneris*)

Rx. The red ☉ of AF. extract all its ☉ with fair ♃, which dry and powder; pour thereupon the spirit of ☉ (22) or ☿ (14); stir it and dry it well, repeating this work seven times; then powder it and mix it with ☉ purified p. ii.; grind and mix them well, and in a glass retort in sand, by degrees of ☊, ☉ for half a day, stopping the mouth of the retort with cotton or wool, and in the neck of the retort you will have the *Ens Veneris* of a yellow or gold-like color, which you may mix with its equal quantity of colcothar or ☉, and ☉ once or twice more.

It is a noble and worthy anodyne, easing all manner of pain, and causing rest. It cures the rickets, and kills worms in children, performing those things beyond any other medicine. It has no equal in pleuresies and in suffocation of the womb; it opens all obstructions, and exhilarates the heart, comforts the animal spirits, gives ease in the stone and dissolves it, and cures such as are in a consumption. Dose, à gr. iv. ad viii., or x. or xii. in canary wine or other convenient vehicle.

THE FAMOUS ELIXIR OF LIFE (Prepared from Balm)

In the proper season of the year, when the herb is at its full growth, and, consequently, its juices in their whole vigor, gather at the fittest time of the day (when Jupiter is rising, and the Moon in Cancer is applying to a conjunction, sextile, or trine aspect thereto) a sufficient quantity of balm, wipe it clean, and pick it; then put it in a stone mortar, and by laborious beating reduce it into a thin pap.

Take this glutinous and odoriferous substance and put it into a bolthead, which is to be hermetically sealed, place it in a dunghill, or some gentle heat equivalent thereto, where it must ℞ for forty days. When it is taken out the matter will appear clearer than ever, and have a quicker scent. Then ℞ the grosser parts, which, however, are not to be thrown away. Put this liquid into a gentle bath, that the remaining gross particles may perfectly subside. In the meantime, dry, ℞, and extract the fixed ☉ of the grosser parts (which remained after the above ℞), which fixed ☉ is to be joined to the liquor when filtrated.

Next, take sea ☉, well purified, melt it, and, by setting it in a cold place, it will ℞ and become clear and limpid. Take of both liquors *ana*, mix them thoroughly, and having hermetically sealed them in a proper glass, let them be carefully exposed to the sun, in the warmest season of the year, for about six weeks. At the end of this space the *primum ens* of the balm will appear swimming on the top like a bright green oil, which is to be carefully ℞ and preserved.

Of this oil, a few drops taken in a glass of wine for several days together, will bring to pass those wonders that are reported by the Countess of Desmond and others; for it will entirely change the juices of the human body, reviving the decaying frame of life, and restoring the spirits of long lost youth. The author who records this curious discovery, remarks: "If after the medicine is thus prepared any doubt be had of its efficacy, or of its manner of operation, let a few drops be

given every day on raw meat to any old dog or cat, and in less than a fortnight, by the changing of their coats and other incontestable changes, the virtue of this preparation will sufficiently appear.

This is of the nature of a Quintessence - being similarly prepared, - the alchemical praxis for which will be fully and clearly expounded in a work I now have in preparation.

THE PHILOSOPHERS' WATER (*Aqua Philosophorum*)

Rx. ♃ ♄ till it be greenish-blue or sky-colored, pour on SV. tartarized (21), ♁, then ♃, and at last force it with a violent ♁.

This is wonderful in curing diseases arising from tartar, in the scurvy, quartans, melancholy, asthma, dropsies, and obstructions of the liver, spleen, and bowels. It is the best menstruum to make all purging tinctures and extracts, whether out of vegetable or mineral. If it be circulated in a bolthead hermetically sealed, it becomes balsamic and sweet-scented, and from a crystalline color it becomes that of a ruby, being as it were a Balsam of Life and Vital Powers, exalting Nature to her highest degree of purity and clarity by quickening the internal fire and heat. Three or four drops of it given with essence of saffron gives ease and rest, and restores in consumptions.

ARGENTUM POTABILE (Potable Silver of Clossæus)

Rx. Plates of ♁ which ♃ often with ♁, pour on ♃ and set it to shoot into crystals; ~~so~~ them into a spirit, by rectified SV. (20) acuated with spirit of ♁ (8) and spirit of ♁ (6); ♁, then ♃, and bring the azure or blue tincture to a powder, which ~~so~~ in rectified SV.

This is a wonderful and excellent medicine against the epilepsy, and most other diseases of the head, as the Moon bears astrological rule over the brain. You may also make Potable Luna after the method of Clossæus in that of ♁, already given.

SPIRIT OF ♁ (*Spiritus Argenti*)

Rx. Of the crystals of ♁ (*ut supra*) being twenty times ♃ d (that it may yield its spirit the easier), or you may take crystals made of filings of fine ♁, with ♃ iii. of water of lilies of the valley, acuated with spirit of ♁ of ♁ ♃ i., ♁ 40 days in ashes, till the menstruum is of a greenish blue; ♃ this, and add more spirit of ♁ of ♁, and extract till the ♁ is nearly all ~~so~~ d. Put the solutions or tinctures together, evaporate and crystallize, which dry; put these dried crystals into a retort, from whence draw first a phlegm and spirit of ♁, which keep apart; then with a stronger ♁ force over the spirit of ♁, and lastly an oil.

It is a thing found by experience that this Luna Spirit takes away the falling sickness by the roots; it specifically strengthens the head and comforts the animal spirits. It is good against all

palpitation of the heart, madness, and all melancholic distempers. The oil taken *gut* iii. or iv. in balm, sage, rosemary, or peony water, is more effectual to all the purposes aforesaid.

OIL OF CINNAMON

Rx. Take cinnamon grossly bruised lb. i., which cover with SV. made very sharp with spirit of \ominus (8), or else having as much \ominus put into it as the SV. will \ominus . Put them into a blind head, which lute close, and set it to \mathcal{L} in a gentle heat for about ten days, then apply an alembic close luted with its receiver; \mathcal{M} it with a small Δ by degrees, so shall you have a heavy oil, which will sink, and a spirit, which \mathcal{M} by setting in a cold cellar for 14 or 16 days after they are \mathcal{M} d, by which time the oil will settle to the bottom.

Note - If this spirit, after its \mathcal{M} , be joined to its own proper \ominus , or else \ominus of \mathcal{F} , and after they are sufficiently united by Δ , circulated with its own proper chemical oil so long till all become united and one entire body, so have you an elixir. This in a true sense is a fortified quintessence, for it is a union of the three principles, \ominus , \mathcal{A} , and \mathcal{Y} , together with the essence. Lb i. yields but \mathcal{Z} ii. or little over, of oil.

This oil pierceth the flesh and bones, being very hot and dry, and is good against all cold and moist diseases afflicting to the head, heart, and other principal parts, in so much that if one lay speechless and almost breathless, it would presently recover him. It helps all diseases that come from cold and phlegm; it digests, makes thin, and provokes the terms, and brings away both birth and after-birth; it helps coughs and asthmas, and stops all fluxions from the head and brain. It is one of the greatest vegetable cordials, and perfectly cureth consumptions, comforting nature, reviving the heart, and cheering all the spirits, natural, vital, and animal. Dose, *à gut* ii. *ad x.* in any convenient liquor. Some give it in cordial waters, some in broth, some in milk, some in canary wine. The best way to take chemical oils is to drop the intended quantity on a piece of refined or loaf-sugar, letting it soak into it, and then dissolve the sugar in wine or some cordial water, proper to the distemper.

G.B.'s Note: These last lines are in fact a corruption of the usual practice of apothecaries which consisted in pounding in a mortar a piece of sugar soaked with an essential oil in order to ensure "atomization", today we would say to ensure a fine separation of the molecules of the oil so we may obtain colloidal solutions, as cinnamon oil is not soluble or spreadable in excipients such as milk, broth, etc... G.B.)

ELIXIR OF PROPERTY

Rx. Of aloes, myrrh, saffron, a. \mathcal{Z} i. moisten all with tartarized SV. (21), and bring them to an alcohol (see Note on Boyle, 21); put all into a glass body, with a pint of tartarized SV., and so much oil of \mathcal{A} *per campanum* as may flow two or three inches above all; close it well and circulate all for three months, extract the tincture and decant it; add tartarized SV. to the matter remaining, extract again and decant it; then \mathcal{M} the fæces that remain, and add it to the former; and again for a month (without \mathcal{M}) circulate them. Others extract the tincture with \ominus of \mathcal{F} volatilized with SV. by \mathcal{L} , so long till the bitterness of the aloes is not perceptible, which seems to be a better way than the former.

This is the famous *Elixir Proprietatis* of Paracelsus. This noble medicament is of very hot and thin parts, containing all the virtues of the natural balsam, conserving nature in extreme age. It cures quartans, and dissolves the stone; it quickens all the senses, and strengthens the brain and memory; it cures the vertigo, lethargy, epilepsy, headache, convulsions, palsy, pleurisy, jaundice, consumption, catarrh, pestilent fevers, gout, and sciatica; it expels melancholy, and makes the heart glad. Lastly, diseases proceeding either from heat or cold by a certain occult property it strangely cureth. Dose, *à gr. vi ad xxx.*, or more, in wine or other convenient vehicle.

OIL OF ☉

(*Oleum ☉ is per Campanum*)

R. According to the old dispensatories it is prepared in a large bell still by the burning and consuming of a large quantity of ☉, by which a sharp spirit, flying from the kindled ☉ and beating against the sides of the still, will turn into a liquor and flow down like water or oil.

Here is to be noted: 1. that the ☉ be put into an earthen cup having sand in it, lest being inflamed it should break it. 2. That this be placed upon another earthen cup, the bottom turned upwards, and these thus disposed be set in the midst of a great earthen pan, then with a red hot iron inflame the ☉. 3. That these be covered with a great glass bell, or glass funnel, with a neck as long as that of a bolt-head, having a hole at top to give breathing, that the flowers may fly away, by which means you will have a greater quantity and more effectual oil. 4. That it be done in a close, moist place (as in a cellar) and on a moist day. 5. That you leave an empty space between the brims of the bell and the pan, that there may be air enough to keep the ☉ inflamed. 6. That by reason of the hole at top of the bell or funnel the more phlegmatic part evaporates, while the acid spirits, not being able to rise so high, condense against the sides of the glass. 7. That this spirit is nothing but a spirit of ☉, drawn from a vitriolic ☉ in the ☉. 8. That from lb. i. of ☉ you will have $\frac{3}{4}$ i. of spirits.

It eases all pains of the gout, and that only by bathing (mixing of it with water or SV.). It strengthens the nerves and muscles, and cures a confirmed leprosy. It cures hectic, consumptions, asthmas, and ulcers of the lungs. It makes the teeth white, restores radical moisture, extinguishes all preternatural heat, purifies the blood, and renovates the whole body, expelling putrefaction. In the French-pox it is excellent, and may serve instead of a diet. There is nothing more powerful in expelling of poison, plague, and all pestilent and malign fevers. Dose, *à gut.*, vi. *ad xvi.* or xx. in broth, beer, ale, wine, or cordial juleb. Taken alone it kills.

Dear Friend,

The furnace needed to accomplish the four fires of Paracelsus' antimony tincture (See Mineral Lesson # 46) have caused us some trouble. To carry out this operation we had to discard coal heating right away, not very practical, and propane, rather dangerous and constraining to at last a minimum watch for long periods of time. So we decided for the electrical solution, not taking into account the superstitions that condemns it; as we can observe that chicks in an electrical incubator are born alive and with a normal constitutions.

Set-up of the oven (See Figure # 1 page 10)

Consider that this oven must be able to function without interruption for 50 to 60 days. To reduce electrical intake to a minimum, a thermal insulation is essential.

The outer part of the oven is made of insulating and light bricks, much more insulating than the heavier refractory bricks. The bricks are installed as shown on drawing A (Figure # 1), which leaves a square inner space, with sides of 20 cm and a height of about 40 cm. To avoid heat loss through the joints between the bricks, and to avoid cement altogether, put asbestos sheets on the inside of the inner part of the oven, of a thickness from 5 to 6 mm (Drawing C). The whole is placed in a construction made of perforated valleys (c) whose sides exceed the side of the inner oven by 10 cm and whose upper height is 25 cm. Aluminum sheets being applied to the construction, the empty space can be filled with vermiculite (v) which reinforces the thermal insulation. The bottom part of the construction is left open on a height of 15 cm for electrical control switches. The 10 cm left at the top are designed for the upper closing. To close the upper part of the oven, a sheet aluminum is set on fiberglass cushions, enclosed in thin aluminum foil; the cushions are in contact with the upper side of the bricks. This sheet is also provided with fiberglass underneath, also maintained by an aluminum foil. Finally three insulating bricks rest on this sheet to insure the upper insulation of the oven. A 8 mm hole is drilled in the center of this "cover" so that you may find out the inside temperature of the oven.

Electrical installation (Figure # 2 page 12)

The issue of electrical resistance for the heat is a difficult one, for it is harder now to find resistances in the form of coils. Instead we use a 6 cm long electrical cord with a resistance of 1 ohm per cm. The resistances in an iron on mica are also appropriate. In this case you'll need four irons each of 220 volts, 400 watts and 120 ohms electrical resistance. The most important is to be able to make the four following combinations:

- first fire:	100 W	480 Ω
- second fire	134 W	360 Ω

- third fire	270 W	180 Ω
- fourth fire	400 W	120 Ω

If you use an electrical contactor with a 4 switch you'll have to modify it to obtain the same intensities. Figure # 2 show the connections needed for the four fires if you have four resistances of 120 Ω each.

Important note:

- the resistances are installed on a double asbestos sheet and the contact are made with threaded rods, stainless steel nuts and boilers.

- the connecting copper wires are linked to the stainless steel rods under the asbestos sheet. (We had several power breaks, as the copper got dissolved by the gases when the crucible's antimony oil lut leaked).

- a triac was used to be able to go from one "fire" to another but it is taken out of the circuit as soon as the temperature level is reached.

The insulation of the oven requires 24 hours for the temperature to stabilize.

It would be good to have one or two extra resistances allowing a more precise regulation of the temperature during attempts and temperature regulation.

A large grid wire set on a small construction will protect the resistances. An ammeter, if you own one, (graduated from 0 to 2 A) shows the electrical power supplied and indicates any breaks in the power supply.

The crucibles

For this oven, the crucibles used are made of porcelain and have a cover. Crucible with a 50 mm width and equal height are appropriate. They are tighten by metallic rigid triangles, and two asbestos blocks one above, one below will reduce breaking risks.

As for the lut; place the crucible (before it is tightened) in an aluminum (or any other metal) vessel which is filled with a paste made of mixture of clay and kaolin that has been allowed to dry up slowly; the crucible water tightness is insured in that manner.

Hereafter is the continuation of the Book of Formulas

Ora et Labora!

THE BOOK OF FORMULAS

ELIXIR OF SUBTILTY

Rx. Of olive oil, honey, SV. rectified and tartarized (21), *ana.* M them all together in ashes, then M all the phlegm from the oils, which will be distinguished by the colors; put all of these into a pelican, and add to them the third part of the essence of balm and celandine; A it for a month, then keep it for use.

This is the *Elixir Subtilitatis* of Paracelsus. It not only resists putrefaction, but also preserves all things from putrefaction which appertains to animate bodies. This is the Balsam of Philosophers, which no sensible body is able to resist, it being subtle and able to penetrate everything; it opens all obstructions in the body after a wonderful manner, with many other things, whose virtues are not fitting to be declared only to the Sons of Art.

THE GREAT ESSENCE

(*Essentia Magna*)

Rx. Rosemary, Lavender, Sage, marjoram, Thyme, Balm, Angelica, all full of juice; bruise all in a mortar diligently, pour on a sufficient quantity of malmsey-wine (some say of their own spirit or tincture), then in a vessel with a blind head set it to A in balneo with a gentle heat for two months, express all with a press, Q the faeces, and extract a crystalline or sweet E, which add anon (or instead thereof crystals of F). This expressed juice or wine A for two months, as before, till a glorious liquor be separated from the faeces or sediment, which decant, adding to it the aforesaid crystals and a little oil of cinnamon.

Its virtues are so great that they can scarcely be numbered; for it strengthens all the inward parts, perfectly cures consumptions, all diseases of the head, heart, breast, and lungs, and makes a sad, drooping spirit merry; it cures plague, malign fevers, small-pox, poisons, etc. It is in vain to enumerate its virtues (as curing the vertigo, epilepsy, megrim, convulsions, palsy, etc.), but rather advising all to have it by them upon any occasion. Dose, *ad* ℥ ss. morning, noon, and night, in broth, fragrant wine, or milk.

MAGISTRY OF □

Rx. Defecated □, place in a glass body in BM. for 40 days that it may putrefy; then — with a gentle fire in BM. till the phlegm is drawn off; rectify the spirit in a glass with a long wide neck, so have you the volatile E which take, and cast away the phlegm. M what remains in sand, and a more volatile E arises; of the ☉ make a fixed E, which mix with thrice as much clay, form it into balls, dry them, and M by a retort, so have you the spirit of the fixed E, into which drop the former spirit or volatile E, till the noise ceases, then — in sand. So have you a fine, pleasant, and delectable E of □, or the true Magistry of E.

This cuts and dissolves the tartarous coagulum in the whole body, and expels all ill humors; it preserves from the stone, taken once a month before the new moon, and cures consumptions wonderfully. Dose, *gr. x.*

MAGISTERY OF \ominus

(According to Mynsicht)

R. Crystalline \ominus of wormwood, upon which drop rectified spirit of \ominus (8) so much as will coagulate and unite, with a prevailing sapor and force above the spirit of \ominus .

It is a most excellent medicine, having a balsamic property; it renovates the whole man, purifies the blood, strengthens the head, heart, and stomach, opens obstructions of both liver and spleen; cuts, discusses, and cleanses from all putrefaction. It is one of the most efficacious diuretics, and specific against dropsy, taking away all flatulent, watery, and tartarous viscosity. It breaks and expels the stone; is prevalent against the iliac and cholic passion¹, the jaundice, all sorts of fevers, palsies, apoplexies, gouts, leprosy, worms, ruptures, etc. Dose, *à gr. vi ad xvi.* In a few days it dissolves the dropsy tympanites².

LIQUOR ALKAHESTI

(Paracelsi.)

R. 1. Prepare an alkali from \oplus and \ominus regale by cementing the \ominus regale with the \oplus , and boiling them in fair ∇ to make a lixivium, filtrating and coagulating by evaporation; of which \ominus prepare a large quantity. 2. Let pure Spanish or Hungarian \oplus be beaten with the alkali, in a stone mortar a little warmed, so long till none of the \oplus can be seen, which put immediately into a glass retort, with a receiver well luted to it, and \mathcal{M} with a naked \triangle , which operation so often repeat till the \oplus becomes very liquid, and appears truly spiritual. 3. This spiritual \oplus distil thrice in a tubulated retort closely joined with *lutum sapientia* to two other vessels with necks at both ends, the latter of which let be well luted to a large receiver, the \oplus let be cast into the receiver by the tube, which tube ought to rise above the furnace, and after the injection of the \oplus every time to be close stopped, which then will pass with its aquosity into its receiver, till it is all turned into ∇ . 4. Put this \oplus al ∇ into a bolt-head so large as it may fill about an eighth part of it, which for some months place in \mathcal{M} in an equable heat, till all the ∇ is converted into froth. The putrefaction still continue till the froth vanishes, and the liquor in the bottom of the vessel be again clear. At last rectify it once or twice by a retort in sand, and keep it carefully for use.

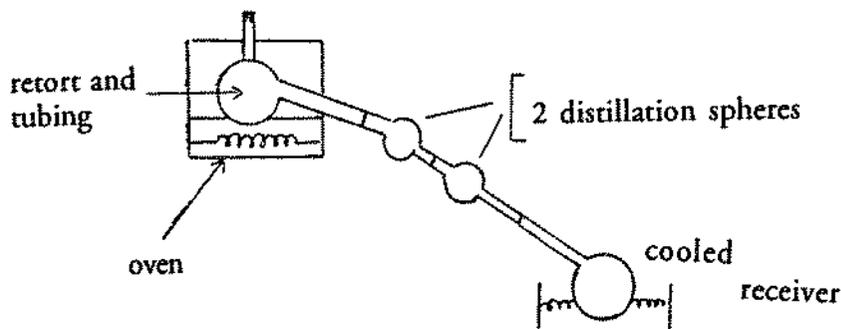
G.B.'s Note: (1) The lixivium presented by the author in the beginning of the text yields, through coagulation, a salt named by the Ancients caustic stone (not to be confused

¹GB's note: iliac passion is the name given by ancient medicine to "stoppage of the bowels".

²GB's note: tympanite is the swelling of the abdomen caused by excess flatulence in the intestines or the peritoneum, according to the Larousse Dictionary - XXth century.

with the silver hell-stone whose making is described further). Glaser suggests a simpler method for the making of this caustic stone in his "Treaty of Chymie". Furthermore he ends his texts on the following sentence: "the use of this caustic stone is too well-known to give it here", which is a wink to all those who know the secret of the direct mercurification of metals).

(2) As for the distillation of the spiritual mercury, the distillation sphere can be used along with the following set-up for distillation:



Volume at least 4 times bigger than the volume of the retort.

Whether this be the Alkahest of Paracelsus with which he did such wonders, and which Helmont so praises, even to the skies, is very doubtful; for as that Alkahest was destined to the preparation of all sorts of medicines, extraction of all sorts of tinctures and essences, whether out of minerals, vegetables, or animals, so also it was reported to cure effectually all diseases, and to root out the seminations of every malady, and to do miracles above any other medicine except the Philosophers' Stone. He that desires to know more hereof may fetch it out of the most learned Helmont, where he may indeed receive a very great deal of satisfaction. The *regale* mentioned above is made thus:

℞. Υ the \odot of the simple spirit, or new Ξ (which you please), in a potter's furnace, make a lixivium in water, filter and evaporate; if it be not white enough, dissolve, filter, and evaporate again.

G.B.'s Note: regal or royal cement: SSS (stratum super stratum or layer on layer) of various powder, place in alternance in the crucible with filings of the metal that you wish to "purge" for a subsequent direct mercurification through the dry way.)

ALL-HEAL OF PARACELSUS

(*Panacea Theophrasti Paracelsi.*)

℞. Of the highest rectified spirit of balm, of mugwort, of valerian, of burnet, of juniper, ana $\frac{1}{2}$ i.; Q.E. of \ominus , oil of \ominus (8), white sugar candy, A. $\frac{3}{4}$ vi., mix them, and keep the mixture in a glass with a glass stopper.

This noble medicine preserves the body, as Hortius says, *per totam vitam integrum*, in health during the whole life. It takes away heaviness of the head, cures the apoplexy, palsy, epilepsy, and other dangerous diseases of the head; it sharpens the eyesight, stays vomiting, and strengthens a weak stomach; it helps asthmas, and most diseases of the lungs; it corrects the vices of the liver and spleen; it is profitable against leprosy, jaundice, colic, stone, disaffections of the womb, and many other diseases. Dose, à \mathbb{D} i. ad \mathbb{Z} ss.

SPIRIT OF FIVE THINGS

(*Spiritus Diapente*)

\mathbb{R} . Paracelsus' Elixir of Property \mathbb{Z} i. ss. Spiritus theriacalis camphorated, \mathbb{Z} iss. Spirit of \mathbb{D} rectified, \mathbb{Z} i. (13). Spirit of \mathbb{D} rectified, \mathbb{D} ii. (10a). Spirit of \mathbb{E} rectified (8) in which let leaves of \mathbb{O} No. X. be \mathbb{D} d, \mathbb{Z} i. Mix all together and \mathbb{N} twenty days, and keep for use.

This powerfully resists all putrefaction, is an antidote against poison, plague, and small-pox, opens all obstructions of the liver and spleen, purges both reins and bladder, is excellent against the dropsy, and all manner of hot and burning fevers, palsy, jaundice, etc. Dose, \mathbb{D} i. in generous wine.

THE MERCURIAL EAGLE

(*Aquila Cælestis*.)

\mathbb{R} . Sublimated corrosive (made with \mathbb{E} and \mathbb{D}) from which extract a yellow tincture with \mathbb{M} d \mathbb{M} in ten weeks; decant, and abstract the decanted liquor to dryness, so have you the *Aquila Cælestis* in a red powder.

This medicine is commended by Paracelsus almost in the highest degree for curing the French-pox, gout, epilepsy, and most diseases of the head, rooting them out by sweat. Dose, à gut ii. ad iv.

ELIXIR OF \mathbb{D}

(*According to Mynsicht*.)

\mathbb{R} . Of galanga the less \mathbb{Z} i. ss., calamus aromaticus \mathbb{Z} i., mint, red sage, *ana* \mathbb{Z} ss., choice cinnamon, cloves, ginger, *ana* \mathbb{Z} iii. nutmegs, cubebs, *ana* \mathbb{Z} ii., xyloaloes, citron peels, *ana* \mathbb{Z} i. Mix and make a powder; add white sugar candy \mathbb{Z} iii. SV. rectified so much as to make it thick like honey. Put all into a glass, and put thereto \mathbb{D} of the \mathbb{D} of \mathbb{F} or \mathbb{D} , or spirit of \mathbb{D} often rectified, so much as to overtop it the breadth of four fingers. \mathbb{N} 40 days, at length decant the tincture and filtrate; upon the remaining *faces* put SV., and according to the spagyric art extract an essence; mix both these together, circulate in BM. for 20 days, and keep it for use.

Experience testifies that there is scarcely a more noble and efficacious stomachic in the whole republic of medicine. It is a great secret in all affects of the ventricle, given in mint-water, for it comforts all the inward parts and principal members; it cool heats, and causes appetite; it is most excellent in the epilepsy, apoplexy, catarrhs, phlegmatic disposition of the whole body, pain of the head, lethargy, and fevers. Dose à \mathcal{D} ss. ad \mathcal{D} i. in an appropriate liquor.

PHILOSOPHIC SPIRIT OF \ominus

℞. \ominus q.v., suppose \mathcal{Z} viii. $\circ\circ$ of \ominus rectified \mathcal{Z} iv. ∇ q.s. for \mathcal{M} of the \ominus . First there comes off a phlegm, then put the matter into a glass retort and \mathcal{M} in sand, then change the receiver, and \mathcal{M} to dryness; so will you have the most exalted spirit of \ominus . But the $\circ\circ$ of \ominus will be coagulated in the bottom of the retort with the alcali or \circ of the common \ominus . Take of this acid spirit \mathcal{Z} ii. \ominus (dissolved in ∇) \mathcal{Z} i. mix and \mathcal{M} in sand, as before; so will you have \mathcal{Z} iii. of spirit. Thus may you proceed infinitely, and increase the quantity of spirit with little or no charge, as long as you please.

This spirit has many uses in chemistry for dissolving bodies, precipitating of things dissolved in AF., spirit of vinegar, etc., and in extracting tinctures. Inwardly taken in wine, ale, or water, it opens, cools, resists putrefaction, takes away all manners of fevers and unnatural heats, and is a potent remedy against the plague. It strengthens the stomach, fortifies the heart, cheers the spirits, and refreshes wearied and decayed nature. Dose from 10 drops to 20 in any proper liquor or vehicle.

OIL OF \odot

(*Oleum Solis vel Auri*)

℞. Ψ of \odot made by reverberation with royal cement; cleanse it and \mathcal{L} it 24 hours in rectified Aqua Vitæ, so shall you have $\circ\circ$ of \odot . Thus Paracelsus. Or thus: *℞.* Of the sharpest juice of lemons filtrated \mathcal{Z} vi. leaves of fine \odot . No. 60, \mathcal{L} them in a glass vessel with a gentle heat for four or five days, then filter and abstract the juice by \mathcal{M} , and the \odot will remain in the bottom in the form of butter. Thus Gesner.

This mixed with wine will give it the color of gold. It wonderfully resists putrefaction; it also purges, and moves to sweat; it cures the leprosy, and such as have been spoiled by mercurial unguents.

NOTE - The above reverberation may be done by putting the filings of \odot alone into a crucible in a reverberatory furnace and burning them (without melting) till they come to a calx of a purple color, thin and light; or you may mix with the filings or flowers of \triangle , and then reverberate till the calx becomes as aforesaid. Furthermore, often dissolution in AR. does the work as well.

THE SILVER HELL-STONE

(*Lapis Infernalis Argenteus*)

Rx. Filings of fine D , p.i. good AF. or spirit of D , p.ii. M in a small matrass with a long neck luted half way; evaporate the humidity in a circularly Δ to dryness, leaving a blackish scum on it; then give a melting heat till the fumes cease; take off the matrass, and forthwith cast it into little brass or iron moulds.

It is caustic, remaining forever if kept from air. It consumes by touching warts, proud and dead flesh, cancers, ulcers, etc., if you wet them with a little water; it dyes hair and skin an unchangeable black.

MAGISTERY OF O

(According to Salmon)

Rx. M filings of steel in purified juice of lemons, D for a month, then filter into a glass vessel, and in a sand heat inspissate to the consistence of a liquid extract. The remainder of the chalybs which will not go through the paper, dry and reduce into a subtile powder for the same use, or for steeled wine.

Both the liquid extract and the powder have a wonderful force in opening all obstructions, and dissolving all tartareous and coagulated matter, and strengthening all the internal viscera. They are an excellent cure for melancholy, quartans, dropsy, and all diseases of the womb occasioned through obstruction. Dose of the extract à z ss. ad z i.; of the powder, à D i. ad D ii.

MAGISTERY OF O (Vitriolated)

Rx. Dissolve steel in rectified spirits of D , then coagulate, so have you a magistery green like vitriol.

It opens obstructions of the liver and spleen, and cures the jaundice, quartans, melancholy, and the green sickness. Dose, z ss. in Rhenish wine.

WATER AND OIL OF F

Rx. D red to whiteness lb. ii. white F lb. i. powder and mix them, then M by a retort; the water separated from the oil rectify.

The rectified water, mixed with a sufficient quantity of rose-water, and dropped into the eyes, cures most distempers happening to them. Taken inwardly in Rhenish wine it opens obstructions and cures the green sickness.

ELECTRUM, OR GOLDEN ELIXIR OF ___

R. Regulus of \odot (made of Mercurius Vitæ, and as much \square and \circ) fine \odot , A. $\frac{3}{4}$ ss., melt and powder them together, to which put \otimes $\frac{3}{4}$ ii; \sim till the star of \odot ascends, and a useless earth remains at bottom; wash off the \ominus , and put the remaining \odot and flowers of \odot in the bottom into an Hermetical egg, in a fixed capella, with such a \triangle as may not melt them, but may make them of a yellow citron color, and afterward of a chestnut color. Extract these flowers with spirit of \otimes alcalized, and then draw out the tincture with SV. as before taught.

It cures consumptions, hypochondriac melancholy, black jaundice, dropsy, gout and scurvy. Dose, the quantity of g. i. twice a day in some proper syrup.

WATER AGAINST CANKERS

(Aqua Phagedænica)

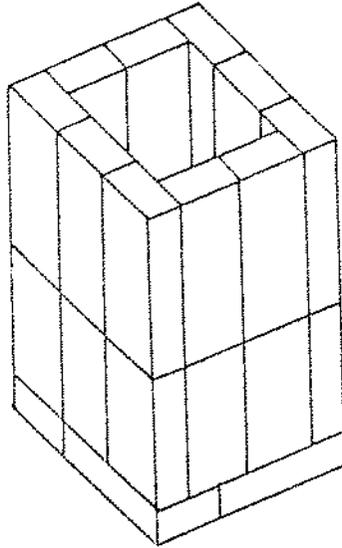
R. Make a strong lixivium of \oplus in boiling ∇ , filter it into a glass bell, in lb. i. of which \otimes corrosive sublimate $\frac{3}{4}$ ss. stir them and there will be an orange color, and the sublimate will fall to the bottom. If the ∇ be too strong put upon it more lime ∇ till it is as you would have it. But Fallopius makes it by putting into lime ∇ lb.i. Mercurius Dulcis a sufficient quantity (viz. $\frac{3}{4}$ ii) and dissolving it by boiling.

Either of these *Phadegænick* waters are good against inflammations, fistulas, malignant and venereal ulcers, cankers, scabs, sores, pustules, and other breakings-out, as also the itch, leprosy, and the like, curing them without danger; first wash well with the water, then apply to the affection a linen cloth dipped therein, so will the proud flesh (if there be any) be consumed, the putrefaction corrected, the sore cleansed and incarnated, and at last by its drying quality cicatrized and made well.

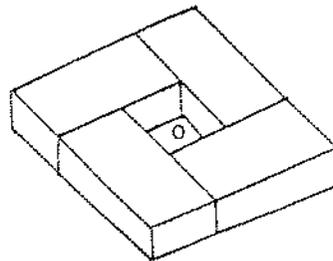
Figure # 1

SETTING-UP THE OVEN

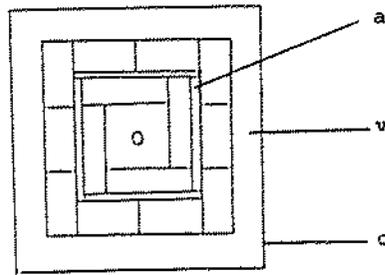
DRAWING A



DRAWING B



DRAWING C



DRAWING A:

It represents the set-up of the 24 bricks of the oven, which are maintained by valleys constructions on vertical lines. Threaded rods are used to tighten everything.

DRAWING B:

The hole O left by the 4 bricks of the basis is used for the stainless steel rods holding the resistances. O is obstructed above by the asbestos sheets used to set-up the resistances and below by an aluminum-fiberglass cushion.

DRAWING C:

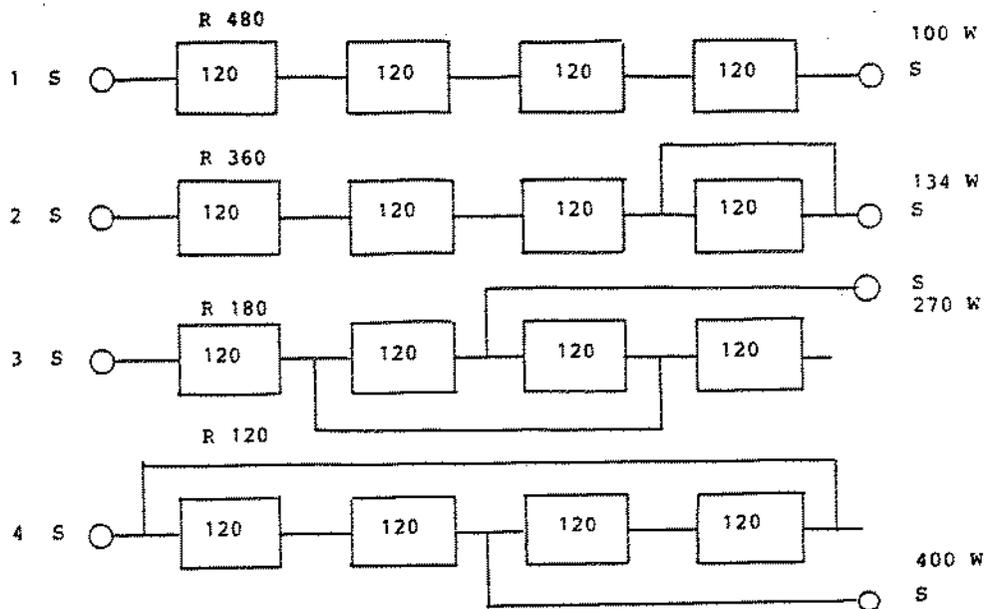
- O - hole in the center of the 4 lower bricks;
- a - asbestos sheet coating lined against the vertical inner parts;
- c - the valley construction and the aluminum sheets;
- v - the empty space filled with vermiculite.

The upper part of the oven is closed with a device, not shown, made by a sheet leaning on the vertical bricks, on a width of 2 cm.

The thermal insulation is insured by 3 insulating bricks placed on this sheet and aluminum-fiberglass cushions.

Figure # 2

ELECTRICAL SET-UP OF THE OVEN



- All the resistances are 120 W in chromium-nickel thread;
- A contactor ensures the four set-ups of the drawing;
- The equivalent resistances and powers are given for each set-up (220 volts);
- A contactor marked 1-2-3-4 insures the connections of the set-ups;
- S represent the plugs to the electrical power.

Dear Friend,

THE DRY PATH

Our association tries to present to its members a variety of solutions to alchemical problems. This has two advantages: first, every individual can choose what seems most appropriate for him, and secondly, it enriches his knowledge of alchemy and of alchemical literature.

We have presented the theory and practice of the acetates of antimony butter, and Urbiger's methods. However, all these methods have a common drawback, namely the emission of obnoxious smells or of dangerous gases. Hence it is difficult to practice these paths if one does not live in the country.

The Collectanea Chemica proposes a metallic path which presents only few, if any, of the drawbacks of the previous paths - with the exception of the first operation.

The method pursued by the Collectanea Chemica is a dry path, i.e., it does not use any particular menstruum. This is because the distillation and extraction liquid is the "humid radical of the ore", the metallic seed contained in the native ore. As we shall shortly see, this path has another advantage: it requires but a minimum of equipment, essentially a Soxhlet, an oven, and several flasks.

The Collectanea Chemica, written by an anonymous author, states that if the ore is liberated of its toxins and placed in a favorable temperature conditions, the seed will come to the surface and will spontaneously cause the principles to dissolve and separate. The common features between this method and the work presented in the Spagyric course is particularly striking.

This method has not yet been presented earlier in this course because the methods, such as they are described in the text, are particularly difficult to experiment with, and require quite some time to be carried out. Although the method we are describing here applies to antimony and to lead, we shall select stibnite for antimony and galena for lead exclusively.

METHOD

Essential data

Sulfur:	becomes volatile at 445 C (833 F) insoluble in water;
Arsenic:	becomes volatile at 613 C (1 335 F) insoluble in water;
Realgar: (arsenic sulfide)	becomes volatile at 565 C (1049 F) insoluble in water;
Stibnite:	fuses at 550 C (1022 F) becomes volatile at 1150 (2102 F).
Galena:	fuses at 1114 C (2037 F) insoluble in water.

Calcinations:

To start off, the most noxious poisons of the ore need to be eliminated, namely sulfur, arsenic, and realgar. This is done through calcination in an oven.

In the case of antimony: As the stibnite melts at 550 C (1022 F), the sulfur can rapidly be eliminated (445C - 833 F). The arsenic vaporizes at 613 C (1135 F), and the realgar at 565 C (1049 F); hence they cannot be eliminated by a quick calcination. To be removed, they require lengthy and repeated calcinations, however, the temperature should not exceed 500 C (932 F). If bright deposits appear on the surface of the crucible or of the dish, in the lowest part, this indicates that the stibnite has reached its fusing temperature. In that case, the stibnite should be discarded. Or if you wish to keep it, use it for another path.

In the case of lead: As galena melts at 114 C (237 F), a calcination performed at a temperature of 650-670 C (1202-1238 F) will rapidly eliminate the three poisons, sulfur, arsenic and lead.

Purification

Once the first calcination is complete for each of the two metals, numerous other impurities nevertheless remain behind. The best way of removing these is to use a soxhlet filled with rainwater. As soon as the water in the flask seems to be saturated, it is replaced with fresh rainwater until the water does not become discolored any more, and no more deposits form in the flask. Usually, a circulation of 7-10 days is required for this.

Calcination

While the first calcination required precautions because of its weaker sulfurous smells and the possible release of arsenic vapors, this problem no longer exists for the second calcination.

Naturally, the ore should be finely ground before the first calcination. While grinding is still necessary between the first and the second calcination, it is later no longer necessary.

Whether stibnite or galena is being used, a temperature of 300-350 C (572-662 F) is sufficient for the second calcination. The calcined substance is circulated in the soxhlet until the circulation causes no more deposit and no discoloration of the water.

Putrefaction

At this stage of the process, the ore is carefully dried under vacuum at a moderate heat. It is then placed in an incubator in a solid and absolutely watertight flask. In this way the external fire kindles the internal fire. If no crude air is allowed in until the humid radical rises in the form of steam, the latter will condense as a metallic water, similar to quicksilver. This is the Mercury of the Sages of the dry path. This completes the putrefaction. The life of the ore is concentrated in Mercury.

Note

The temperature of the incubator depends on the solidity of the flask. The higher the temperature, the quicker the separation, and the greater the risk of an explosion. A good compromise would seem to be a temperature of just below 100 C (212 F).

Once the separation is made, the purification of the Philosophical Earth becomes possible without the destruction of the mineral seed. Unless it is purified, however, the Earth cannot mature the seed, which must in turn undergo a preparation necessary to begin the cycle of the Great Work.

In the next lesson, we shall examine the practical problems involved in this method, and their solutions.

Ora et Labora!

Dear Friend

THE DRY PATH - PRACTICAL ASPECTS

In the previous lesson we mentioned the fact that we had had many difficulties and even downright disappointments with the process of the Collectanea Chemica. We shall now look at how these operations begin, making sure all the precautions are taken, that can shorten its their length of time and increase or eliminate any cause for failure.

Choosing the ore:

- Try, as much as possible, to obtain a rich and little polluted ore, to avoid losses and shorten the purification time;

- Swedish galena is preferable to any other; pieces of ore with the highest density should be chosen;

- Stibnite from Quimper (Brittany, France) is the best, especially if obtainable in larger chunks. Here again the most dense pieces should be selected;

- Reduce the ore to powder. Have enough powder to fill three or four thimbles of a 500 cm³ soxhlet. Keep the powder away from damp as soon as it is produced.

First calcination

- The first reason why it might fail is that it has been poorly carried out;

- Ensure that the temperature gauge is placed in the hottest part of the oven;

- Increase the temperature very slowly, so that it affects the ore in a homogeneous way.

- Spread the ore out in thin layers on non-metallic surfaces.

- For galena: the heat should be increased very slowly up to 650 C (1202 F). Be cautious: at about a temperature of 600 C (1112 F) the arsenical vapors may be released in greater or lesser quantity depending on the ore.

- For stibnite:

- * Increase the temperature even more slowly than for the galena;
- * Stop at 450 C (842 F);
- * Watch the oven very carefully;
- * Switch off the electrical power at 400 C (752 F);
- * Observe the maximum temperature obtained;
- * Switch the power on again, intermittently, until a maximum of 450 C (842 F) has been reached.

The first circulation

With galena, the ore is crushed and loaded into the soxhlet.

With stibnite, the ore should be carefully inspected. If any shiny spots are present, this means that fusion has occurred, and one should eliminate all stibnite in that particular layer. The satisfactory stibnite is then crushed and loaded into the soxhlet.

During the leaching in the soxhlet, as the leaching medium is water, there is no risk, theoretically speaking, of losing the philosophical character. Still, in the case of stibnite, the free sulfur of the ore may produce some sulfuric acid, which may cause the ore to lose its philosophical nature. Hence, it is important to remove this sulfur. If a partial fusion of the mineral has occurred, or a loss of philosophical character due to the presence of the acid, the metal substance becomes a metallic corpse. In the same way that ingesting a putrefied corpse may cause death in the animal kingdom, so the presence of a metallic corpse during putrefaction may contaminate the entire substance.

Methods: in parallel or in sequence

Since the quantity of substance used is important, two methods are possible: one in parallel, the other in sequence, depending on the set-up we have at our disposal.

It is very important in this type of process to understand that matter "evolves", and that only substances having the same, or a close, level of evolution should ever be mixed. The tendency of mixtures is to take on the level of the least evolved matter or, at the very least, to get close to it, at least in the beginning of operations.

Our experience in this field leads us to give the following advice: start with a series of four calcinations-circulations. As a matter of fact, from that moment onwards, the loss in volume decreases somewhat, and the ore becomes an impalpable powder with little effort.

In the beginning, therefore, if one is well-equipped, a sufficient quantity of matter should be calcined to fill three or four soxhlets, given that at the end there won't be enough substance to fill one soxhlet alone. (method in parallel).

If you only own one extractor, we should first perform three or four successive leaching of the matter; as we go along, we will be left only with enough matter for three leachings, and for two leachings and finally only for one (method in sequence).

Here one comes up against the following dilemma: more material, less time-consuming - less material, more time-consuming.

Each circulation takes about 60-70 hours; however, it may be performed intermittently without any inconvenience - a rather long time in the sequence method, using a single extractor.

Sequence of calcinations:

After this first calcination it is no longer necessary to apply temperatures higher than 300-350 C (572-662 F). However, it is always a good idea to make the layers as thin as possible, and to ensure that every calcination gets between 4 and 6 hours of the maximum temperature.

Always allow the oven to cool down, without, of course, opening it before it has been cooled off completely.

Precautions in order to avoid losses of substance

The following deals especially with imported galenas, rich in ore, as well as with the stibnite from the Quimper region. We pick up again at the point where the three calcination cycles have been completed.

After the calcination, there is no point in crushing the substance, as it is easily reduced to powder with a metallic sieve, and a spoon for a pestle. Now very little substance will remain in the sieve, less than a teaspoon, in fact. This should be removed from the circuit and set aside, possibly with traces of smolten ore, if any, for a different path.

Caution: These operations should be carried out either outdoors or in a lab, using a dust mask. According to the ancient term the matter "opens up", and as the operation progresses an impalpable, ever finer dust arises.

A special precaution is to fill the bottom of the soxhlet with cotton wool, and to use a thimble made of cellulose or glass. This is important when the substance becomes powdery.

As for calcination, if the temperature remains below 300 C (572 F), dishes of glazed clay are fine to use; if you don't open the oven when hot, they will be good for ten to twenty calcinations. They should be cleaned with a green scouring pad to ensure maximum recuperation of powdered ore; the scouring pas should be dry for this purpose.

The evolution of matter

Extraction and leaching problems in the soxhlet usually appear with the third or fourth cycle. The substance is so fine a powder that it goes across the cellulose of the paper thimbles and obstructs the too finely grounded glass. There is thus in the extractor flask, the water containing the impurities, and a deposit of galena or stibnite which adheres to the sides of the flask. To solve this problem, not negligible in the sense of substance loss, follow the method described below. Supposing that one decides to carry out a series of seven cycles after the three first cycles.

After each leaching, the extraction flask should be allowed to decant (during the calcination, for example). The water is slowly poured, but not all of it, to ensure that the powdered substance remains in the flask.

By the seventh cycle, the flask is washed with soap if necessary. The cleansing water is recouped and filtered to recuperate the powder. The powder is then leached once with rain water in the soxhlet. It is mixed with some substance at the end of the third cycle, or possibly at the start of a series of seven cycles.

The substance may be set aside for further use in a second attempt (at the end of the first three cycles or at the start of the first cycle of seven), or for any other use, (such as the preparation of the regulus).

Evaluation of a successful condition of the substance

- For the first extraction of the second cycle of seven leachings-extractions, the whole should be carefully cleaned;

- Load it with demineralized water, or distilled rainwater;

- The pH of the water should be measured before each operation;

- The pH should be measured after each operation;

- Some water is taken and dry evaporated;

- If the pH of the water hasn't changed, and if no solid residue remains after the evaporation of the water, the substance is considered purified, and one may proceed with the "fermentation". Otherwise, the leachings-calcinations should be continued.

Precautions for the "fermentation"

From this time on, the ore is rapidly dried, preferably under vacuum or in an oven. It should be spread out in very thin layers and put to a temperature of 110 C (230 F) maximum.

The ore is then placed into a solid flask with a high neck. If it closes with grindings, a teflon grinding is essential, as is a stopper which holds very well. The radical moisture will arise, circulate and condense in the form of a metallic looking water, dense as mercury.

Caution: Should the stopper open, the circulation will stop and no longer continue. Nothing should be touched before all the radical moisture has been extracted.

For the remaining processes, it is advisable to have a sand-bath or a flask heater protected by a sheath of kaolin clay which has been adapted/moulded to the putrefaction flask for distillation.

Note: The metallic water in this process has the same appearance as that obtained by the saline dissolution of the ores. The time involved is the same, but the quantities are greater in the *Collectanea Chemica*.

Ora et Labora!

Dear Friend,

As soon as you have succeeded in creating the metallic seed in the egg, several problems arise, and in particular the following two:

- 1) the recuperation of the seed;
- 2) the multiplication of the seed.

If there is plenty of seed, which is rare, then recouping it presents no problem.

If, as is frequently the case however, at least in the first attempts, there is but little of the seed, then direct recuperation or recuperation through distillation becomes impossible. The only way is to increase the seed in vitro, which entails using highly purified common mercury.

Obtaining very pure mercury is expensive, to say the least. However, one may use recuperated mercury (ex. from batteries or contactors) instead, although it has the inconvenience of containing many impurities, or some mercury usually stretched with dissolved lead or tin (from flea-markets).

In fact, there are only two efficient ways of purifying mercury: by electrolysis of its salts, or by distillation.

Electrolysis is a very delicate process, and not one performable by the student familiar with alchemy.

Distillation is efficient but dangerous, requiring numerous precautions, especially as mercury boils at 360 C (680 F) and releases highly dangerous vapors.

We have put together a process which is very safe, provided that all the precautions indicated are followed very carefully. For this, let us examine the next figure.

The volume of distillation flask (b) is between 50 and 100 cm³.

If it is made of pyrex, it **must be heated in a sand-bath**;

If made of quartz, it may be heated with a bunsen burner (or another type).

Mercurial distillations should not be attempted in large quantities. In addition, the flask should only be filled up to a third or half of its volume. If the mercury is loaded after setting up the apparatus, you should have a funnel with an elbowed tube, long enough to easily exceed the lateral opening of the distillation flask.

The stopper (bs) should be made of pyrex glass if the flask is of pyrex, and of silicon if the flask is of quartz; in both cases, using teflon will ensure water and airtightness, and the stopper should be kept in place tightly by a metal wire.

The lateral outlet is connected to a sphere (s) by a teflon tube squeezed by two metal collars.

The volume of the sphere should be greater than the volume of water (e) contained in the tube (t). If the sphere does not have a long enough tube at its base, a tube should be added, again made of teflon, and its far end should be tapered in such a way that the bubbles of mercury steam remain small in size. The length of this tube should be such that its base is not reachable by the distilled mercury.

The role of the sphere is to prevent the water from rising up in the apparatus and reaching the hot mercury, in case it cools rapidly at the end of distillation.

To make sure that absolutely no mercury escapes, small pieces of gold leaf should be placed in the critical areas, such as the stopper (bs) or the teflon connections of the sphere. The gold will whiten very rapidly if there is any mercurial vapor.

The water from the steam condensation tube must be distilled water, or possibly de-ionized water.

Since these manipulations require many precautions, if one is working indoors, it is very wise to have a bowl handy containing an ammoniac solution. However, it is far better to work outdoors, or underneath an extraction hood.

Cleaning is complex, especially after the first distillations. The glass surfaces should be carefully cleaned of grease to prevent the small mercury bubbles from sticking. A good amount of the mercury may be recouped by washing it with de-ionized water, which should be decanted.

After distillation, there is always the risk of having tin, lead, copper, etc. deposit on the glass. In this case, a cleaning with nitric acid is necessary, which is set to digest. Mercury is only satisfactory after its third distillation.

If the "spirit" has been prepared from the deliquium of antimony butter, and if a little mercury is poured into this spirit, one should read the text on metallic medicine by *Sieur de la Violette*, whose symbolic name is *Of the Oak (Quercetanus)*.

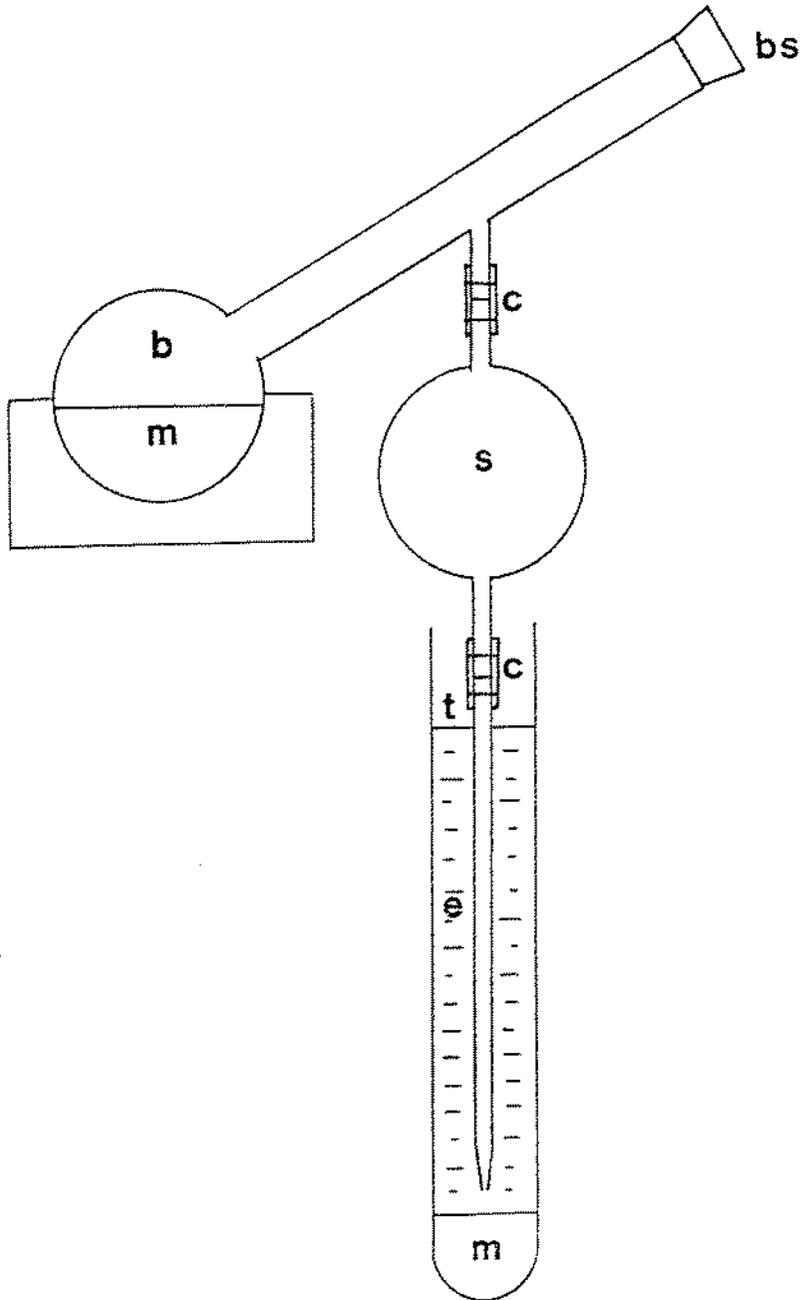
Note: It is important to use only distilled or de-ionised water, as these practically do not dissolve mercury, which is not the case with water containing minerals.

Ora et Labora!

Figure enclosed:

The distillation of mercury

DISTILLATION OF THE MERCURY



- b** : flask
- m** : mercury
- bs** : stopper
- c** : collars
- s** : sphere
- t** : tube
- e** : water

Dear Friend,

THE SUBTLE DISTILLATIONS

We must be careful because a distillation may release the "volatile part", i.e. the alchemical life and in this case, all work is lost.

In Mineral Lesson # 60, we have presented the result of our experiments with regards to the issue of distilling common mercury. This distillation should be done:

- first in order to purify the mercury, either in view of multiplying the seed, or in order to produce the projection powder;

- secondly, because it is a very good lesson that prepares you for the distillation of rather similar products, products that are the fruit of a long work, and which should not be lost.

However if you are not used to this kind of distillation, it is best to start these experiments outside, in the open, which is easy because you do not need then to deal with the issue of the water circulation. It is a good thing - and a safer one - to put gold leaves in all areas where a leak might occur. The whitening of the gold, a very quick process, is a good leak detector. Only after having performed several distillations without leak, can you operate inside a room, however it must be well ventilated or better - and safer - operate under a fume hood.

We will face a new problem when dealing with the seed, no matter what its origin is - whether metal dissolution (Philalethes' or Lapidus' method), or self-dissolution (method of the Collectanea Chemica). During the vapor phase, the "volatile spirit", the metallic life, will be released and it will immediately return to the original chaos unless the distillation device is absolutely air tight. In these paths, given the noxiousness of the vapors, this problem is one very important to be solved.

The basic principle is that the condensing system must always be capable of driving off more calories than the distillation flask heater brings in. Therefore, in addition to the condenser, the receiving flask must be seriously cooled down

with ice mixed with an ordinary salt solution for instance.

Even with an excellent cooling system, a precaution is mandatory: install a stopper that would be strongly expelled out of the system, before everything should explode, and control the force of its expulsion with a spring or an elastic. But above all be patient, ceaselessly watch the operation and maintain the heat at the lowest limit needed for distillation.

We can recognize, in the methods considered above, an image of the vegetable process, i.e., as soon as the "life of the kingdom" has been separated from the earth - the salt - the later can be purified by a strong heat; which was not possible before the separation. The sequence of cohobations and separations will allow for the purification of the subtle elements, since the impurities are absorbed by the salt and driven out of the salt by heat.

Be careful, extracting the life out of the salt is now easy, which was not the case before the first separation. But once more, be careful the separation can occur again but only through a distillation in an airtight circuit otherwise the "volatile life" is lost.

In fact, distilling in a retort, entirely covered with hot sand, makes this process far easier: in this case, the vapors do not have to "rise" and they cannot condense on the hot "sky" of the retort. The air tightness and the safety are then provided by the cooling of the receiving flask and by the air tightness and elasticity of the lut joining the retort to the flask.

This lesson may seem short but it is the basis for some efficient practical work and what has been clearly expressed is the result of long strenuous readings of abstruse texts.

Ora et Labora!

Dear Friend,

We are progressively reaching the end of these Mineral lessons to which, like to the other LPN material, we wanted to give a time limit.

The methods we last described require a certain time for their realization and we will then take this opportunity to explain three issues of which we have spoken little until now, but that we consider very important:

- 1) The philosophy of the lessons and how it applies in choosing a method;
- 2) Astrology and alchemy;
- 3) Initiation in alchemy, the most important point.

I. PHILOSOPHY OF THE LESSONS

It is based on the following principle: alchemy's principal goal is the Initiation of the individual. However, there is not one and only type of Initiation because, in fact, the way it operates depends on each individual. As a matter of fact, the involutory process was appropriate and personal for each one of us and therefore we can say that for each being the series of involutory experiments has been typically his own and different from that of every one else. Thus, all the beings who are reaching the Nadir, the end of involution, while they are equal at that level, are different in their experience. For this reason, each one has to search by himself for the process that best suits him. Some alchemists have said that the stone which suits each one is the stone made by the method that each one has found on his own. That is why we provide in these lessons several methods whose different phases can be inserted one in the other. For example, we can extract the red oil of the acetate of antimony for the method of the four fires of Paracelsus and Bacon. Other ideas along this line of working will be presented in the paragraph about Alchemical Initiations.

II. ASTROLOGY AND ALCHEMY

While in the Spagyrics lessons some information was given on lunar astrology which is appropriate for experimentation on plant materials, very little was mentioned on astrology in the metallic realm.

If we use classical astrology, several theories are available that indicate the favorable operation time, the most experienced one being that of the alchemist Stahl. But his theory introduces an intra-mercurial planet, Vulcan, whose ephemerides are difficult to come by. Another drawback of classical astrology, a major drawback for alchemy, is the issue of time. In fact, a favorable configuration for as slow a planet as Saturn, for instance, may require years. Consequently, in alchemy it is best to use the energies of the planetary geniuses, whose weekly cycles are certain and regular. Saturday morning offers good conditions for work, which is very compatible with the modern way of life.

To shed light on what we have just said, let's recall some basics of qabalistic knowledge, of which 4 important elements should be known:

- 1) The direction of energy circulation;
- 2) The correspondence between worlds and elements;
- 3) The use of the energy levels;
- 4) The time of influence of the energies.

1. The direction of energy circulation (see Figure # 1)

The animating energy - which is life - comes from Kether and follows as a metallic seed (which is its most important aspect for us) the sequence of numbers. We have: lead - tin - iron - gold - copper - mercury - silver - antimony, about which we can draw a conclusion and useful remarks.

Life begins with animating the metallic seed at the level of Saturn, that is why the Ancients used to call it Medium Coeli and said that its mercury is cold and crude (as opposed to ripe).

When it reaches Jupiter - tin - the energy ripens and, while animating the seed of tin, it renders it able to dissolve all the six other metals.

When it reaches Mars - iron - the energy matures the seed further, and because some solar energy is present in the iron, the seed of iron becomes the seed of gold. Thus is explained the

need to use some iron in the processes regarding the regulus of antimony.

When it reaches the Sun - gold - the seed of gold gives birth to gold, a metal which, like the Sun, is the king of this system. The seed ripens but if it is not used and becomes partly exhausted it moves on to Venus.

Upon reaching Venus - copper - the seed still contains some of the gold's properties, and in that it justifies the use of copper in some of the ways leading to the red stage of the Work.

Upon reaching Mercury - mercury - the energy causes an important mutation in the seed: from a male, red metal, the energy goes through the state of androgynous seed in a white metal. In addition, the liquid state of mercury makes it particularly sensitive to planetary influences.

When reaching the Moon - silver - the lowest phase of energy before its passage towards antimony, the seed takes on a strongly female appearance.

On earth, antimony is the receptacle of the energy which has gone through all planetary areas, that is why Basil Valentine affirms that antimony contains the "colors" of the seven planets (the seven seeds in potential).

2. Correspondence between worlds and elements

The Qabala divides the ten levels just mentioned into four worlds and attribute to each of them an element, in other words one element will be the strongest although the other three are also present. Therefore, at each level, we have four levels of energy, or a total of 40 shades of energies, each having an invocational name.

On Figure # 2, the name of the strongest element for each level is written in bold. In addition, at the bottom of the page we specified how to read for each level:

two names giving the principle - Sulfur
two names giving the principle - Mercury
two names giving the principle - Salt

3. Use of the energy levels

Never try to use one single level of energy; always invoke all the higher levels first. For example, if we operate on iron we must invoke 1 - 2 - 3 - 4 and then 5.

Never utter one single name, always use names by twos. For

example:

- Should you wish to reinforce the Sulfur of iron, we need to utter the two names at the left of the figure of the following levels: 1 - 2 - 3 - 4 - 5;

- Should we wish to reinforce the Mercury of lead, we need to utter the two names in the center of the figure for the following levels: 1 - 2 - 3;

- Should we want to reinforce the Salt of the Earth, or Salt of antimony, we must say the two names on the right of the figure for the following levels: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10.

How to pronounce the names:

The names must be "vibrated", i.e., we must feel the vibration in our entire body particularly in the area concerned by the level:

- 1 - 2 - 3 in the head
- 4 - 5 - 6 in the chest
- 7 - 8 - 9 in the belly
- 10 must be vibrated throughout the entire body.

4. Hours of planetary influence

As levels 1 and 2 are "out of time" they are not affected by time.

The Qabala says that the seven planetary geniuses, i.e. the rulers of the laws, symbolized by the seven planets, have each in turn and for one solar hour a dominant influence. The sequence of dominance is the following: Saturn - Jupiter - Mars - the Sun - Venus - Mercury - the Moon. The Qabala also states that the hours of dominance begin at sunrise, the first dominant genius being that of the day, i.e. Venus for Friday, Saturn for Saturday, the Sun for Sunday and so on...

Example of use. To reinforce the Sulfur of iron:

- Saturday, before sunrise, vibrate the names for Fire and Air of 1 plus those of Fire and Air of 2;
- Then from sunrise on, vibrate the names for Fire and Air of 3;
- On the next solar hour vibrate the names for Fire and Air of 4;
- And still one hour solar later, vibrate the names for Fire

and Air of 5.

To multiply the metallic seed, we would operate during the same hours, however, we would use the names for Air and Water until 8 included.

With this method, we can influence one of the principles: Sulfur, Mercury or Salt or two, or three of them, but we cannot influence one element alone without taking great risks.

To influence one single element at a specific planetary level, rituals such the Hexagram or the Greater Pentagram must be used but these operations require a rather advanced training in Qabala.

Planetary influence and antimony:

Antimony is an exception in the metallic realm; we can use the previously described methods in two ways:

- by using level 10, the level of the entire antimony, i.e. by using the seven planetary aspects of its seed;

- or at an intermediary level, by reinforcing one of the "colors" of the antimony for instance 5, to increase its affinity for the Sulfur of Mars.

We have noticed with experience that it is easier to extract the red oil of antimony when the weather is clear, and the sun above the horizon.

As for the deliquescence of the butter or of the salts of antimony, they are best done between the winter and the summer solstices, and better still during the second part of this time period. The weather should not be damp (no mist or fog), otherwise algaroth could form.

III. ALCHEMICAL INITIATION

Personal initiation and successively realizing the methods described are mutually linked in alchemy. No one transmutes any thing who has not already transmuted himself said Paracelsus.

Alchemical initiation entails two important stages, the "white" and the "red" stage. When alchemists mention "our silver, our Moon", we must understand them to mean that which qabalists call Yesod.

In Mineral Lesson # 30, we described the method to direct the white stage of the work toward the metal, toward Initiation or toward medicine. Make sure that the preparation of the blood

of the adept (see Mineral Lesson # 30) is necessary for the Initiation to last, because a blood that has not been purified closes down the centers that have been opened through initiation.

There are three white and three red medicines.

The three white medicines open levels 9 - 8 - 7 - (the lunar world). As long as this is not complete, the red medicine is not useful from the point of view of initiation and it is furthermore dangerous from other standpoints.

The red medicine opens levels 6 - 5 - 4 - (the solar world) and consequently also opens opportunities towards a higher level.

The white medicine consciously suppresses the veil of birth and death (the separation between levels 9 and 10).

The red medicine suppresses the veil of the second death (Paroketh, the veil separating level 6 from 7).

And above there is the passage of the Abyss, without return; it is said to be the result of the Stone at the state of a crystal.

Ora et Labora!

Enclosed figures:

- # 1 Circulation of the planetary energy.
- # 2 The 40 invocations

Figure # 1

CIRCULATION OF THE PLANETARY ENERGY

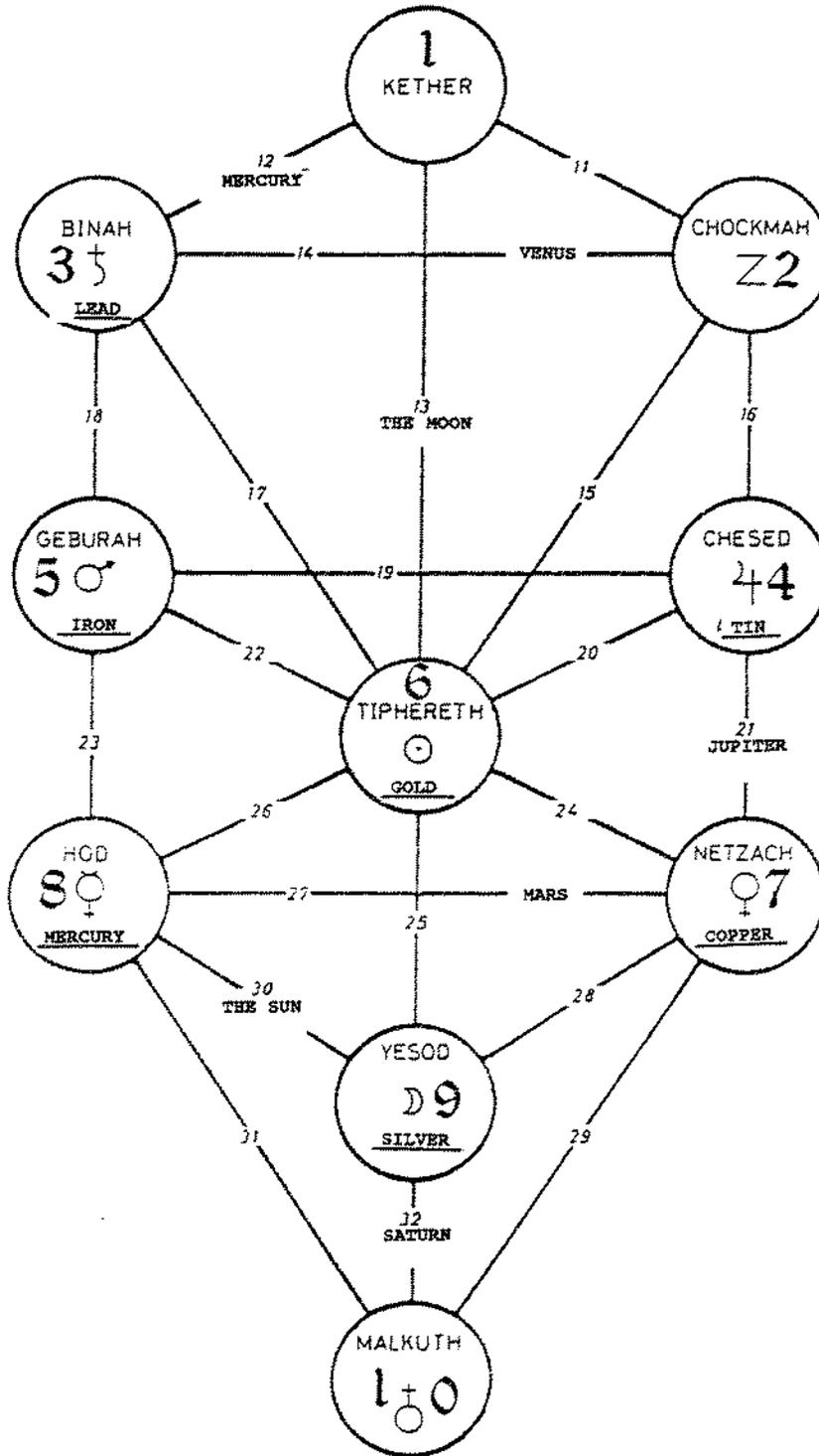
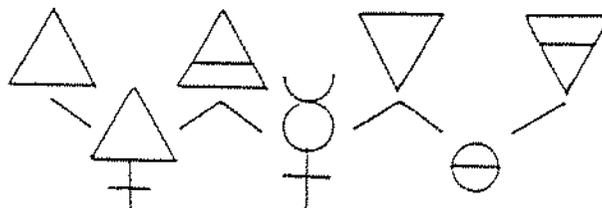


Figure # 2

THE 40 INVOCATIONS

	FIRE	AIR	WATER	EARTH
1	EHIEH	METATRON	CHAYOTH	RASHIT HA GILGALIM
2	YAH	RAZIEL	AUPHANIM	MAZLOTH
3	ELOHIM JEHOVAH	TZAPHKIEL	ARALIM	SHABBATHAI
4	EL	TZADQIEL	CHASHMALIM	TZEDEK
5	ELOHIM GIBOR	KAMAEI	SERAPHIM	MADIM
6	JEHOVA ELOAH-VA- DAAT	RAHAEL	MELEKIM	SHEMESH
7	JEHOVA TZABAOth	HANIEL	ELOHIM	NOGAH
8	ELOHIM TZABAOth	MICHAEL	BENI ELOHIM	KOKAB
9	SHADDAI EL CHAI	GABRIEL	KERUBIM	LEVANAH
10	ADONAI HA-ARETZ	SANDALPHON	ASHIM	OLAM YESODOTH



SULFUR MERCURY SALT

Dear Friend,

The following question has often been asked: "If we were to dilute plant elixirs in the homeopathic way, would that increase their power and would the healing power of these dilutions be reversed as a result?"

This kind of question leads us to believe that the theory of alchemical processes has not been properly understood.

T H E O R Y O F S P A G Y R I C S

(Second Level)

Alchemists consider involution to "touch" everything on earth, and they state that during involution all the "mixtures" on the surface of the earth have been contaminated if not "disharmonized".

As a reminder a "mixture" must include the three principles: Sulfur, Mercury and Salt, which in turn result from the combination of the four elements, i.e., Fire-Air for Sulfur, Air-Water for Mercury, Water-Earth for the Salt. We have here two life principles: Fire and Air and two matter principles: Water and Earth.

The result of involution (the Fall from Grace in all religions) is that all mixtures are dominated by matter principles and therefore, the Fire and Air principles can no longer act properly.

An operation of spagyrics is an "initiation" of the mixture which is to repair the negative results of involution and to give back their dominance to the elements of life.

There are two purifying elements, each with its specific role:

- the element Fire to purify the elements of the spiritual domain;

- the element Water to purify the elements of the material domain.

Before we begin our operations, the situation of a mixture is the following: the Sulfur and the Mercury are still united to the Salt only because they are of opposite polarities. We recognize the general law of nature according to which opposites attract each other (male-female, positive-negative, north-south in a magnet, etc.). In alchemy, this attraction, which ensures stability to the mixtures is often implicitly quoted in texts by the name of "steel" and "magnet"; the steel being the spiritual, positive element, and the magnet, the material, negative element.

In our "involved and fallen" mixture, the Sulfur-Mercury principles are weakened by the impurities and consequently, are prisoners from the Salt; on the other hand, the impurities do not hinder the Salt. In the mixture, the material influence predominates when the spiritual influence, Sulfur and Mercury, should actually predominate.

To remedy this fact, we must purify the mixture but we cannot do it directly. Water has but little influence on the mixture and Fire would destroy its mercurial life; therefore we need to separate the principles in order to be able to purify each of them without risks.

As mercurial life is the most fragile principle, it should be extracted first. This operation is possible only if you have a liquid with an attractive power sufficient to extract the life of the Salt. In every kingdom, there is such a liquid, which has consequently been called the Mercury of the kingdom where it can operate (Messenger of the Gods). The Mercury of the plant kingdom is alcohol, adequately prepared, which moreover extracts both the Sulfur and the Mercury of the mixture. As the Salt becomes a dead body ("caput mortuum"), the mixture can, without drawbacks, confront the fire and the water of purification. To make the mechanism clear, we will remind you of the following points.

In a mixture, the plant or animal life is possible only if it contains carbon. The entire plant and animal chemistry - today called organic chemistry - is based on the presence and the properties of carbon. This chemistry states that carbon has four electrons on its outer shell. Apparently this is one feature of the bodies that can animate with life the salt of plant or animal mixtures. In this domain, recently, chemistry has succeeded in creating bodies having properties close to those of organic bodies by replacing carbon by silica, a body that also has four electrons on its outer shell. Let us remark, on another level, that tin and lead are at the top of the columns of the Tree of Life; these metals also have four electrons on their outer shell.

The Mercury of the wet ways, in the plant and mineral kingdoms always contains carbon - an element with four electrons which allows life to act upon matter - and hydrogen, the first

element produced by Fire.

Let's resume our subject. If we want to purify plant Salt from all its impurities, we must take away from it the carbon and to a lesser degree, the silica, another element with four outer electrons. Thus deprived of all vital energy whether good or contaminated, the Salt will be perfectly pure.

The carbon is eliminated through calcination (element Fire). And, as the silica is insoluble, the separation is done through water: dissolution of the salt, filtering which eliminates the silica and coagulation which recuperates the Salt. The latter wins back a tremendous attraction power: its emptiness gives it a hunger for the principles of life, Mercury and Sulfur, contained in the tincture. It will then satiate itself with the good or bad energies, but only the energies in harmony with it will fixate themselves on it. A second purification through Fire will eliminate any non harmonious energies. Progressively, as you repeat the process, the tincture becomes purified and the mixture finds its original positive part. As a matter of fact, its properties are now reversed and even though its negative structure made it toxic in the first place, its new positive structure will render it beneficial and healing. The energies of Sulfur and Mercury now predominate.

Note that in this process the mercurial life of the tincture should be spared by recuperating it as much and as completely as possible after each circulation and before each purification. If we have separated the Mercury and the Sulfur in the tincture, we can modify the process by purifying the Sulfur following the way described above, and by reincorporating the purified Mercury through distillations and imbibitions. This mechanism works in the plant kingdom as well as in the mineral kingdom. The same process is implied in the acuation or sharpening of the Mercury or of the metallic seed by cohobation and digestion on the earth, and then distillation.

To resume our introduction, let's say that homeopathy provokes the reversal of the effects of the mixture in the body of the patient by the elimination of the physical support and by the transfer of these energies into the solvent.

In alchemy-spagyrics, there is the same reversal due to the elimination not of the physical support but of the impure elements. It is therefore logical to conclude that the healing power of the alchemical elixir is of the same nature as the one obtained through the homeopathic dilutions of the same mixtures. However, in the spagyric elixir, the energies will be more powerful than in the homeopathic dilution because they have been powerfully attracted by the Salt. On the other hand, we must add that repeated operations of cohobation-distillation exalt the energies and that there is, in the results obtained, a certain

analogy between dilution and circulation-cohabitation in this exaltation.

Ora et Labora!

Dear Friend,

Although we are reaching Mineral Lesson # 64, it seems important to remind you of certain significant principles in the alchemical work, and on the other hand, to stress and specify their complementary effects or influences. Therefore this lesson deals with miscellaneous points.

We cannot in the practical part of our work operate like a chemist; however some knowledge of chemistry is essential, if only for operational safety.

We cannot study alchemical texts as we study a physics or mathematics handbook. While there is some logic in alchemical texts, studying them implies taking their initiatory side into account, along with their symbolical language and further the way they have been ciphered.

Some schools say they study theory before practice. There is some relative truth in this way of proceeding. In fact, certain alchemical texts can only be decoded when well supported with practical experimentation: therefore alternate study and practice, as one sheds light on the other. On the other hand, the element of initiation requires some work and not exclusively a study from the intellectual domain; intellectual study is somehow the seed that must sprout and transmute itself inside of us. In fact, in alchemy, as in any true initiatory path everything moves slowly but surely toward unity. So, if any artificial walls of knowledge are needed in order to simplify explanations, these walls must progressively become clear and finally disappear.

OPERATION-OPERATOR and LABORATORY-ORATORY

We have already mentioned that the operator reacts to and on the operation, and most importantly the operation has a reaction on the operator. This implies several things with regards to laboratory work.

This symmetry of reaction is stronger in the mineral than in the vegetable kingdom: therefore it will become more and more demanding as we advance further in the experiment. We can also say that the laboratory must progressively become more of an

oratory, or that true alchemical work only occurs when we are alone in the laboratory or only in the presence of the alchemical couple.

The time-consuming circulation and digestion operations of course cannot entail the uninterrupted presence of the alchemist. Starting these operations however must be the subject of a meditation-communion. The operator must strive to identify innerly with nature through the channel of the matter being operated upon. A preparation is necessary in order for this identification to be sensed. This is possible through meditation, through qabalistic operations, or by using quite a different system that enables us to modify our inner energies in the direction we wished for. When the operator has reached the necessary state to become efficient in the laboratory, a second problem arises, which is not easy to solve, and it is:

THE PHILOSOPHICAL STATE OF MATTER (or of THE MIXTURE)

We have said in the Spagyrics Lessons that the philosophical state is satisfactory when the three principles Mercury, Sulfur and Salt were present. While this condition is sufficient in Spagyrics, it is not so in the mineral and metallic kingdom. The three principles may be present yet the philosophical state is not achieved, which is not a frequent occurrence but is possible.

Alchemy states that the generative process of mixtures is analogous, if not identical in the three kingdoms. In fact, in the plant kingdom (the kingdom were the mechanics of it is most obvious) we have the seed, the water and the earth. If the earth has been properly prepared, sufficiently soaked with water, the seed can be planted in it. But generation will occur, in other words the seed will be multiplied only if it is still alive, i.e., if it still possesses its invisible germinative power and then, if the conditions of temperature (Fire) are proper.

A body is truly philosophical only when it has in itself the germinative power of its kingdom. Wheat is philosophical; once seeded it will multiply. "Seeded bread" won't yield anything, therefore it is not philosophical.

In the mineral realm, an ore is philosophical only if we succeed in extracting its mineral seed and water, in other words the humid radical; only the white earth should be left. If such is not the case with our matter, we must find an efficient method to revivify our mixture and give it back its life along with its germinative power in its own kingdom.

In our Spagyrics Lessons on the Archeus and the Gur, we have said that the universal seed arrives on earth through the channel

of the air of the atmosphere. Upon arriving the seed is undetermined, in other words it does not belong to a kingdom in particular. It can as a matter of fact remain in the air or be incorporated in rainwater. Water does not belong to any kingdom but it is by nature the mixture of life, so that the seed contained in water is still not determined; this is why the fecundation of the Gur by the Archeus can yield a result in the three kingdoms.

Therefore there are several solutions to reconstitute the germinative power to the mixture:

- a) - Collect rainwater;
- Prepare the Archeus according to the kingdom of the mixture;
- Circulate the mixture and the Archeus or even simply imbibe the earth of the mixture with the Archeus.
- b) - Use what the Ancients used to call magnets, i.e., deliquescent salts which, by absorbing the humidity of the air, are being charged in seed. In that case, however, the seed will come from a determined realm according to the nature of the magnet.
- The deliquescence of potassium carbonate (calcined tartar salt) will yield a vegetable seed quite useful in preparations made from dry plants.
- The deliquescence of the antimony butter gives a seed of the metallic realm.
- To set the double salt of dissolution described above to deliquescence, i.e., the dew salt - ammonium nitrate - and the sal ammoniac - the ammonium chloride - will philosophically "shape up" the martial regulus of antimony dissolved by this double salt. We can produce the double dissolution of the double salt with a correctly prepared Archeus.

Now we will explain:

**THE DIFFERENCE BETWEEN THE PHILOSOPHICAL STATE
AND THE CHARGED MIXTURE**

A mixture is said to be charged when its elementary, subtle energies: Fire, Air, Water, and Earth have been reinforced either separately, by twos, threes or fours at a time. Charging a

mixture does not always mean that the philosophical state has been reestablished. The interesting thing about charging a mixture is that it will radiate its excess energies and thus it will be beneficial to its environment if its energies correspond to the ones necessary for its environment.

The most practical way of charging a mixture is to use, through Qabala, its corresponding planetary genius and to then reinforce the element we wish to see radiate. If we use a "magnet" to directly draw energy from air, you must remember that the energy transfer from magnet to mixture only happens in the liquid state.

MATTER CONTAMINATION

Let's consider the reasons why the work should be performed alone or by a couple in the laboratory. Every human is "charged" and therefore radiates an harmonious (or not) energy into his environment. If someone alien to our work happens to be in the laboratory when the mixture is in the liquid state, it could become charged with the radiation of that person - i.e., a radiation other than that of the operator. There is a risk of troubles and failure. We have already mentioned that distillations of metallic acetates fail when several people are present. During this operation, there is a sequence of passages from the solid to the liquid state and vice-versa, and the contamination is probably occurring when the matter is in the liquid state.

We hope that this information will help you draw a parallel between laboratory and oratory. In this respect, we suggest that you begin each work session by lighting a candle and by meditating for a few minutes on the symbol of our own inner light that we wish to awaken within us.

ALCHEMICAL KNOWLEDGE

As soon as we touch the initiation element in knowledge, which is the case with alchemy, a simple and rational analysis no longer suffices. A knowledge of another category, a more subtle knowledge is necessary. Perhaps is this why the Ancients had called alchemy the "Royal art". The Art contains both technical knowledge and the gift; the word gift could also be translated as "inner knowledge".

So, when we study ancient writings, we should definitely not take them literally but strive to understand their inner meaning through intuition and by taking the symbols in, particularly that of the seven metals, of the zodiacal signs and that of the various salts not included in the two previous categories.

An example of a simplified translation of the three ways of Urbigerus, we have: earth, humid radical, seed.

- Path # 1: a time-consuming path, we do not destroy any of the three elements, but they are separated through digestion;

- Paths # 2 and # 3: we agree to destroy the seed to accelerate the earth, humid radical preparation; there are then two solutions to recoup the seed:

- 1) recoup it in the scoria of the preparation of the antimony;
- 2) recoup it in "our gold";

To reach the unitary state, which is the goal of all initiatory paths, do not lose sight of the three-phase theory-practice-Knowledge and keep in mind the fact that life and evolution are always present in the three realms and that the alchemical processes are similar to those of nature.

Ora et Labora!

Dear Friend,

PURIFICATION OF THE ANTIMONY
(without any bad odors or noxious gas)

Dissolution of the mineral

The first operation is the dissolution of the antimony ore in a soda solution whose proportions may vary according to the quality of the ore.

- For each part of ore, put about a half part of soda and about 10 parts of demineralized water (proportions for the ore of Brittany in France);

- Always operate when cold but shake constantly: place the mixture in a flask and stir slowly (4 to 5 turn per minute), and slant the whole at 45 °;

- Filter the solution twice through cotton wool;

- Be careful to keep the solution in a closed flask if it is not used right away, because it is sensitive to the carbon dioxide of the air and is also very dangerous for your eyes.

Setting up the apparatus (see enclosed figure):

- Fill the flask # 4 with an ammonia solution up to the mark;

- In no event should the liquid reach the extremities of the shorter tubes;

- The long tube of receiving flask # 4 is tapered to keep gas bubbles small;

- Pour hydrochloric acid into flask # 5 up to 1 cm below the extremity of the tapered tube.

First operation:

Filling the apparatus and precipitating the "Kermes"

- Note: we could not do a true representation of tube # 9 on the figure (it is actually longer); you need a length of about one meter for this tube;

- Open taps # 7 and # 8;

- Pour the soda solution slowly, making sure its level remains half way between the extremities of tubes # 10 and # 9;

- Pour some demineralized water to eliminate the traces of the soda solution in the funnel and above tap # 7;

- Close taps # 7 and # 8;

- Fill # 6 with acetic acid and open tap # 7; as soon as the acid has flown through, close it off again;

- The acid drives the air out of flask # 1, which provokes some air bubbling in # 4. But the gas bubbling continues as long as the acid acts on the solution. Plan a flexible connection for tube # 9 and for the tube joining flask # 1 to receiving flask # 2 so you can shake flask # 1 slightly to distribute the action of the acid;

- Again fill # 6 with acetic acid, then open tap # 7, and close it off again as soon as the acid has flown through. When shaking the flask no longer causes a gas release, stop pouring acid.

Functioning of the first operation:

The action of the acid on the soda-antimony solution causes noxious gas to be released along with pretty smelly and powerful odors. These gas are led through tube # 10 into flask # 2 and, from there into bubbling containers # 3 and # 4. They are then neutralized and from # 4 on, only a slight scent of ammonia is released.

In flask # 5, the tapered tube ends about 1 cm to 1/2 cm above the hydrochloric acid. The residual ammoniac vapors are transformed into a white smoke which condenses in the form of sal ammoniac.

Second operation: cleaning the precipitate

The orange precipitate of flask # 1 contains a complex mixture of antimony sulfide and oxisulfide, and soda acetate.

The latter which is water soluble should be eliminated. If you are not cautious, this operation causes strong and bad odors.

In flask # 1, the base of tube # 10 is blocked by cotton wool. To avoid it to be plugged up, let the cotton wool spread up to the outside of the tube. The function of the cotton wool is to filter the leaching water without allowing the "kermes" to pass through.

- Fill # 6 with filtered rain water, otherwise with ordinary water, then open flask # 7. The water level rises in flask # 1 until it reaches the level of the base of tube # 10. If tube # 9 is long enough the filtering occurs rather quickly, as the pressure is not negligible;

- Keep pouring water into # 6. It will pour over into flask # 2. Stop as soon as the water level in # 2 is getting close to the base of the short tubes;

- At that moment, plug a water pump to the end of # 11 and cover tap # 8. The water of # 2 mixes with the water of the pump, and consequently very little odor escapes; in addition, the water is quickly evacuated;

- When # 2 is empty, close # 8 again, and again pour water into # 6. You can, during the course of the draining of # 2, insert a flask between # 11 and the water pump. The density of the collected water gives information about the progress of the operation, which will be completed in theory when the density reaches 1;

- Proceed now with an additional leaching with distilled water or demineralized water.

Notes and precautions at that stage of the process

- The solution plus the "kermes" should be odorless or at least smelling bearably;

- After decanting, the "kermes" is dried out, but do not let the temperature reach 100 C;

- If a white powder appears after a few days on the dried "kermes", then the water leaching was not enough;

- If in # 4 or # 3 long crystals appear on the glass, the ammonia must be changed.

Use of this process

1 - It prepares the "kermes" for the way of the acetates and for the red oil of antimony (there is no longer any bad odor);

2 - It eliminates the scoria of the ore for fusion with the regulus;

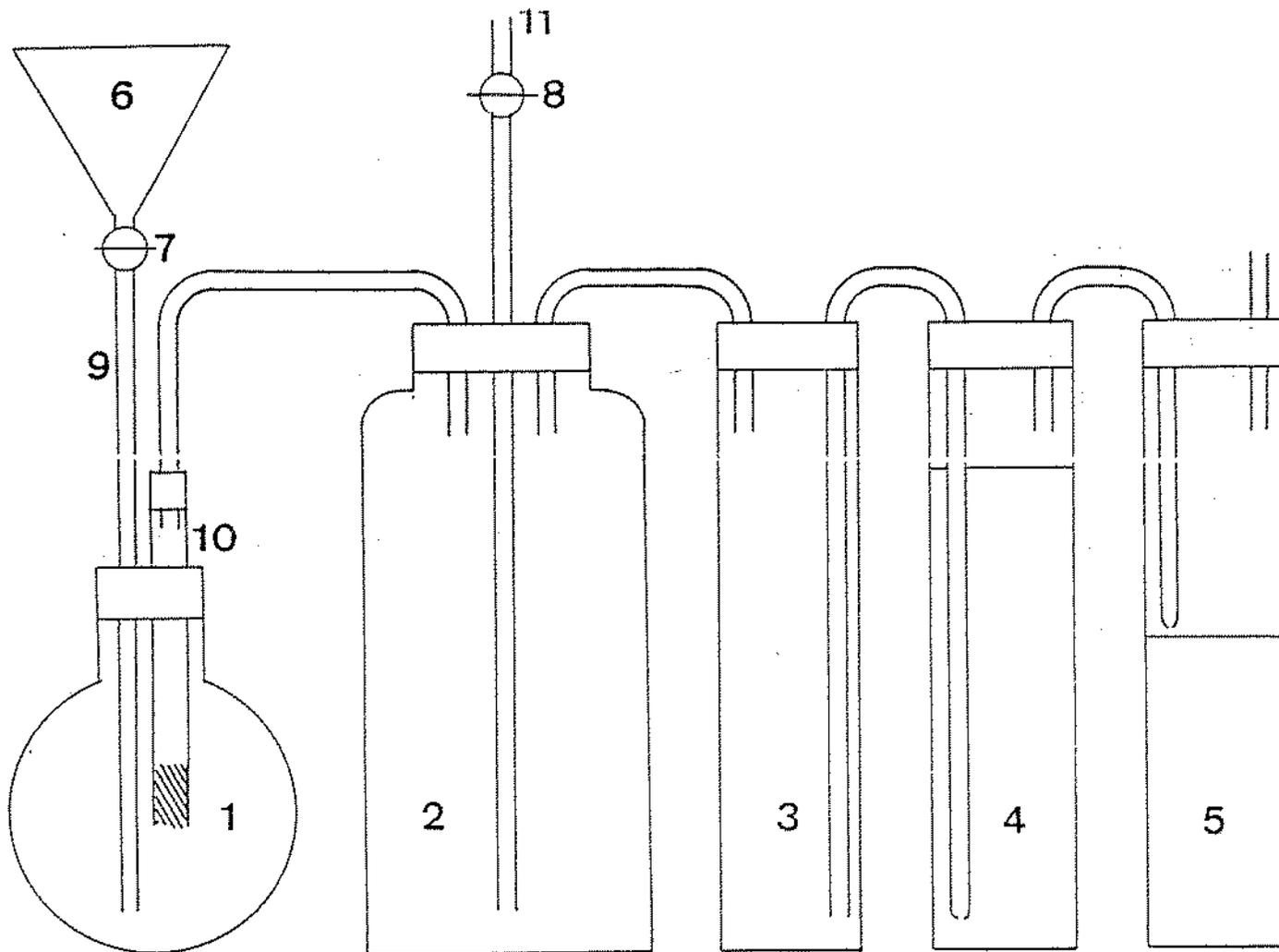
3 - In this "kermes" an important part of the "poisons" and "impurities" has been eliminated. Thus this process dramatically shortens the preparations for the system of the Collectanea Chemica. As a matter of fact, arsenic, arsenic sulfide and sulfur are not soluble in the soda solution and are eliminated during the filtering of the solution.

Ora et Labora!

Enclosed figure:

- Producing the "kermes" without odors.

PRODUCING THE "KERMES" WITHOUT ODORS



Dear Friend,

The subject we deal with here may surprise some of you, but we think it useful to stress the identities of the vegetable and of the mineral because apparently some of you lost sight of our ascending toward the unity of knowledge.

Particularly, we think that Isaac Hollandus' Opus Vegetalis has a double meaning but that both are correct. Thus, the part of the treatise concerning the stone of celandine belongs as much to the plant as to the mineral kingdom, which explains that the process leads to a "red stone".

You probably know that our class is the result of several individuals' work and that the work presented here is in fact the result of the work of one of the members of the Research Group of the association.

The study of this lesson has two parts:

1) What we have practically achieved to help resolve problems due to the use of fresh plants;

2) The deciphering into clear language, by one of the association's member, of the text the "Celandine Stone" by Hollandus.

I - Practical Issues Regarding Fresh Plants

Operations on plants are difficult at the calcination stage, for two reasons:

- a) they release bad odors;
- b) they lose elements useful to obtain the inter-kingdom stone.

The method that we are to described enables us to recoup all the useful elements of the fresh plant. We feel it may also be interesting to you to know the progressive improvements we made to our method while repeating the experiments.

Process (Figure # 1)

On the Figure, flask # 1 contains the fresh plant. This flask, or container, is made of quartz; if it is made of pyrex, it should be heated in a sand bath and cannot be used many times.

In our first experiment, flask # 1 threw its vapors directly into bubblers # 4 and # 5 filled with distilled water. The experiment showed an increase of the water volume and red oil floating on its surface.

In a second experiment, we inserted a tube similar to the one in # 6 in between # 1 and # 4 and # 5. The oil condensed in # 6 but only in part. This led us to our present set-up or at least close to it.

Flask # 1 sent off its vapors into # 2, a straight tube condenser. The oil and one part of the water were recouped in # 3.

The gas are still released and dissolved in bubblers # 4 and # 5. However, we decided later on to insert # 6 in between # 4 and # 5, the water bubblers, and # 7 and # 8 the ammonia bubblers.

In # 6 the volatile salts of the plant are deposited on the walls of the outer tube if it remains cold. Ammonia bubblers # 7 and # 8 neutralize the residual odors. The odor of ammonia is absorbed by HCl in # 9.

Results:

- Recoup in # 3 and separate the red oil and the golden water through distillation;
- The distillation of the water in # 5 and # 6 yields the white earth;

- Scraping # 7 yields sal ammoniac;
- The sal ammoniac coming from # 9 has no alchemical value.

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The Making of the Celandine Stone According to Hollandus

The method used in this process successively extracts the three principles of the stone out of the faeces of the plant. The extraction liquid, the golden water of the beginning, is sharpened - acuated - as we proceed with the solve coagula, and progressively becomes more able to extract the most subtle principles.

On the Figure, the 5 stages are as follows:

- 1) - 1 - 2 - 3 - 4 - : preparation and purification of the golden water;
- 2) - 5 - 6 - 7: extraction of the red earth (TR);
- 3) - 9 - 10: extraction of the sal ammoniac;
- 4) - 11: extraction of the white earth (TB);
- 5) - 12 - 13 - 14: cohobation, digestion, maturation of the stone.

Sequence of the operations represented on the figure:

- 1) Dry distillation of the fresh plant;
- 2) The faeces are ground and made into a tingeing paste with the distillate;
- 3) Make a series of Solve Coagulas to dissolve as many faeces as possible in the golden water. If we don't have enough distillate you can add tri-distilled water. Put aside all non soluble faeces;
- 4) The golden water is clarified by several filterings or by clarifying with egg whites;
- 5) After decanting, the golden water is directed to # 7 and the faeces to # 8;
- 6) The faeces coming from # 3 and # 4 are subjected to a

series of Solve Coagulas with the water coming from # 4. The faeces are directed toward # 8 and the water toward # 7.

- 7) The dry distillation of the faeces yields the purified red earth in TR;
- 8) New series of Solve Coagulas on the faeces coming from # 5 and # 6. The directed in # 10, the faeces in # 9;
- 9) The dry distillation of the faeces yields a water that is lead to # 10 and an oil which is recouped through bubbling in the water;
- 10) A series of Solve Coagulas on the three waters and a dry distillation to obtain the sal harmoniac;
- 11) The water of # 10 and the faeces of # 9 arrive in # 11. A dry distillation yields the white earth (TB), which is cohobated with the oils issued from # 9 previously rectified in boiling water;
- 12) Make a paste with the water coming from # 11, the white earth, the red earth and the sal harmoniac. Digest for 22 days at 40 C;
- 13) Digest for 40 days at 40 C in a sealed crucible;
- 14) Calcination and fusion of the powder into a stone.

Ora et Labora!

Enclosed figures:

- # 1 - Work on a fresh plant;
- # 2 - Figure for the Stone of Celandine.

Figure # 1

WORK ON A FRESH PLANT

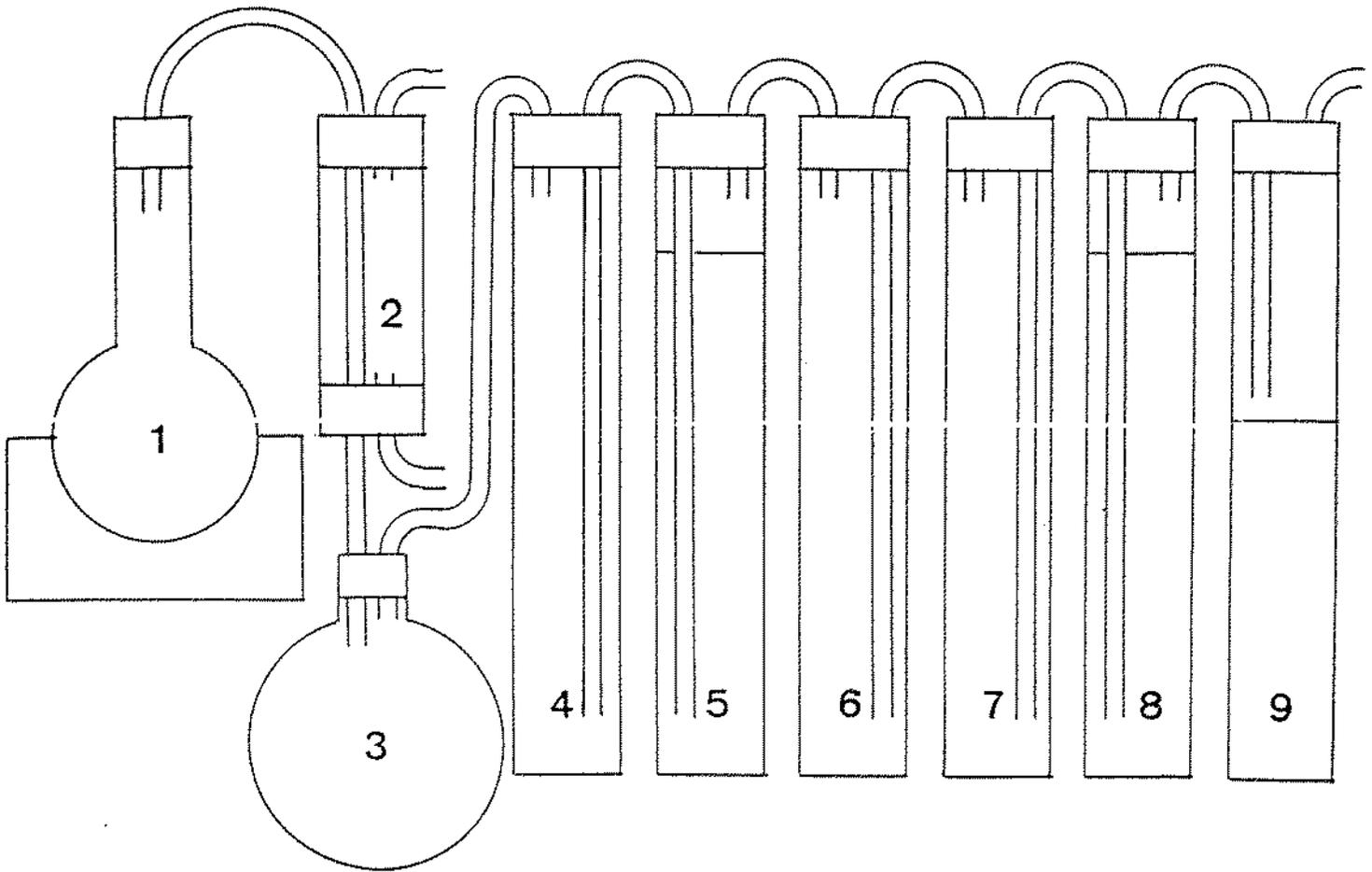
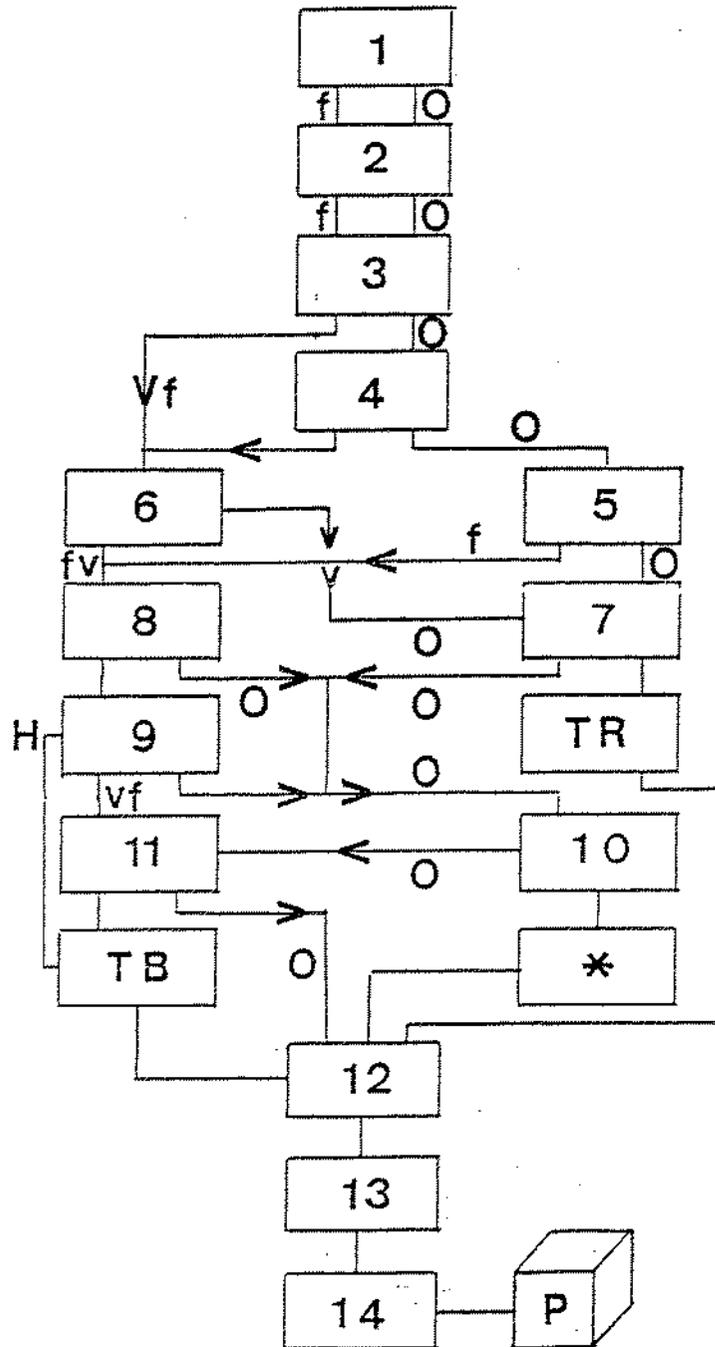


Figure # 2

FIGURE FOR THE STONE OF CELANDINE



Dear Friend,

Included is a series of precautionary measures whose necessity has become evident during experimental work.

AMMONIA BUBBLING

If you have started working with the devices described in Mineral Lessons # 65 and # 66 you may have witnessed a release of chlorine gas resulting in a white deposit on the glass and the oxidation of everything metallic. However, since the ammonia odor tends to spread and since it cannot be neutralized, a method is necessary: the problem can be solved - not through HCl - but through a bubbler of acetic acid. During the bubbling some Menderenius spirit forms.

MERCURY SAFETY MEASURES

We have recently described a system to distil mercury. Our experience has shown that while manipulating this metal, it was impossible to prevent microballs from forming. Some loss of metal results but there is above all a risk of contaminating the laboratory because these microballs are practically impossible to recoup on the ground. To succeed, place the distiller in a plastic container that is sufficiently large and proceed with your operation just above it and also practically in it, during all manipulations. Once in a while gather the balls with a brush and recoup them.

If we separate distilled mercury from the water of the condensing tube with a decanting bulb, we avoid one or two additional distillations by pouring acetic acid and ordinary kitchen salt (sea salt) into the bulb; shake once in a while and we can see the black dots of mercury dissolving.

NOTES ON THE DISSOLUTION OF METALS WITH THE DOUBLE SALT OF AMMONIA

- 1) Gather some rainwater (See Spagyrics Lessons # 20 and # 21);
- 2) Prepare some Archeus in which the four elements are

balanced;

- 3) Dissolve until saturation each of the salts in the Archeus. Do a separate dissolution for each salt;
- 4) The nitrate is about 4 times more soluble than chloride. Therefore the dissolution liquid must contain 12 parts of chloride solution for 1 part of nitrate solution;
- 5) If the temperature of the incubator is the proper one, the "seed" may appear in a few weeks.

PRACTICAL PRECAUTIONS FOR THE CALCINATION OF MARCASITE AND STIBNITE

Never calcine pieces of marcasite; a violent burst occurs and the pieces are projected creating danger. Therefore, reduce it to powder before you calcine it.

It is the same for stibnite. However, for the making of butter, the powder is not suitable. Therefore you must break the stibnite into pieces, the size of a small pea to that of a hazelnut, because if the pieces are too big, when bursting they could break the reaction tube.

OTHER WARNING FOR THE DRY DISTILLATION OF STIBNITE

When making vinegar of antimony or when distilling the stibnite + sal ammoniac mixture, never reheat the flask after the distillation, without cleaning it thoroughly beforehand. As a matter of fact, a layer of ore has deposited on the entire surface of the flask and if you reheat the dilatation of this layer breaks the flask (even if it is made of quartz).

ADDITIONAL INFORMATION ON ANTIMONY BUTTER

The interesting thing about antimony butter when it is well distilled, put into deliquescence and redistilled, is that it may lead to the black stage of the work in less than a month. (We will resume this subject in the future).

The old method using mercury bichloride is no longer possible if only because of its cost and toxicity. We have therefore described a process presenting some difficulties, requiring a particularly extreme care and prudence. But the

successive modifications of our experiments made this method much easier.

The incidents - which may become dangerous if you wear no protection (such as gloves, goggles, or a protective sheet of glass) have essentially three origins:

1) Clogging of the reaction tube with melted stibnite or with dust from the bursting stibnite;

2) Clogging by the butter either at the outlet of tube G, around the level of the Vigreux points or in the condenser;

3) Blocking of the bubbling device by several impurities.

DESCRIPTION OF THE NEW SET-UP AND ITS FUNCTIONING

1) -B: Flask - C: Flask heater - D : triac

- Load flask B with sea salt and nitric acid up to one third of its volume; the level of the liquid acid is 1 cm above the salt. The triac very progressively controls the heat increase but in no event should the flask heater be fed at more than one half the voltage of the network.

2) - G: reaction tube - H: heating resistance - J: thermocouple;

- In a reaction tube introduce tube N (the presence of this tube is only necessary with an ore yielding much powder);

- The gradations made in the tube are designed to allow for a better gas circulation;

- Tube G is then loaded with bits of stibnite;

- A heating coil (with joined spires) made of silica is rolled around the tube up to the Vigreux points. It is powered by a self-transformer, and a voltmeter constantly controls the voltage applied.

- A fine thermocouple probe is inserted between the extracting tube and the heating coil (a thick probe pushes away the resistance and results in the heat spreading unevenly);

- A water circulation is necessary in K at the same time you start the heat of the tube;

- Be careful: you should stabilize G's temperature well before you start heating B, at about 250 - 280 C. Do not go

beyond 280 C. As a matter of fact, we found out that with some ores the gas issued from B formed a fluxing agent probably with the impurities of the stibnite. Which inevitably creates an explosion, since the regulus solidifies at the lower end of G;

- An aluminum foil around the area of the resistance protects it from the corrosive action of the gas in case one of the groundings were not 100% airtight.

Note: antimony butter boils at 283 C.

3) The condenser K is cooled down with water but as in the previous set-ups a tube (which is not cooled down) can be inserted profitably between G and K.

4) L: receiving flask. It must be changed when the butter resting on the walls of the condensers is made to fall.

5) - The tube M is the key to our safety. If G and K are clogged, the gas increase the pressure in flask B. They may move the mercury and can then escape through the bubbling circuit of the set-up. During cooling down the mercury will be pushed in the reverse direction, that is why if we have a height of 10 cm of mercury we need a tube of at least 40 to 50 cm above the surface of the mercury.

It happens sometimes that sudden gas releases may drive the mercury away into tube # 4 of the bubbling. To avoid this drawback, we can set-up a small Kjeldahl bulb, with no grounding, on top of tube M on the side opposite extension A.

6) This set-up of 4 tubes corresponds to the double bubbling system already described. However, here two additional precautions are mandatory:

a) the tube linking # 3 and # 4 must be carefully bent without its inner diameter being diminished in any way, otherwise the white deposits may clog it. In fact, should white deposits appear, heating of B should be stopped right away. It is useful to plan a simple device like a thick block to take out the flask B out of the flask heater C;

b) insert some pH paper in the tube linking # 2 to # 3; as long as the paper remain blue everything is all right, but as soon as it turns pink, stop and change the ammonia in tube # 3 and # 4;

Preparation of the products to increase safety

Experience shows that there are two kinds of parasite products that might get clogged either at the start of the safety circuit of mercury, or in the exhaust bubbling tubes. To reduce

this risk to a minimum the following operations are needed:

1. One Solve Coagula on the sea salt with distilled rainwater or demineralized water;
2. Have some nitric acid with as little impurities as possible; if needed distill it before use (difficult operation requiring a lot of safety measures);
3. Choose the pieces of stibnite with as little gangue as possible. Possibly eliminate the free sulfur through circulation in a soxhlet with Cl_2 . Be careful, this product is difficult to eliminate and is very dangerous when hot. To eliminate it make a circulation with distilled acetone and dry the pieces of stibnite very carefully before loading the reaction tube.

Pieces of Advice for the safety of the operator

1. Plan that the operator will stay as far away as possible from the set-up;
2. Feed the resistance and the flask heater through separate cables;
3. Have from where you stand, within reach, the triac of the flask heater, the self-transformer powering the resistance and if possible a voltmeter for each apparatus;
4. Make sure that from his place the operator can see:
 - the gradations of the temperature millivoltmeter;
 - the mercury tube;
 - tube # 3 and # 4 of the bubbling;
5. If the level of mercury drops 15 to 20 cm, the reaction tube becomes clogged. So, switch the power of the flask heater off but do not switch off the resistance of the reaction tube because the butter may flow. If the level of mercury is balanced again, slowly reestablish the heating of the flask;
6. If a white solid deposit forms in tube # 3 and # 4 and the bubbling ceases or weakens, switch the power off in both circuits. Do not get near before it cools down, unless you wear a mask, goggles and gloves, in order to quickly remove the supporting block of the flask heater;

If after it has cooled down the level of the mercury is unbalanced toward the flask, then the reaction tube is clogged. It becomes necessary to undo the entire set-up before you start again.

7. If white vapors come out after the acetic acid bubbling and the pH paper has become pink then the ammonia is out. In that case, let everything cool down before you load some more ammonia.

This preparation process of antimony butter required a lot of work from LPN in general, much experimentation and many changes in the set-up, so we hope that your being discreet about it will help keep the results of this painstaking work within LPN.

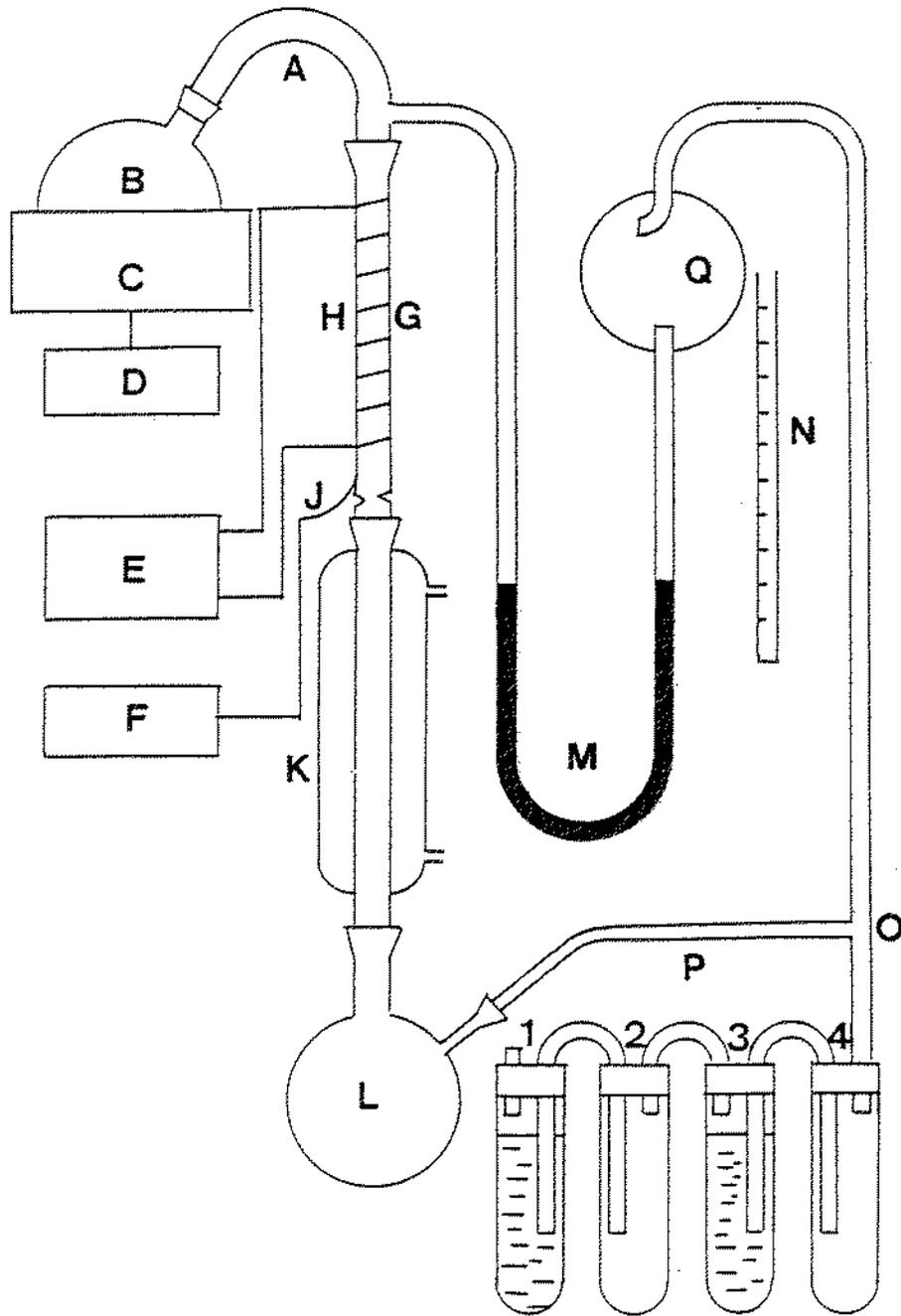
Even though we stress all these safety measures, this does not prevent you from being watchful during all operations.

Ora et Labora!

Enclosed Figure:

- Safe Set-up for the butter of antimony

SAFE SET-UP FOR THE BUTTER OF ANTIMONY



LEGEND

- A - Elbowed extension with ground glass and a side outlet;
- B - Flask containing acid and salt;
- C - Flask-heater;
- D - Triac controlling flask heater;
- E - Self-transformer powering resistance H;
- F - Millivoltmeter indicating the temperature;
- G - Reaction tube with ground glass and 4 Vigreux points at its lower end;
- H - Heating resistance, silica coil;
- J - Fine thermocouple probe;
- K - Straight ground glass condenser;
- L - Receiving flask with two ground glass entries;
- M - Mercury in the elbowed tube;
- N - Borosilicated glass tube with gradations;
- O - "T" connection for gas outlets;
- P - 4 ammonia, acetic acid bubbling tubes;
- Q - Small Kjeldhal bulb (optional).

Dear Friend,

We emphasized the making of antimony butter quite a lot for two essential reasons that should be kept in mind. First of all, experience shows that the butter is by far the best magnet according to the alchemical concept, and therefore, a powerful element to trigger metallic alchemical evolution. On the other hand, whatever the safety measures taken or whatever the process used, there is always an important risk of surpressure because of a tube being clogged. We strive to reduce this risky point to a minimum.

The set-up suggested in the previous lesson is the best we have found so far. But this set-up does not allow for any lack of caution. It is therefore necessary to dismantle it after each use and to eliminate thoroughly all the elements that may constitute the beginning of an obstruction for the next operation.

It is obvious, and we have not mentioned it before, that the greater the diameter of the bubbling tubes the less chances they have to become clogged.

Some additional safety measures: if you use a condenser for the first condensation of the butter, spread the solidification area by feeding the condenser with water at 60-70 C. In this way one of the main cause of clogging is eliminated. This method is also good to distill the butter deliquescence.

Experiment to explain the theory
presented in the Collectanea Chemica

The Collectanea also says that if the poisons are eliminated from the native (live) ore and if it is shaped up to an adequate condition its evolution may begin again. The favorable conditions are (in our opinion) a temperature of 80 C and an air-free room deprived of light.

We thought that it was perhaps possible to purify the ore without using the time-consuming and painstaking process of the Collectanea. We can, for instance, circulate the ore with solvents such as carbon tetrachloride to eliminate the free sulfur. Another method, particularly applicable to stibnite, is

digestion by means of soda. In fact, we are getting back to the making and the leaching of the "Kermes". Experience shows (to this day) that the products thus prepared do not "start again".

By meditating on the processes of the *Collectanea Chemica*, by examining the impalpable mists rising from the metal after many operations, and taking into account the sentence of the old text saying that calcination opens the pores of matter, we have been led to believe that in this process, the mechanics are the following ones.

In most common chemical operations, matter is agglomerated. In a sense, it comes in the form of atoms packages, let say "molecules", rather than as separate atoms. Thus, what the ancients used to call opening of the pores could well mean, in a way, the reduction of matter to its atomic state. In other words, repeating the operations progressively leads to the isolation of an ever greater number of atoms from each other and this "atomized" matter acquires different evolutionary properties than the original "molecular" matter. The elimination of "poisons" being only accessory.

This led us to reexamine the descriptions of the processes using ordinary common mercury. To this effect, we intend to experiment with these processes in the future not losing sight of the following notions. Mercury, being liquid, loses its spirit at room temperature. Therefore it must be revived by antimony, for instance, but maintained enclosed in a mantle as soon as it has been revived. The second thing to obtain is along the line of what has been mentioned: the mercury should no longer be "molecular" but "atomized", which is perhaps easier to obtain in the liquid state than in the solid state.

We think that this notion of "atomization" sheds light in particular on the text of "*Practica Philosophica*" and the text of "*Divine Cinnabar*" by Hurley.

As a suggestion for those of you who are looking for a personal path in this realm, the "atomization" of mercury could perhaps be obtained by a series of distillations and its revivification could be effected then by the transfer from sulfur to antimony.

Note on making and recouping antimony butter

During repeated deliquescence and distillation of the butter, it is necessary to clean the apparatus of any residual marks of butter. This is easily done by leaching with HCl, which should not be discarded but put aside for use until it is saturated.

The distillation of this acid permits to recover part of the butter but the operation is not easy because some phenomena occur which resemble those occurring when we attempt the distillation of ammonium acetate. What seems the best is the following method:

- Distil 15 to 20% of the liquid;
- Let it cool down. Crystals will form. Separate them from the liquid and start again. There comes a time when the crystallization no longer occurs, then mix the distillate with the non distilled acid and use it again for leaching.

The distillation-crystallization method also allows the production of a little bit of butter in the following manner:

- Recoup the black lion resulting from the dry distillation of the antimony acetate and dissolve it in ClH which is then filtered. The distilled liquid, as previously, yields several crystals of butter;
- Do not distil in an airtight circuit, the outlet starts in a bubbling loaded with soda carbonate or potassium carbonate;
- The same experiment with dissolved "Kermes" does not yield any butter;
- In these operations, a yellow oil may form which is antimony pentachloride. Heating this oil decomposes it into butter and chloride.

Ora et Labora!

Dear Friend,

THE EVOLUTION OF MATTER

(Comparison between the vegetable and mineral kingdoms)

We have already mentioned, and we agree on this subject with many authors, that evolution is an important element of alchemical processes. In short, repeating an operation on the same matter has an evolutionary power similar to that of the birth-life-death-rebirth cycle... But evolution can only happen when the elements of life are present, particularly the active element of life Fire \triangle . Therefore we can only experience alchemical evolution with philosophical products, products that are alive, products that have a germinative power.

We are describing below a series of experiments which concern the evolution of matter.

First experiment:

- First, filter rainwater which is a living matter readily available;
- Operate a series of dry distillations;
- Operate under a partial vacuum with water-bath heating to spare both the flask and the water;
- Carefully clean the flask after each distillation;
- Continue the same thing until there is a residue or until the flask is not as clean at the end of the operation as it was in the beginning;
- Make 5 to 6 distillations;
- Then pour the water into a two-entry flask, on which a Kjeldahl sphere has been installed;
- Add an extension with a thermometer and a condenser leading to a vacuum valve, which in turn leads to the two-entry flask;
- Join the additional entries of the two flasks with a glass

tube;

The whole set-up is such that:

- a) The vapor cannot go through the glass tube;
- b) As soon as the receiving flask is filled to about 1/3, the water flows slowly into the distillation flask;
- c) For safety, a mercury equalizer is set-up on the outlet of the vacuum valve, preventing the air to get in or out.

Remarks

- At the beginning of the experiment, the temperature of the vapors was 100 C;
- The distillation is maintained for three months, and the temperature diminished slightly to 96 C and remained stable for the following month. The experiment was then stopped;
- The water was slightly yellow.

These results are not conclusive because they could be explained by the dissolution of one of the components of the glass of the flask. However, the glass was definitely intact.

Second experiment:

The second body that we have "tried" is sea salt because it is a life bearer. In addition, to somewhat spare its philosophic character, the water used for the sequence of the Solve Coagulas was distilled rainwater.

The dry distillation leading to crystallization occurred under partial vacuum in a water-bath.

A sequence of 10 Solve Coagulas did not give any results except that after 4 to 6 Solve Coagulas the salt no longer deposits any faeces during crystallization. This does not authorize us to say that the description of the soft salt is erroneous but that this soft salt can only be expected after a great number of Solve Coagulas.

Third Experiment:

Set the potassium carbonate you bought to deliquescence (equivalent to calcined tartar).

The operation takes place as follows:

- Set the salt to deliquescence;

- Collect and filter "the oil of tartar";
- Vacuum distil the oil to recoup the two following products:
 - * the angels' water;
 - * the salt of tartar.
- Set the salt to deliquescence again and start the whole operation again.

Remarks:

- A magnificent blue color in the salt - a proof of its evolution - is obtained rather quickly, after less than 10 deliquescences;

- The angels' water is charged with vegetable \triangle and is very recommended for spagyric use.

Fourth experiment:

The more dramatic, the butter of antimony.

We have previously mentioned that the use of two condensers one after the other was necessary for the making and the distilling of the butter. We have also said that in the beginning, it was good to have warm water circulating in the mantle of the first condenser to spread the pour of the butter and to avoid clogging.

However, very quickly, by the third or fourth deliquescence of the butter, the first condenser should no longer be warmed up. And by the 5th to 6th deliquescence it must be cooled down. The butter solidifies at a lesser temperature each time, which shows an evolution of matter. It is the same with the distillation of the spirit of the deliquescence and if we do not succeed, as claimed Basil, Bacon and Paracelsus, in distilling with the heat of our hand, at least we are very close to being able to do it.

This proves that in the four experiments just described, the one with the butter is the one where the evolution is the quickest, and by far.

We repeat - again - that the work on antimony butter requires an important air-circulation system. If a white powder is deposited on the glass, there is some problem with the air tightness in the apparatus, or the room is not ventilated enough. If the outlet bubbling units are loaded with acetic acid, instead of HCl, there should be no white deposit.

Note: if you distil the acid used for cleaning to recoup the butter, be careful because the ClH gas is very soluble and may through brutal dissolution in the bubbling water, provoke some unpleasant surprises.

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ALCHEMICAL INITIATION

In all our manipulations, we should not lose sight of the "Ora" side, in other words the work must tend toward Initiation. Initiation being the cure, the repair of our spiritual being, whatever the initiatory system the only active element is what we call the Prima Materia, the undetermined Fire.

The ultimate Initiation can only happen through the undetermined, yet coagulated Fire.

When we use a magnet to attract Fire, the magnet determines the Fire. The calcined earth (potassium carbonate) used as a magnet determines the Fire in the vegetable realm and acts on the vegetable elements in us, or essentially on the Fire aspect of each Sephira.

If the magnet is the butter of antimony, the Fire will be determined in the metallic kingdom and will act on the Air element in each Sephira.

As for the choice of the Sephira, it will depend on the planetary energy charged which then determines the planetary form of Fire. The charging only occurs when the magnet is in the liquid state, therefore you must carefully chose the moments when you set it to deliquescence according to astrological data. But it is better by far to use the hours of the planetary geniuses if you can.

Ora et Labora!

Dear Friend,

This lesson contains several remarks and thoughts that have been provoked on the one hand by repeated experimentation, and on the other, by meditations on the Mendeleïev Table of the Elements which contains very rich suggestions.

Organic chemistry which bears life always contains the elements carbon, oxygen and hydrogen. As for the outer shell of electrons, we have 4 for carbon, 6 for oxygen, and 1 for hydrogen. Note that in column IV of the Table, the element above carbon is silicon with 4 electrons on its outer shell. In fact, modern chemistry is capable, with that element, to create an organic chemistry more "dense" than that of carbon and less sensitive to temperature. This leads us to believe that bodies with an outer shell containing 4 electrons are probably the best adapted to create "a heavy organic chemistry".

Now let's consider the other elements in the column with a 4 electron outer shell. We have germanium, then tin and finally lead. This last metal can therefore, because of its 4-electron outer shell, play a function identical to that of silicon in relation to carbon but at a yet denser level. This explains the choice made by Bacon, Paracelsus and Valentine to fix the "red oil", or lead lime, i.e., a lead oxide.

In this operation, the elements of life are distributed in the following way: carbon is replaced by lead; the oxygen is the one contained in the oxide; and the hydrogen of the red oil which brings the solar Fire, the animating Fire. In order for this process (already written) to function correctly, it is best to use the red oil made from lead acetate rather than the one made from antimony acetate. As for the oxide, the best is the one produced by the spontaneous combustion of the Black Lion that results from the dry distillation of the acetate.

As opposed to what the authors mentioned above say, this process does not yield "our gold" but "our silver". As a matter of fact, the process stops at the white stage, and we think that it is the same for all the acetates because vegetable life cannot lead beyond the sephira Netzach. Therefore we cannot, from the alchemical standpoint, go beyond the Lunar astral world in this case. The white obtained must be treated as mentioned in the Lesson on the simplest stone.

When examining the Mendeleïev Table of Elements, we have been led to believe that the bodies placed on a same column had of course a same chemical effect but also a same alchemical effect at a denser state. Thus the following would be alchemically analogous:

- In column I : hydrogen, lithium, sodium, potassium, copper, silver, gold;
- In IV: carbon, silicon, germanium, tin, lead;
- In V: nitrogen, phosphorus, arsenic, antimony, bismuth;
- In VI: oxygen, sulfur, selenium;.

Iron, mercury and chlorine, although used in alchemy have a separate role.

As nature acts in a similar way in the three kingdoms, we have been led to believe that in its metallic generation, the sulfur would play the same role as oxygen in the animal or vegetable realm. It is an interesting point to consider for the various processes of the Collectanea Chemica type.

Animal and vegetable life is possible as long as water (hydrogen, oxygen) and oxygen in a gas state are present. If these bodies are exhausted, life can no longer develop. On the other hand, the result of life releases products that can be toxic in the kingdom considered. Thus, the bodies CO and CO₂ resulting from combustion or from breathing are toxic for men, when these same elements under a different form are beneficial. Similar causes stop life and metallic evolution.

The calcination-leaching operations in the method of the Collectanea Chemica "open matter" but also rid it of its "toxins" which it has itself created during its evolution.

Thus, the outer sulfur in marcasite or in stibnite is an "exhausted metallic oxygen" and it must be eliminated in the ore. However, there is no guarantee that the evolution will start again because we do not know the residual vital quality of the sulfur forming the marcasite and the stibnite. Thus we improve the evolutionary process and the quantity of metallic seed by "oxygenizing" the ore. To do it we need a native sulfur which has not been into contact with a metallic sulfur.

We can obtain a sulfur of this quality in volcanic earths which, often, are a mixture of chalk, clay and sulfur. We easily extract this sulfur with a soxhlet loaded with carbon tetrachloride. When this liquid is saturated, the extracted sulfur crystallizes in the flask of the Soxhlet. Decant as best as you can the sulfur and then leach it with acetone to eliminate

the traces of tetrachloride. This extraction process seems to be much much better than that of extracting by fusion which might destroy the subtle principle of the sulfur (see the allotropic modifications of the sulfur during fusion and cooling down). A little percentage of this sulfur mixed with metallic sulfur helps to start the evolution again.

There are similarities of properties in the vegetable, animal and mineral kingdoms, which are expressed in the chart below. These similarities have some value only from an alchemical standpoint.

ORGANIC	MINERAL
Hydrogen Sodium Potassium	Copper Silver Gold
Carbon "Silicon"	Tin Lead
Oxygen	Sulfur Selenium
Nitrogen	Phosphorus Arsenic Antimony
Chlorine + Sodium	Iron
H ₂ O	(with many reservations) Mercury

We hope that what we have just described, along with your own experiments and meditations on Nature's processes, will help you in your personal work.

Note: in Urbigerus, as well as in what we have said about the antimony butter, there are two possible solutions that use chlorine (Green Lion), either the butter or the corrosive sublimate, since both are products made from sea salt. We can make some corrosive sublimate by using the chlorine generated in the same set-up used to make the butter - and not absorbed by the stibnite - by inserting between the gas outlet and the neutralizing bubblers a flask containing some mercury: the gas is directed through a tube close to the surface of mercury, but which does not bubble.

Be careful the corrosive sublimate is extremely and violently toxic.

Ora et Labora!

Dear Friend,

You have certainly noticed some similarities in the evolutionary processes of the three realms. The vegetable process, being quick enough, is quite accessible to our awareness. Therefore, through analogy, it helps us to understand what happens in the metallic realm. However, to avoid failure, we must also understand that Spagyrics and Alchemy cannot be used just anyhow or anywhere.

During the involution of the animating energy, under the pressures of the then negative forces of the Growth, it involves in the kingdom corresponding to its stage: mineral, then vegetable, then animal. Each of these cycles is done under the rule of an alchemical sign, that is:

- For the mineral realm: Earth;
- For the vegetable realm: Water;
- For the animal realm: Air.

Note that the involution-evolution of the animal realm occurs under the pre-eminence of the element Air.

In the next cycle, man's cycle, the element Fire provides the consciousness of the self. With the appearance of Fire, man was born. He then begins his involution with the four elements. The Fire is present in him, even during the involutory part of the sequence of incarnations.

Spagyrics or Alchemy should not attempt any action during the entire involutory cycle, whatever the realm, because there would then be a risk of conflict between the result of the alchemical operation and the Growth of Man and of Nature. Conversely, as soon as the Nadir has been cleared and evolution has begun, Spagyrics and Alchemy can and must act in the three realms.

During involution, since the negative forces have accumulated scoriae, impurities, and some "disharmony" in each of the three realms (what has been called the "original sin") the Spagyrist and the Alchemist will then have two objectives:

- a) To eliminate impurities so that evolution may begin;
- b) To accelerate evolution and go through Initiation in the three realms through the only truly active element of creation: Fire.

But the element Fire must be determined, i.e. in agreement with the realm on which it must act otherwise there is a risk of interference.

Today, almost the totality of the vegetable realm and the totality of the mineral realm have cleared the Nadir. Thus, there is really little precautions to be taken in what concerns the choice of materials (except perhaps, in the vegetable realm, in what concerns mushrooms).

Our experiments confirm that any success is due to the presence of the element Fire and to truly enter the alchemical domain all matter must be saturated with the element Fire. The red color, however always preceded by the white color, is the main feature of the saturating presence of Fire, or of its coagulation. The white color corresponds to the state of purification necessary to obtain the attraction and the condensation of Fire.

While the solid vegetable stone is difficult to push to the red, we can, on the other hand, easily obtain a red tincture by saturating the plant with the element Fire.

We purify calcined tartar so that it becomes very white; if it can become very slightly bluish it is even better. The calcined tartar is then put to deliquescence preferably during spring.

- The oil resulting from the deliquescence is simply filtered;
- The powdered plant is poured into the "oil";
- Shortly, within 24 to 48 hours, a very red tincture is extracted. The richness of a Fire that has been determined in the vegetable realm by the tartar ensures this quick result;
- To recoup this tincture, just filter the "red oil" and pour absolute alcohol on it. There is no blending occurring;
- The alcohol extracts the tincture and the residual impurities remain at the surface separating the two liquids;

- Extracting the tincture with alcohol requires one to three months in an incubator.

For the mineral realm, the antimony butter is the matter of the deliquescence.

- We need a sequence of several deliquescence and distillation (6 to 10) for the butter to be adequate;
- Then recoup the deliquescence without distillation;
- Place it in the incubator at 38-39 C after having placed two or three sheets of beaten gold in the flask;
- The flask should be small, roughly 10 cm³, filled up to 1/3 with a long neck closed by ground glass (silicone stopping, plastic and thread to strongly fix the stopper);
- If there is no gold, the deliquescence turns black, then white but then the Fire ceases to act.

The solution of the problem for all liquids extracted from mineral or metallic acetates, and for all the side-products of antimony (butter, oil, etc.) are repeated distillations. Red and white wines (Weidenfeld) are separated from a same liquid at the 7th or 14th distillation.

We never repeat it enough: heart and patience are the unique keys to alchemy.

We have just said all that is necessary for the white stage of the work but if your "ORA" is not sufficient (or you aura...) you will never go beyond the white stage, if you even get there.

The Eternal only grants power to the generous at heart.

Ora et Labora!

Dear Friend,

We are reaching the last lesson of the Mineral class¹. Since the very beginning of the association, we had decided that it would be, like all others, limited in time. This does not mean that we would not provide any information to the LPN members but it will take a different form.

LABORA

As we have seen, several paths are possible and all of them sooner or later, quicker or slower, lead to the same result. The choice of a specific path is personal only because it depends upon the technical and chemical knowledge, the aptitudes, and the patience of each one.

As last practical pieces of advice, we can say:

- a) If you are very patient the simplest way is that of the Collectanea Chemica which requires but little material: a soxhlet, an oven, an incubator;
- b) The second way is that of the acetates but it must be completed as in Paracelsus' process: self-calcined Black Lion into white chalk that will be saturated only with the red oil. In this way, only lead or antimony is possible;
- c) The way of the antimony butter is by far the quickest one but requires a strong background in experimental chemistry and the necessity to operate under a fume hood or outside.

ORA

We are going to dwell upon this element. Let us be very clear, the only goal of Alchemy, we said it more than once, is Initiation. Report to the lessons which approach this essential issue. Remember that the different medicines described in books and in the class operate in the following way:

¹Several more lessons have been added since. The last one is # 83.

So-called white stage of the work

- Medicine of the 1st order -----> initiated in Yesod
- Medicine of the 2nd order -----> initiated in Hod
- Medicine of the 3rd order -----> initiated in Netzach

So-called red stage of the work:

- Medicine of the 1st order -----> initiated in Tiphereth
- Medicine of the 2nd order -----> initiated in Geburah
- Medicine of the 3rd order -----> initiated in Chesed

Now let's go to the genuine key of this class:

"No one may transmute anything, if he has not already transmuted himself." (Paracelsus).

Basil Valentine (in Greek "the powerful king") attempted to explain the significance of the Inner state in Alchemy. To do so, when living at a time where religion was all-powerful, worldly and intolerant, he used the style of religious texts.

We have said and personally experienced that it was not possible to succeed with certain alchemical experiments when in the presence of one or several other people. We also have always said that the adequate inner state of the alchemist is the first thing to obtain to succeed in these operations.

You sense strongly that the inner state of the alchemist totally rules his advance on the mineral path; this is not quite as true for the vegetable path. Consequently, vegetable Alchemy is the key and the purifying tool of our Inner Salt. That is why, in the previous lesson, we have given a method to prepare a vegetable tincture very rich in Fire and therefore, more powerful for the initiation part.

As for our sulfur, it must be prepared by our mental state. If we refer to the Qabala, and this will be very helpful to shed some light, the chemist is only the little king of the Earth, the king of the kingdom of Malkuth. The Alchemist is the Great King of the Invisible, our Higher Self. It includes the nine Sephiroth from Kether to Yesod and it is the only one to have access to the laws that dominate matter. In these nine Sephiroth of the Invisible, Tiphereth is the only sephira that is directly in touch with the other eight. It is the spokesman of the Great King. Remember the allegory: "No one goes to the Father (Kether) without going through the Son" (Tiphereth).

If the Great king does not speak to you, you have no access to True Alchemy. Alchemy is identical to what we call a "miracle". Its nature cannot be explained by modern day science. When we say "miracle", it is a way of speaking or of illustrating the mechanics at play. It is a matter of the transcendence of earthly matter by the power of each of the laws of the Invisible which are then entrusted to us by our Higher Self. We have seen it, each of the Medicines corresponds to one of the Sephiroth of the temporal invisible world and gives the mastery of the corresponding Double Law.

What must we do for our Invisible Self to talk to us?

We must strive to accomplish a life based for the most part on the following rules:

- First, to be generous at heart because the heart is the tool of transmission and a dry heart does not work;
- To be simple in spirit (and not stupid or simple-minded), which allows for the unitary understanding of Nature and prevents us from searching out of curiosity what is not our business or responsibility;
- To be humble without being humiliated. To this effect, do not, in any group or association, look for grades, honors, ranks, or any other forms of honor. Do not do anything to obtain them, and do not refuse them if they are proposed and in this case, use them as a tool for service;
- Eliminate all pride and susceptibility (its daughter) but without allowing yourself to become humiliated. Keep a calm dignity;
- Remain watchful about your sense of ownership. You may detain goods but you should not squander. These are tools at your service;
- Try not to become attached to most things in this world but do not become indifferent. Particularly, if your inner self gives you an order to serve, you must perform it inexorably and whatever the cost. You should not detach yourself from what is your Duty;
- Never, in spirit, be a master or servant of others;

As a summary, we must find the equilibrium of the Universal Balance.

When you'll be an alchemist, there will certainly be two

things that you have to experience. While meditating in front of your retort, you will feel your heart becoming fulfilled both with the burden of the world and with the universal love; so, you'll have much difficulty to keep your eyes dry. If this state has been reached, then you have reached the state of the Authentic Alchemist. Then you won't need any formula, ritual or prayer, direct contact resolves everything. In this state of Universal Love, be sure not to privilege someone in particular, except if the help requested concerns him or her. In these extraordinary states, think of the correct meaning of: "You will leave your parents, your wife, and your children, to follow me". If love in particular is contaminated with egoism, it will hinder the opening of Universal Love.

As soon as you have reached this state, you can be sure that the chemist of Malkuth will directly receive from Tiphereth, by night or by day, all the elements he lacked, whether they are from the domain of knowledge or of Knowledge.

With Sendivogius, we say now: "burn all your books even mine".

Jean Dubuis

Ora et Labora!