

The Root of the World

Roger Bacon

1. The bodies of all natural things being as well perfect as imperfect from the original of time, and compounded of a quaternity of elements or natures, viz., fire, air, earth, water, are conjoined by God Almighty in a perfect unity. In these four elements is hid the secret of the philosophers. The earth and water give corporeity and visibility; the fire and air, the spirit and invisible power, which cannot be seen or touched but in the other two. When these four elements are conjoined, and made to exist in one, they become another thing; whence it is evident, that all things in nature are composed of the said elements, being altered and changed.

2. So, saith Rhasis, simple generation, and natural transformation is the operation of the elements. But it is necessary, that the elements be of one kind, and not divers, to wit, simple: for otherwise neither action nor passion could happen between them. So saith Aristotle, there is no true generation, but of things agreeing in nature. So that things be not made but according to their natures. The elder or oak trees will not bring forth pears; nor can you gather grapes of thorns, or figs of thistles, things bring not forth, but only their like, or what agrees with the in nature, each tree its own fruit.

3. Our secret therefore is to be drawn only out of those things in which it is. You cannot extract it out of stones or salt, or other heterogeneous bodies: neither salt nor alum enters into our mystery. But as Theophrastus saith, the philosophers disguise with salts and alums, the places of the elements. If you prudently desire to make our elixir, you must extract it from a mineral root. For as Geber saith, you must obtain the perfection of the matter from the seeds thereof. Sulphur and mercury are the mineral roots, and natural principles, upon which nature herself acts and works in the mines and caverns of the earth, which are viscous water, and subtil spirits running through the pores, veins, and bowels of the mountains. Of them is produced a vapour or cloud, which is the substance and body of metals united, ascending, and reverberating upon its own proper earth, (as Geber sheweth) even till by a temperate digestion through the space of a thousand years, the matter is fixed, and converted into a mineral stone, of which metals are made.

4. In the same manner, sol, which is our sulphur, being reduced into mercury by mercury, which is the viscous water made thick, and mixed with its proper earth by a temperate decoction and digestion, ariseth the vapour or cloud, agreeing in nature and substance with that in the bowels of the earth. --- This afterwards is turned into most subtil water, which is called the soul, spirit, and tincture, as we shall hereafter shew. When this water is returned into the earth, out of which it was drawn, and every way spreads through or is mixed with it, as its proper womb, it becomes fixed. Thus the wise man does that by art in a short time, which nature cannot perform in less than the revolution of a thousand years. Yet notwithstanding, it is not we that make the metal,

but nature herself that does it. --- Nor do or can we change one thing into another; but it is nature that changes them. We are no more than mere servants in the work. Therefore Medus in *Turba Philosophorum*, saith, our stone naturally contains in it the whole tincture. It is perfectly made in the mountains and body of the earth; yet of itself, without art, it has no life or power whereby to move the elements.

5. Choose then the natural minerals, to which, by the advice of Aristotle, add art; for nature generates metalline bodies of the vapours, clouds, or fumes of sulphur and mercury, to which all philosophers agree. Know therefore the principles upon which art works, to wit, the principles or beginnings of metals; for he that knows not these things shall never attain to the perfection of the work. Geber saith, he who has not in himself the knowledge of the natural principles, is far from attaining the perfection of the art; being ignorant of the mineral root upon which he should work. Geber also farther saith, that our art is only to be understood and learned through the true wisdom and knowledge of natural things; that is, with a wisdom searching the roots and natural principles of the matter. Yet saith he, my son, I shew thee a secret, though thou knowest the principles, yet therein thou cant not follow nature in all things. --- Herein some have erred, in essaying to follow nature in all her properties and differences.

6. The second principle of our stone is called mercury, which some philosophers call, as it is simple of itself, a stone. One of them said, this is a stone, and no stone, and that without which, nature never performs any thing; which enters into, or is swallowed up of other bodies, and also swallows them up. This is simply argent vive, which contains the essential power, which explicates the tincture of our elixir or philosophers' stone. Therefore saith Rhasis, such a thing may be made of it which exceedeth the highest perfection of nature. For it is the root of metals, harmonizes with them, and is the medium that explicates and conjoins the tinctures. For it swallows up that which is of its own nature and production; but rejects what is foreign and heterogene: being of an uniform substance in all its parts. Wherefore our stone is called natural, or mineral, vegetable, and animal, for it is generated in the mines, and is the mother or womb of all metals, and by projection converts into metals; it springs or grows like a vegetable, and abounds wit life like an animal, by piercing with its tincture, like spirit and life, every where, and through all particles.

7. Morien saith, this stone is no stone that can generate a living creature. Another saith, it is cast out upon the dunghill as a vile thing, and is hidden from the eyes or understandings of ignorant men. Also in *Libro Speculi Alchemiae*, it is said, our stone is a thing rejected, but found in dunghills, i.e., in putrefaction, or the matter being putrefied) containing in itself the four elements, over which it triumphs, and is certainly to be perfected by human industry. Some make mercury of lead, thus: --- R. lead, melt it six or seven times, and quench it in salt armoniac dissolved, of which take three lb.: of sal vitriol, one lb.; of borax, half lb., mix, and digest forty days in igne philosophorum. So have you mercury, not at all differing from the natural. But as that is not fit for our work, as the mineral. If you have any understanding, this caution may sufficiently instruct you.

8. This is a great and certain truth, that the clean ought to be separated from the unclean; for nothing can give that which it has not. For the pure substance is of one simple essence, void of

all heterogeneity; but that which is impure and unclean, consists of heterogeneous parts, is not simple, but compounded (to wit of pure and impure) and apt to putrefy and corrupt. Therefore let nothing enter into your composition, which is alien or foreign to the matter, as all impurity is; for nothing goes to the composition of our stone, that proceedeth not from it neither in part nor in whole. If any strange or foreign thing be mixed with it, it is immediately corrupted, and by that corruption your work becomes frustrated.

9. The citrine bodies, as sol, etc., you must purge by calcinations or cementation; and it is then purged or purified if it be fine and florid. The metal being well cleansed, beat it into thin plates or leaves, as if gold leaf, and reserve them for use. The white liquor, as mercury, contains two superfluities, which must necessarily be removed from it, viz., its foetid earthiness, which hinders its fusion; and its humidity, which causes its flying. The earthiness is thus removed. Put it into a marble or wooden mortar, with its equal weight of pure fine and dry salt, and a little vinegar. Grind all with the pestle, till nothing of the matter appears, but the whole salt becomes very black. Wash this whole matter with pure water, till the salt is dissolved; this filthy water decant, and put to the mercury again as much more salt and vinegar, grinding it as before, and washing it with fair water, which work so often repeat, till the water comes clear from it, and that the mercury remains pure, bright and clear, like a Venice looking-glass, and of a celestial colour. Then strain it through a linen cloth three or four times doubled, two or three times, into a glass vessel, till it be dry. The proportion of the parts is as 24 to 1. There are 24 hours in a natural day, to which add one, and it is 25, to wit, the rising of the sun. To understand this, is wisdom, as Geber saith. --- Endeavor through the whole work, to overpower the mercury in commixtion. Rhasis saith, those bodies come nearest to perfection, which contain most argent vive. He farther saith, that the philosophers hid nothing but weight and measure, to wit, the proportions of the ingredients, which is clear, for that none of them all agree with another therein, which causeth great error. Though all matters be well prepared and well mixed, without the proportions or quantities of the things be just, and according to the reason of the work, you will miss the truth, or the end, and lose all your labour; you will not indeed bring any thing to perfection. And this is evident in the examination: when there is a transmutation of the body, or that the body is changed, then let it be put into the cineritum or test, and then it will be consumed, or otherwise remain, according as the proportions are more or less than just; or just as they ought to be. If they be right and just, according to the reason of that, your body will be incorruptible and remain firm, without any loss, through all essays and trial; you can do nothing in this work without the true knowledge of this thing, whose foundation is natural matter, purity of substance, and right reason or proportion.

10. Euclid the philosopher, and a man of great understanding, advises to work in nothing but in sol and mercury; which joined together, make the wonderful and admirable philosophers' stone, as Rhasis saith. White and red both proceed from one root; no other bodies coming between them. But yet the gold, wanting mercury, is hindered from working according to his power. Therefore know that no stone, nor pearl, or other foreign thing, but this our stone, belongs to this work. You must therefore labour about the dissolution of the citrine body, to reduce it to its first matter. For as Rhasis saith, we dissolve gold, that it may be reduced into its first nature or matter that is mercury. For being broke and made one, they have in themselves the whole tincture both

of the agent and patient. Wherefore saith Rhasis, make a marriage (that is a conjunction) between the red man, and his white wife, and you have the whole secret.

11. The same saith Merlin: if you marry the white woman to the red man, they will be conjoined and embrace one another, and become impregnated. By themselves they are dissolved, and by themselves they bring forth what they have conceived, whereby the two are made but one body. And truly our dissolution, is only the reducing of the hard body into a liquid form, and into the nature of argent vive, that the saltness of the sulphur may be diminished. Without our brass then be broken, ground, and gently and prudently managed, till it will be reduced from its hard and dense body, into a thin and subtil spirit, you labour in vain.

12. And therefore in the *Speculum Alchemiae*, it is said, the first work is the reducing the body into water, that is, into mercury. And this the philosophers called dissolution, which is the foundation of the whole art. This dissolution makes the body of an evident liquidity, and absolute subtility; and this is done by a gentle grinding, and a soft and continued assation or digestion. Wherefore saith Rhasis, the work of making our stone is, that the matter be put into its proper vessel, and continually decocted and digested, until such time as it wholly ascends, or sublimes to the top thereof. This is declared in *Speculum Philosophorum*. The philosophers' stone is converted from a vile thing, into a precious substance; for the semen solare is cast into the matrix of mercury, by copulation or conjunction, whereby in process of time they be made one. Also, that when it is compounded with the like, and mercurized, then it shall be the springing bud. For the soul, the spirit, and the tincture may then be drawn out of them by the help of a gentle fire.

13. Therefore saith Aristotle, the true matters or principles are not possible to be transformed or changed by the most learned in alchemie, except they be reduced into their first matter. And Geber saith, all ought to be made of mercury only; for when sol is reduced to its first original or matter, by mercury, then nature embraceth nature. And then it will be easy to draw out the subtil and spiritual substance thereof; of which Alkindus saith, take the things from their mines, and exact or subtilize them, and reduce them to their roots, or first matter, which is lumen luminum. And therefore, except you cast out the redness with the whiteness, you will never come to the exalted glory of the redness. For Rhasis saith, he that knows how to convert sol into luna, knows how to convert luna into sol. Therefore saith Pandophilus, in *Turba Philosophorum*, he that prudently draws the virtue or power from sol, and his shadow, shall obtain a great secret. Again it is said, without sol, and his shadow, no tinging virtue or power is generated. And whosoever it is that shall endeavor to make a tinging or colouring tincture, without these things, and by any other means, he errs, and goes astray from truth, to his own hurt, loss and detriment.

14. The vessel for our stone is but one, in which the whole magistry or elixir is performed and perfected; this is a cucurbit, hose bottom is round like an egg, or an urinal, smooth within, that it may ascend and descend the more easily, covered with a limbeck round and smooth every where, and not very high, and whose bottom is round also like an egg. Its largeness ought to be such, that the medicine or matter may not fill above a fourth part of it, made of strong durable glass, clear and transparent, that you may see through it, all the colours appertaining to, and appearing in the work; in which the spirit moving continually, cannot pass or fly away. Let it

also be so closed, that as nothing can go out of it, so nothing can enter into it; as Lucas saith, lute the vessel strongly with lutum sapientiae, that nothing may get in or go out of it. For the flowers, or matter subliming, should breathe out, or any strange air or matter enter in, your work will be spoiled and lost.

15. And though the philosophers oftentimes say, that the matter is to be put into the vessel, and closed up fast, yet it is sufficient for the operator, once to put the said matter in, once to close it up, and so to keep it even to the very perfection and finishing of the work. If these things be often repeated, the work will be spoiled. Therefore saith Rhasis, keep your vessel continually close, encompassed with dew, which demonstrates what kind of heat you are to use, and so well luted that none of the flowers, or that which sublimes, may get out, or vanish in vapour or fume. And in *Speculum Alchimiae*, it is said, let the philosophers' stone remain shut within the vessel strongly, until such time that it has drunk up the humidity; and let it be nourished with a continual heat till it becomes white.

16. Also another philosopher, in his *Breveloquium* saith, as there are three things in a natural egg, viz., the shell, the white, and the yolk, so likewise there are three things corresponding to the philosophers' stone, the glass vessel, the white liquor, and the citrine body. And as of the yolk and white, with a little heat, a bird is made, (the shell being whole, until the coming forth or hatching of the chicken), so it is in the work of the philosophers' stone. Of the citrine body, and white liquor, with a temperate or gentle heat is made the avis hermetis, or philosophers' bird.

17. The vessel being well and perfectly closed, and never so much as once opened till the perfection or end of the work; so that you see the vessel is to be kept close, that the spirit may not get out and vanish. Therefore saith Rhasis, keep thy vessel and its junctures close and firm, for the conservation of the spirit. And another saith, close they vessel well, and as you are not to cease from the work, or let it cool, so neither are you to make too much haste, neither by too great a heat, nor too soon opening of it. You must take special care that the humidity, which is the spirit, gets not out of the vessel; for then you will have nothing but a dead body remaining, and the work will come to nothing. Socrates saith, grind it with most sharp vinegar, till it grows thick, and be careful that the vinegar be not turned into fume, and perish.

18. The philosophers have described in their books a twofold fire, a moist and a dry. The moist fire they called the warm horse belly; in the which, so long as the humidity remains, the heat is retained; but the humidity being consumed, the heat vanishes and ceases, which heat being small, seldom lasts above five or six days; but it may be conserved and renewed, by casting upon it many times urine mixed with salt. Of this fire speaks Philares the philosopher: the property of the fire of the horse belly, is, not to destroy with its dryness the oil, but augments it with its humidity; whereas other fire would be apt to consume it.

19. Senior the philosopher saith, dig a sepulcher and bury the woman with her man, or husband, in horse-dung, or balneo of the same heat, until such time as they be intimately conjoined or united. Altudonius the philosopher saith likewise, you must hide your medicine in horse-dung, which is the fire of the philosophers; for this dung is hot, moist, and dark, having a humidity in itself, and an excellent light, or whiteness. Here is no other fire comparable to it in the world,

excepting only the natural heat of a man, or woman's body. This is a secret. The vapour of the sea not burned, the blood of man, and the blood of the grape is our red fire.

20. The dry fire is the fire of the bodies themselves; and the inflammability of every thing able to be burned. Now the government of these fires is thus: the medicine of the white ought to be put into the moist fire, until the complement of the whiteness shall appear in the vessel. For a gentle fire is the conservation of the humidity. Therefore saith Pandolphus, you are to understand that the body is to be dissolved with the spirit; --- with which they are mixed by an easy and gentle decoction, so that the body may be spiritualized by it. Ascanius also saith, a gentle fire gives health, but too much or great a heat will not conserve or unite the elements, but on the contrary divide them, waste the humidity, and destroy the whole work.

21. Therefore saith Rhasis, be very diligent and careful in the sublimation and liquefaction of the matter, that you increase not your fire too much, whereby the water may ascend to the highest part of the vessel. For then wanting a place of refrigeration, it will stick fast there, whereby the sulphur of the elements will not be perfected. For indeed in this work, it is necessary that they be many times elevated, or sublimed, and depressed again. And the gentle or temperate fire is that only which completes the mixture, makes thick, and perfects the work. Therefore saith Botulphus, that gentle fire, which is the white fire of the philosophers, is the greatest and most natural principle matter of the operation of the elements. Rhasis also saith, burn our brass with a gentle fire, such as that of a hen for the hatching of eggs, until the body be broken, and the tincture extracted. For with an easy decoction, the water is congealed, and the humidity which corrupteth, drawn out; --- and in drying, the burning is avoided. The happy prosecution of the whole work, consists in the exact temperament of the fire; therefore beware of too much heat, lest you come to solution before the time, viz., before the mater is ripe; for that will bring you to despair of attaining the end of your hopes. --- Wherefore saith he, beware of too much fire for if it be kindled before the time, the matter will be red, before it comes to ripeness and perfection, whereby it becomes like an abortion, or the unripe fruit of the womb; whereas it ought to be first white, then red, like as the fruits of a tree, a cherry is first white, then red, when it comes to its perfection.

22. And he that might indigitate a certain time, of decoction, he saith, that the dissolution of the body, and coagulation or congelation of the spirit, ought to be done, by an easy decoction in a gentle fire, and a moist putrefaction, for the space of one hundred and forty days. To which Orsolan assents saying, in the beginning of the mixture, you ought to mix the elements, being sincere and made pure, clean and rectified with a gentle fire, by a slow and natural digestion, and to beware of too much fire, till you know they are conjoined. Bonelius also saith, that by a temperate and gentle heat continued, you must make the pure and perfect body.

23. You ought to put on courage, resolution, and constancy, in attempting this great work, lest you err, and be deceived, sometimes following or doing one thing, and then another. For the knowledge of this art consisteth not in the multiplicity, or great number of things, but in unity; our stone is but one, the matter is one, and the vessel is one. The government is one, and the disposition is one. The whole art and work thereof is one, and begins in one manner, and in one manner it is finished.

24. Notwithstanding the philosophers have subtly delivered themselves, and clouded their instructions with enigmatical and typical phrases and words, to the end that their art might not only be hidden and so continued, but also be had in the greater veneration. Thus they advise to decoct, to commix, and to conjoin, to sublime, to bake, to grind, and to congeal; to make equal, to putrefy, to make white, and to make red; of all which things, the order, management, and way of working is all one, which is only to decoct. And therefore to grind is to decoct, of which you are not to be weary, saith Rhasis: digest continually, but not in haste, that is, not wit too great a fire; cease not, or make no intermission in your work, follow not the artifice of sophisters, but pursue your operation, to the complement and perfection thereof.

25. Also in the *Rosary* it is advised, to be cautious and watchful, lest your work prove dead or imperfect, and to continue it with a long decoction. Close up well they vessel, and pursue to the end. For there is no generation of things, but by putrefaction, by keeping out the air, and a continual internal motion, with an equal and gentle heat. Remember when you are in your work, all the signs and appearances which arise in every decoction, for they are necessary which arise in every decoction, for they are necessary to be known and understood in order to the perfecting the matter. You must be sure to be incessant and continual in your operation, with a gentle fire, to the appearing of the perfect whiteness, which cannot be if you open the vessel, and let out the spirit. From whence it is evident, that if you manage you matter ill, or your fire be too great, it ought to be extinguished. Therefore saith Rhasis, pursue your business incessantly, beware of instability of mind, and too great expectations, by a too hasty and precipitate pursuit, lest you lose your end. But as another philosopher saith, digest, and digest again, and be not weary; the most exquisite and industrious artist can never attain to perfection by too much haste, but only by a long and continual decoction and digestion, for so nature works, and art must in some measure imitate nature.

26. This then is the thing, that the vessel with the medicine be put into a moist fire; to wit, that the middle or one half of the vessel be in a moist fire, or balneo, of equal heat with horse-dung, and the other half out of the fire, that you may daily look into it. And in the space of forty days, the superficies or upper part of the medicine will appear black as melted pitch; and this is the sign, that the citrine body is truly converted into mercury. Therefore saith Bonellus, when you see the blackness of the water to appear, be assured that the body is made liquid. The same thing saith Rhasis; the disposition or operation of out stone is one, which is, that it be put into its vessel and carefully decocted and digested, till such time as the whole body be dissolved and ascended. And in another place he saith, continue it upon a temperate or gentle balneo, so long till it be perfectly dissolved into water, and made impalpable, and that the whole tincture be extracted into the blackness, which is the sign of its dissolution. Lucas also assureth us, that when we see the blackness of the water in all things to appear, that then the body is dissolved, or made liquid. This blackness the philosophers call the first conjunction; --- for then the male and female are joined together, and it is the sign of perfect mixtion.

27. Yet notwithstanding, the whole tincture is not drawn out together; but it goes out every day, by little and little, until by a great length of time, it is perfectly extracted, and made complete. And that part of the body which is dissolved, ever ascends or rises to the top, above all the other undissolved matter which remains yet at bottom. Therefore saith Avicen, that which is spiritual

in the vessel ascends up to the top of the mater, and that which is yet gross and thick, remains in the bottom of the vessel. This blackness is called among the philosophers by many names, to wit, the fires, the soul, a cloud, the raven's head, a coal, our oil, aqua vitae, the tincture of redness, the shadow of the sun, black brass, water of sulphur, and by many other names.

28. And this blackness is that which conjoineth the body with the spirit. Then saith Rhasis, the government of the fire being observed for the space of forty days, both (to wit the white liquor, and the citrine body) are made a permanent or fixed water, covered over with blackness; which blackness, if rightly ordered, cometh to its perfection in forty days space. Of which another philosopher saith, so long as the obscure blackness appeareth, the woman hath the dominion; and this is the first conception or strength of our stone; for if it be not first black, it shall never be either white or red. Avicen saith, that heat causeth blackness first, in a moist body; then the humidity being consumed, it putteth off or loseth its blackness; and as the heat increaseth, or is continued, so it grows white. Lastly, by a more inward heat, it is calcined into ashes, as the philosophers teach.

29. In the first decoction, which is called putrefaction, our stone is made all black, to wit, a black earth, by the drawing out of its humidity; and in that blackness, the whiteness is hidden. And when the humidity is reverted upon the blackness again, and by a continued soft and gentle digestion is made fixed with its earth, then it becomes white. In this whiteness, the redness is hidden; and when it is decocted and digested by augmentation and continuance of the fire, that earth is changed into redness, as we shall hereafter teach.

30. Now let us return to the black matter in its vessel, continually closed. Let this vessel I say, stand continually in the moist fire, till such time as the white colour appears, like to a white moist salt. The colour is called by the philosophers arsenic, and sal armoniac; and some others call it, the thing without which no profit is to be had in the work. But inward whiteness appearing in the work, then is there a perfect conjunction, and copulation, of the bodies in this stone, which is indissoluble. And then is fulfilled that saying of Hermes, the thing which is above, is as that which is beneath; and that which is beneath, is as that which is above, to perform the mystery of this matter. Phares saith, seeing the whiteness appearing above in the vessel, you may be certain, that in the whiteness, the redness lies hid; but before it becomes white, you will find many colours to appear. Therefore saith Diomedes, decoct the male and the (female or) vapour together, until such time as they shall become one dry body; for except they be dry, the divers or various colours will not appear. --- For it will ever be black, whilst that humidity or moisture has the dominion; but if that be once wasted, then it emits divers colours, after many and several ways.

31. And many times it shall be changed from colour to colour, till such times as it comes to the fixed whiteness. Synon saith, all the colours of the world will appear in it when the black humidity is dried up. But value none of these colours, for they be not the true tincture: yea, many times it becomes citrine and reddish, and many times it is dried, and becomes liquid again, before the whiteness will appear. Now all this while the spirit is not perfectly joined with the body, nor will it be joined or fixed but in the white colour. Astanus saith, between the white and the red appear all colours, even to the utmost imagination. --- For the varieties of which the

philosophers have given various names, and almost innumerable; some for obscuring it, some for envy's sake. The cause of the appearance of such variety of colours in the operation of your medicine, is from the extension of the blackness; for as much as blackness and whiteness be the extreme colours, all the other colours are but means between them. Therefore as often as any degree or portion of blackness descends, so often another and another colour appears, until it comes to whiteness.

32. Now concerning the ascending and descending of the medicine, Hermes saith, it ascends from the earth into heaven, and again descends from heaven to the earth, whereby it may receive both the superior strength, and the inferior. Moreover this you are to observe, that if between the blackness and the whiteness, there should appear the red or citrine colour, you are not to look upon it or esteem it, for it is not fixed, but will vanish away. There cannot indeed be any perfect and fixed redness, without it be first white. Wherefore saith Rhasis, no man can come from the first to the third, but by the second. From whence it is evident, that whiteness must always be first looked for, after the blackness, and before the redness; for as much as it is the complement of the whole work. Then after this whiteness appears, it shall not be changed into any true or stable colour, but into the red, Thus we have taught you to make the white; it now remains that we elucidate the red.

33. The matters then of the white and red, among themselves, differ not in respect to their essence; but for the red elixir needs more subtilization, and longer digestion, and a hotter fire in the course of the operation, than the white, because the end of the white work, is the beginning of the red work; and that which is complete in the one, is to be begun in the others. --- Therefore without you make the white elixir first, make the matter become first white, you can never come to the red elixir, that which is indeed the true red; which how it is to be performed, we shall briefly shew. The medicine for the red ought to be put into our moist fire, until the white colour aforesaid appear, afterwards take out the vessel from the fire, and put it into another pot with sifted ashes made most with water, to about half full, in which let it stand up in the middle thereof, making under the earthen pot a temperate dry fire, and that continually. But the heat of this dry fire ought to be double at the least, to what it was before, or than the heat of the moist fire, by the help of this heat, the white medicine receiveth the admirable tincture of the redness.

34. You cannot err if you continue the dry fire. Therefore Rhasis saith, with a dry fire, and a dry calcinations, decoct the dry matter, till such time as it becomes in colour, like to vermilion or cinnabar. To the which you shall not afterwards put to complete it, either water, or oil, or vinegar; the more red it is, the more worth it is, and the more decocted it is, the more red it is. Therefore that which is more decocted, is the more precious and valuable.

35. Therefore you must burn it without fear in a dry fire, until such time as it is clothed with a most glorious red, or a pure vermilion colour. For which cause Epitus the philosopher saith, decoct the white in a red hot furnace, until such time as it be clothed with a purple glory. Do not cease, though the redness be somewhat long, before it appears. For as I have said, the fire being augmented, the first colour of whiteness will change into red. Also when the citrine shall first appear, among those colours, yet that colour is not fixed. But not long after it, the red colour shall begin to appear, which ascending to the height, your work will indeed be complete. As

Hermes saith in *Turba*, between the whiteness and the redness, one colour only appears, to wit, citrine, but it changes from the less to the more. Maria also saith, when you have the true white, then follows the false and citrine colour; and at last the perfect redness itself. This is the glory and the beauty of the whole world.

36. Our medicine, or elixir, is multiplied after a two-fold manner, viz., 1. By dissolution, 2. By fermentation. By dissolution, it is augmented tow manner of ways, first, by a greater or more intense heat; secondly, by dew, or the heat of the balneum roris. The dissolution of heat is, that you take the medicine put into a glazen vessel, or boil or decoct it in our moist fire for seven days or more, until the medicine be dissolved into water, which will be without much trouble. The dissolution by dew, or balneum roris, is, that you take the glass vessel with the medicine in it, and hang it in a brazen or copper pot, with a narrow mouth, in which there must be water boiling, the mouth of the vessel being in the mean season shut, that the ascending vapours of the boiling water may dissolve the medicine. But note, that the boiling water ought not to touch the glass vessel, which contains the medicine, by three or four inches, and this dissolution possibly may be done in two or three days. A fter the medicine is dissolved, take it from the fire, and let it cool, to be fixed, to be congealed, and to be made hard or dried; and so let it be dissolved many times; for so much the oftener it is dissolved, so much the more strong, and the more perfect it shall be. Therefore Bonellus saith, when the aes, brass, or laten is burned, and this burning many times reiterated, it is made better than it was; and this solution is the subtilization of the medicine, and the sublimation of the virtues thereof.

37. So that the oftener it is sublimed and made subtil, so much the more virtue it shall receive; and te more penetrative shall the tincture be made, and more plentiful in quantity; and the more perfect it is, the more it shall transmute. In the fourth distillation then, it shall receive such a virtue and tincture, that one part shall be able to transmute a thousand parts of the cleansed metal into fine gold or silver, better than that which is generated in the mines. Therefore saith Rhasis, the goodness or excellency of the dissolution and fixation of the perfect medicine. For so much the oftener the work is reiterated, so much the more fruitful it will be, and so much the more augmented. So much the oftener you sublime it, so much the more you increase it; for every time it is augmented in virtue, and power, and tincture, one more to be cast upon a thousand; at a second time upon ten thousand; at a third time upon one hundred thousand; at the fourth time upon a million. And thus you may increase its power by the number of reiterations, till it is almost infinite. Therefore saith Mercedes the philosopher, know for certain, that the oftener the matter or stone is dissolved and congealed, the more absolutely and perfectly the spirit and soul are conjoined and retained. And for this cause, every time the tincture is multiplied, after a most admirable and inconceivable manner.

38. Our medicine is multiplied by fermentation; and the ferment for the white is pure luna, the ferment for the red is pure fine sol. Now cast one part of the medicine upon twenty parts of the ferment, and all shall become medicine, elixir, or tincture; put it on the fire in a glass vessel, and seal it so that no air can go in or out, dissolve and subtilize it, as oft as you please, even as you did for making of the first medicine. And one part of this second medicine, shall have as much virtue and power, as ten parts of the former. Therefore saith Rhasis, now have we accomplished our work by that which is hot and moist, and it is become equally temperate: and whatsoever is

added or put to it shall become of the same temperament and virtue with it. You must then conjoin it, that it may generate its like; yet you must not join it with any other that it might convert to the same, but only with that very same kind, of whose substance it was in the beginning

39. For in *Speculo Terrae Spiritualis*, it is written, that the elixir is figured in the body, from whence it was taken in the beginning, when it was to be dissolved. That is to say, to dispose, marry or conjoin that earth revived, and in is soul purified by commixtion of its first body from whence it took beginning. Also in *Libro Gemmae Salutaris*, it is said, that the white work needs a white ferment; which when it is made white, is white ferment also; and when it is made red, is the ferment of redness. And so the white earth is ferment of ferment: for when it is conjoined with luna; or shall be made a medicine, it is to be cast upon mercury, and every imperfect metalline body, to be converted into luna. And to the red, ought sol to be joined; and it will become a medicine or tincture, to project upon mercury, or upon luna.

40. Rhasis, also saith, you must now mix it with argent vive, white and red, after their kind; and be so chained that it flies not away. Wherefore we command argent vive to be mixed with argent vive, until one clear water be made of two argent vives compounded together, But you must not make the mixture of them, till each of them apart or separately be dissolved into water: and in the conjunction of them, put a little of the matter upon much of the body, viz., first upon four; and it shall become in a short time a fine powder, whose tincture shall be white or red, This powder is the true and perfect elixir or tincture, and the elixir or tincture, it is truly a simple powder.

41. Egidius also saith, to solution put solution, and in dissolution put dessication, viz., make it dry, putting all together to the fire. Keep entire the fume or vapour, and take heed that nothing thereof fly out from it. Tarry by the vessel and behold the wonders, how it changes from colour to colour, in less space than an hour's time, till such time as it comes to the signs of whiteness or redness. For it melts quickly in the fire, and congeals in the air. When the fume or vapour feels the force of the fire, the fire will penetrate into the body, and the spirit will become fixed, and the matter made dry, becoming a body fixed and clear or pure whether white or red. This powder is the compleat and perfect elixir or tincture; now you may separate or take it from the fire, and let it cool.

42. And first, part f it projected upon 1000 parts of any metalline body, transmutes it into fine gold or silver, according as your elixir or tincture is for the red or the white. From what has been said, it is manifest and evident, that if you do not congeal argent vive, making it to bear and endure the fire, and then conjoining it with pure silver, you shall never attain to the whiteness. And if you make not argent vive red, and so as it may endure the greatest fire, and then conjoin it with pure fine gold, you shall never attain to the redness. And by dissolution, viz., by fermentation, your medicine, elixir, or tincture, may be multiplied infinitely.

43. Now you must understand that the elixir o tincture, gives fusion like wax: for which cause saith Rhasis, our medicine ought of necessity be of a subtle substance, and most pure, cleaving to mercury, of its nature, and of most easy and thin liquefaction, fusion, or melting, after the

manner of water. Also in the book, called *Omne Datum Optimum*, it is said, when the elixir is well prepared, it ought to be made liquid, that it may melt as wax upon a plate red fire-hot, or upon coals. Now observe what you do in the white, the same you must do in the red, for the work is all one. The same operation that is in the one, is in the other, as well in multiplication as projection.

44. Geber, the Arabian prince, alchemist, and philosopher, in lib. 5 cap. 21 saith, that there are three orders of medicines. The first order, is of such medicines, which being cast upon imperfect bodies, takes not away their corruption or imperfection, but only gives tincture, which in examination, flies away and vanishes. The second order, is of such medicines, which being cast upon imperfect bodies, tinge them (in examination) with a true tincture, but take not away wholly their corruption. The third order, is of such medicines, which being cast upon imperfect bodies, not only perfectly tinge them, but also take away all their corruption and impurities, making them incorrupt and perfect: of the first two kinds, or orders of medicines, we have nothing to say here; we now come to speak of the third. Let therefore this your perfect medicine, or elixir, be cast upon a thousand or more parts, according to the number of times it has been dissolved, sublimed, and made subtile: if you put on too little, you must mend it by adding more; otherwise the virtue thereof will not accomplish a perfect transmutation.

45. The philosophers therefore made three proportions, divers manners of ways, but the best proportion is this: let one part be cast upon an hundred parts of mercury, cleansed from all its impurities; and it will all become medicine, or elixir; and this is the second medicine: which projected upon a thousand parts, converts it all into good sol, or luna. Cast one part of this second medicine upon an hundred of mercury prepared, and it will all become medicine, and this is the third medicine, or elixir of the third degree, which will project upon ten thousand parts of another body, and transmute it wholly into fine sol or luna. Again, every part of this third medicine being cast upon an hundred parts of prepared mercury, it will all become medicine of the fourth degree, and it will transmute ten hundred thousand times its own quantity of another metal into fine sol or luna, according as your fermentation was made. Now these second, third, and fourth medicines may be so often dissolved, sublimed, and subtilized, till they receive far greater virtues and powers, and may after the same manner be multiplied infinitely.

46. According to Rhasis, the proportion is thus to be computed. First, multiply ten by ten, and its product is an hundred: again 100 by 10, and the product is 1000; and a 1000 by 10, and the product will be 10,000. And this 10,000 being multiplied by 10, produces an 100,000; and thus by consequence you may augment it, till it comes to a number almost infinite. That is to say, put 1 upon 10, and that 10 upon an 100, and that 100 upon a 1000, and it shall multiply to, or produce an 100,000; and so forward, in the same proportion.

47. Now the projection is after this manner to be done: put the body, or metal upon the fire in a crucible, and cast thereon the elixir as aforesaid, moving, or stirring it well; and when it is melted, become liquid, and mixed with the body, or with the spirit, remove it from the fire, and you shall have fine gold or silver, according to what your elixir was prepared from. But here is to be noted, that by how much the more the metalline body is the easier to be melted, by so the ore shall the medicine have power to enter into, and transmute it. Therefore by so much as mercury

is more liquid than any other body, by so much the more, the medicine has power in being cast upon it, to wit, mercury, to transmute it into fine sol or luna. And a greater quantity of it shall your medicine transmute, give tincture to, and make perfect, than of any other mineral body. The like is to be understood, to be performed in the same manner upon other mineral bodies, according as they are easy or hard to be fused or melted.

And because prolixity is not pleasant, but induceth error, and clouds the judgment, we shall now use much brevity, and shew the complement of the whole work, the premises being well conceived. It appears, that our work is hidden in the body of the magnesias, that is, in the body of Sulphur; which is sulphur of sulphur; and in the body of mercury, which is mercury of mercury.

Therefore our stone is from one thing only, as is aforesaid, and it is performed by one act or work, with decoction: and by one digestion, or operation, which is the changing of it first to black, then to white, thirdly, to red: and by one projection, by which the whole act and work is finished. From henceforth, let all pseudo-chemist, and their followers, cease from their vain distillations, sublimations, conjunctions, calcinations, dissolutions, contritions, and other like vanities. Let them cease from their deceiving, prating, and pretending to any other gold, than our gold; or an other sulphur than our sulphur, or any other argent vive than ours; or any other ablation or washing than what we have taught.

Which washing is made by means of the black colour, and is the cause of the white, and not a washing made with hands. Let them not say, that there is any other dissolution than ours, or other congelation than that which is performed with an easy fire: or any other egg than that which we have spoken of by similitude, and so called an egg. Or that there is any production of the philosophic matter from vegetables, or from mankind, or from brute beasts, or hares' blood, and such like, which may serve to this work, lest thereby you be deceived, and err, and fall short of the end. But hear now what Rhasis saith, look not upon the multitude, or diversity of names, which are dark and obscure, they are chiefly given to the diversity of colours appearing in the work.

Therefore whatever the natures be, and how many soever, yet conceive the matter or thing to be but one, and the work to be but one only. Lucas saith, consider not the multitude of the simples composing it, which the philosophers have dictated, for the verity is but one only, in the which is the spirit and life sought after. And with this it is that we tinge and colour every body, bringing them from their beginnings and smallness, to their compleat growth, and full perfection.

Permenides the philosopher saith, it is a stone, and yet no stone; it is sulphur, and no sulphur, it is gold, and yet no gold: it is also a hen's egg, a toad, man's blood, man's hair, etc., by which names it is called, only to hide the mystery. Then he adds, O thou most happy, let not these words, nor other the like trouble thee, for by them understand our sulphur and our mercury. If you that are searchers into understand these words and things which we have written, you are happy, yea, thrice happy: if you understood not what we have said, God himself has hidden the thing from you. Therefore blame not the philosophers but yourselves; for if a just and faithful mind possessed your souls, God would doubtless reveal the verity to you. And know, it is

impossible for you to attain to this knowledge, unless you become sanctified in mind, and purified in soul, so as to be united to God, and to become one spirit with him.

When you shall appear thus before the Lord, he shall open to you the gates of his treasure, the like of which is not to be found in all the earth. Behold, I shew unto you the fear of the Lord, and the love of Him with unfeigned obedience: nothing shall be wanting to them that fear God, who are cloathed with the excellency of his holiness, to whom be rendered all praise, honour and glory to the ages of ages. Amen.