Apollogia Alchymiae - R.W. Councell

Transcribed by Mark House.

APOLLOGIA ALCHYMIAE
A Restatement of Alchemy

R.W.COUNCELL

John M. Watkins, 21 Cecil Court, Charing Cross Road, London 1925.
Made and Printed in Great Britain by Percy Lund, Humphries & Co., LTD., The Country Press, Bradford.

R.W. Councell *Apollogia Alchymiae*

Preface

Transcribed by Mark House.

PREFACE

Of the illusions which amuse the childish mind of man, that of Scientific Progress is not the least absurd. It is the most popular toy in the nursery called Modern Civilization. The wisdom of yesterday is the jest of today, the superstition of tomorrow. Human experience shows this to be the case. Yet we go on believing we are making discoveries. In the days of the Regency a physician looked upon a patient who refused to be bled in much the same way that a modern practitioner regards an appendicitis case who declines to have the inflamed fragment removed. Harley Street, in 1923, assures us that old time surgery resulted in thousands of unnecessary deaths from loss of blood. Harley Street, in 2023, will probably declare that our present method resulted in thousands of unnecessary deaths from loss of the appendix. We believe we understand the phenomena of solar and lunar eclipses, and believe that we have measured the distances from this our earth to the visible planets. Five hundred years hence our calculations will almost certainly be proved ridiculous. Nevertheless, we go on believing we are making discoveries. A day must surely come when crowds shall throng the waiting room of some consultant, famous for his having established the efficacy of cupping; when all shall know that eclipses are not due to the earth's shadow; when to common knowledge this same earth be stationary, whilst stars, moon and sun revolve around it.

What, then, do scientific discoverers discover? They discover (with certain notable exceptions) new bottles to contain old physic. They exhibit for our awe a tube of brick coloured powder, which they have named something ending in "ium." It has always been, that brick coloured powder. An earlier race, dwellers, perhaps, in a great Sun City now lost beneath an ocean, used it to dye their beards. They proclaim radium. And one day, it may be in some forgotten tomb, a practical radium lamp is found still alight. They bear witness to the triumph of steel by erecting, in New York or elsewhere, the worlds highest building; forgetting that somebody or another built the Great Pyramid. They acclaim certain Japanese craftsmanship the finest of its kind until among the treasures of a buried pharaoh yet finer examples are unearthed. Signor Marconi can talk to his friends who are hundreds of miles away. So could Apollonius of Tyana. The cinematogragh shows us moving figures of those who have passed over. Any igh priest of Osiris could have shown us the same; so could Moses. The churches assured the world that we had emerged from the black ages of barbarism and were civilized. Thereupon we plunged into the most savage and sanguinary war recorded in the annals of man.

What, then, is Evolution? That it is a slow process in the case of humanity, experience would seem to show; but since Lord

Rayleigh calculates the age of Mother Earth to be 925 million years, the possibility of endless cycles suggests itself. That, by means of a ceaseless chemical operation, the elements (which we are constantly and confidently "discovering") become merged in forms variously known as coal, diamonds, lead, gold, and a host of other commercial practicabilities, would seem to be a Truth as opposed to a Theory. And since many natural processes can be artificially reproduced, why not this wedding of atom to atom?

Professor Richardson, speaking of recent experiments relating to the structure of the nucleus of atoms, declared the artificial transmutation of chemical elements to be now an established fact. In short, it would almost seem that we find ourselves upon the eve of "discovering" the Philosopher's Stone of medieval alchemy. Professor Irving Fisher, of Yale, recently startled the world by announcing that a German chemist had succeeded in making synthetic gold from base metals by means of an electric vacuum furnace. Referring to this alleged experiment, in an interview with a representative of the "Daily Mail," Dr. Irvine Masson, of University College, London, said: "So far no definite transmutation of an element by building up heavy atoms of gold from lighter metals has been achieved. On the other hand, Sir Ernest Rutherford has disintegrated certain of the lighter elements into one still lighter. While one cannot say it is impossible, there seems no reason why gold should be specially singled out by Nature to be the ultimate product of a building-up or breaking-down process.

"Supposing a certain amount of gold had been found to be a product of change, the question would arise as to the utility of the process. At present the only transmutation that has been affected has been, from the productive point of view, extraordinarily ineffective and extravagant. I think that most scientists are interested in these alleged discoveries, but are inclined to be somewhat skeptical until definite proofs are forthcoming, which is my position in

the present case."
But whatever the facts may be regarding this modern operation, the attitude of leading scientists toward the possibilities of the German's vacuum furnace; yet the author of the present work, whose researches into the subject of Alchemy have been exhaustive, appears to have found good reason to believe that some of these made synthetic gold! In the preface to his "Alchemy, Ancient and Modern." Mr. Stanley Redgrave says: "The number of books in the English language dealing with the interesting subject of Alchemy, is not sufficiently great to render an apology necessary for adding thereto. Indeed, at the present time, there is an actual need for a further contribution on this subject."
The present work is apparently written with a view to rectifying certain misconceptions which are held by those who have criticized adversely the claims of the old alchemists. This the author has sought to do by quoting verbatim from the alchemystical writers themselves. That he has an extensive library dealing with this subject, goes without saying; and of his deep and wide personal inquiries mention has already been made.
His style betrays a profound belief in alchemy or, as he terms it, "the law of evolution as applicable to metals and minerals." In this he evidently does not stand alone, as men eminent in science are to-day holding this view as an hypothesis, and are making more than tentative experiments to test it.
The "Periodic Table of Mendeleeff" points in this direction, at least as certainly as fossils do in the evolution of animal and vegetable life. Sir Edward Thorpe and others have indicated definite numerical relations between the members of the halogen group of Fluorine, Chlorine, Bromine, and Iodine. Also in the case of the nitrogen group of Nitrogen, Phosphorus, Arsenic, Antimony, and Bismuth. Apparently similar relations can be shown to exist between the members of the following group: Lithium, Sodium, Copper, Silver and Gold. "These numerical relations," says the author, "seem to suggest affinity, even if they are far from proving it, and affinity suggests at least a common parentage.
"Some investigators would appear to find in their study of alchemy, ground for putting forward an hypothesis that dogmas of religious belief are the foundations on which alchemic writers have raised a bizarre temple of chemistry. Further, that his chemistry was never practically achieved, but only used symbolically to veil certain tenets of religion, such as the trinity. However, considering the testimony on von Helmont and others, which cannot be lightly set aside, and also the experiments of present-day scientists, which far from disproving a law of evolution in metals, tend, indeed, to affirm it, such an hypothesis seems inadequate to account for the existence of alchemic literature."
Chemistry has been styled "the wise daughter of a foolish mother," but we see today that the daughter is investigating the maternal fairy tales with the utmost caution, lest they should be found too true. World-wide interests would be jeopardized by a discovery of the method of making gold by synthesis; and it is really remarkable that more fiction has not been written around this fascinating subject.
A cipher manuscript, by Friar Bacon, is now being investigated in America with a view to decoding it, and perhaps of getting at the truth of gold evolution. One would imagine it to be almost certain, however, that Bacon omits the names of his ingredients, or else supplies false names, as do other writers. There are many ciphers in alchemic literature which have been discovered such names as vitriolum, antimony, saturn (lead), stannum (tin), etc. each of which is condemned as an ingredient by a consensus of writers of repute. Doubtless, they are interpolated to distract the attention of the student from the name of their "proxima materia", which name they have mentioned openly and in the vulgar tongue.
This name according to the author of the present work is given in order to acquaint the alchemist's unknown brother adepts with the fact that he knows the material; it is not written for the information of the tyro. Thus, Sendivogius writes that he "intimated the art from word to word," but that his hearers "could by no means understand" him. Basil Valentine named the substance openly. Eirenaeus Philalethes asserts that he could tell true writers from sophisters "by a secret character." Therefore, he must have found this word or character in the writers form whom he quotes. It is, then, for others to find, but probably not in a cipher.
Alchemy, at one time, was undoubtedly under the aegis of the Church. The names of Flamel, Basil Valentine and Bernard Trevisan may be cited, but without undue stress; in the cases of Bacon, Ripley and Lully, the evidence is stronger. Ripley had the permission of the Church to withdraw from his sacerdotal duties, in order to devote himself to alchemy. It is impossible to conceive of the sanction of the Church being given if the art were fraudulent in all instances. History places it on record that certain alchemists were imprisoned by the sovereigns of states, not for fraud, but for refusing to exercise their art or to impart its secret. This seems to imply that success in the art had been proved beyond doubt.
These hypotheses, and others which arise out of them, are extraordinarily fascinating; but after all is said, remains the concrete fact that there has been in the present day no accredited demonstration of the art perfected the great work of transmuting baser metals into silver or gold. Nevertheless, some of the foremost scientists of Europe and America are turning their eyes in the direction of that star which beckoned to Raymond Lully. We are possibly about

to witness the phenomenon of the Philosopher's Stone, "myth" of ancient superstition, emerging, tangible, from an electric vacuum furnace! Who, now, shall deny the existence of fairies or doubt the birth of the Gods?
SAX ROHMER
BRUTON STREET.
FEB. 5th, 1923

R.W. Councell *Apollogia Alchymiae*

Section I. Prefatory Remarks

Transcribed by Mark House.

SECTION I
Prefatory Remarks

This small treatise is intended to be a very brief re-statement of the claims of the alchemists. It is set forth largely in their own words, and principally from their view point; but the aspect from the standpoint of recent scientific discoveries in the realm of physics, has not been overlooked. Indeed, to have disregarded these latter, would have been tantamount to neglecting the most trenchant arguments available, for making out an a priori case in favour of the existence of a law or laws of evolution through unity, applicable to all material things.

As all branches of physics point in this direction, it is difficult to say which method of investigation appears to yield the most striking intimations, and presumptive evidence, of the evolution of metals. Probably the spectroscope is foremost. Considerations of space, and of the scope of this treatise, prevent further allusion to this fascinating subject than is given in subsequent chapters. For him who proves the existence of this evolutionary law by the production of gold, there is no guerdon of fame; for results of publicity in this matter are truly incalculable.

As regards the claims of the alchemists, these are twofold: first, that a law of evolution obtains in the mineral and metallic realm; and second, that its working has been practically demonstrated. Modern writers on chemistry, and modern critics of alchemy, do not definitely deny the possibility of evolution, but they do assert that the practical proof of the existence of such a law has not yet passed successfully through the crucial test. Yet the truth of the alchemists' assertions is vouched for in the most solemn language possible. Without any obligation to do so, writers have pledged their hopes of eternal salvation upon the truthfulness of their statements. Some of the prayers of the alchemists are amongst the most sublime outpourings of soul extant. I instance two only: Ripley's prayer in the Medulla of Alchemy, commencing "O most incomprehensible Light," and Basil Valentine's preface to his Last Will and Testament. These and the prayers and pious ejaculations of the other alchemists e.g., Artephius, Flamel, Bacon, Geber, Kalid, Hermes are worthy to be preserved, and to be made accessible to the ordinary reader. To assert that such men are liars, or are deluded when they say they have evolved gold and silver, is tantamount to admitting that one is ignorant of psychology. There is no room for delusion or self deception, as there might be in witnessing a conjuring trick.

PRAYER OF BASIL VALENTINE LAST WILL AND TESTAMENT

"O Lord God Almighty, merciful gracious Father of Thine Only Begotten Son Jesus Christ, who art only the Lord of Sabaoth, the principle of all things that are made by thy word, and definite end of all creatures above and below; I, poor miserable man and earthworm, return thanks with my babbling tounge from the innermost center of my heart, who hast been pleased to enlighten me with the great light of Thy heavenly and earthly wisdom, and the greatest mysteries of the created secrecies and treasures of this world, together with Thy divine saving word, by which I learn to know Thine Almighty power and wonders. To Thee belongs eternal praise, honour and glory, from eternity unto eternity, that Thou hast bestowed on me health and livelihood, strength and ability to be helpful to my fellow Christians in their necessities and inflicted infirmities with these mystical healing medicines, together with such spiritual comforts, to raise the drooping spirits. Lord, to Thee alone belongs power, might and glory, to Thee is the praise, honour and gratefulness, for all the mercies and graces Thou has bestowed upon me, and hast preserved me therein to this my great age, and lowest comforts, be not angry with me that I deliver up to Thee, mine eternal Creator, the keys of my stewardship; wrapped up in this parchment, according to the duty my calling and conscience calls for; with these Thou did suffer me to keep house the most of my time till now, Thou hast called and foreseen me to be thy servant and steward, and hast graciously afforded, that I should enjoy the noble sweet fruits which were gathered in thy almonary to my last instant, and which now O Lord lieth in Thy power. I beseech Thee for the dear merits of Jesus Christ, come now, when Thou pleasest, enclose my heart, receive my soul into Thy heavenly throne of grace; let her be recommended unto Thee graciously O Thou faithful God, who hast redeemed her on the Holy Cross with the most precious tincture of the true blood of Thy holy body: then is my life well ended on this earth, grant to the body a quiet rest, till at the last day, body and soul join again, and are of a heavenly composition: for

now my only desire is to be dissolved, and to be with my Lord Christ: the which Thou, Almighty, Holy, and Heavenly Trinity grant to me, and all good Christian believers. Amen."

PRAYER OF RIPLEY IN MEDULLA ALCHEMIAE

"O most Incomprehensible Light, most glorious in majesty, who with the clarity of Thy heavenly rays dost darken our dimmer light; O substantial Unity, the Divine Three, the joy and rejoicing of the heavenly host, the glory of our redemption. Thou most merciful, the purifier of souls, and the perpetual subsistence, O most gracious, through daily dangers and perils which Thou sufferest us to undergo, and through this vexatious veil of vanity, bring us to Thy Heavenly Kingdom. "O power and wisdom, Thou goodness inexplicable, uphold us daily, and be our guide and director, that we may never displease thee all the days of our lives, but obey Thee as faithful professors of Thy Holy name. Early, even betimes, O Lord, hear Thou my prayers, by virtue of Thy grace help forward my desires, and enable me, I beseech Thee, to perform Thy Holy Will. O most excellent fountain, boundless in treasures, Thou scatterest Thy good things without measure amongst the sons of men, and Thou makest every other creature to partake of Thine especial kindness. Thou art worthy, O Lord, to behold the works of Thy hand and to defend what Thy right hand hath planted, that we may not live unprofitably, nor spend the course of our years in vanities. Grant, therefore, we beseech Thee, that we may live without falsehood and deceit, that avoiding the great danger of a sinful course of life, we may escape the snares of sin. "And as I renounceth love of the things of this life, and the concupiscence or lusts thereof, so accept of me, Thy servant, as a true and spontaneous votary, who wholly depends on Thy goodness, with all confidence, possessing nothing more. "We submit ourselves to Thee, for so it is fit; vouchsafe Thy light to discover to us the immortal treasures of life; shew us Thy hidden things, and be merciful and good unto us. "Among the rest of Thy servants, who profess Thy name, I offer myself with all humble submission; and I beseech Thee O Lord, to forgive me, if I open and reveal Thy secrets to Thy faithful servants. Amen."

These men declare that they have actually done the work themselves, by their own hands; one exception to this being stated by the author of The Book of Alze. It is simply a question of having produced ten fold, a hundred fold, or a thousand fold more gold and silver than was used as a ferment. A man who states definitely that he has accomplished this work is telling the simple truth, or he is a conscious and self condemned liar. He has had a certain result, and the theory he puts forward is intended to account for this phenomenon through perfectly natural causes; and if the material and working are correct the same result must inevitably follow.

If he reads many alchemic books, the unbiased man will be unable to avoid the conclusion that the alchemist had done that which he solemnly asserted he had actually accomplished, viz., produced gold which was not previously in existence. The whole possibility turns on this point; "Is gold a compound body?" Chemists can only say that they have not yet succeeded in splitting it up, if indeed such a statement is true. It could also be said that it acts like a simple body. This latter is not a sufficient argument, for many compounds take, for example, ethyl and ammonia act as simple bodies to form bases, salts, amalgams, and so on. These compounds were formerly considered to be simple.

It has been stated that nitrogen, hitherto considered to be a simple element has been split up into helium and hydrogen. The diamond has been proved to consist of something more than crystallized carbon. Where analysis has been accomplished, the possibility of synthesis has to be considered, especially in "lifeless" things. Several books have been written suggesting, and actually stating, that the art is impossible. Reduced to its simplest terms, this means that these detractors have not accomplished the work, and know of no one who has. The Periodic Law, if it points in any direction, points in the direction of evolution. The evidence of the spectroscope shows that the older a heavenly body is, the more "elements" it contains. Our sun contains more elements than younger suns. The earth contains more elements than the sun, although the former were thrown off from the sun, and probably contained at that time precisely the same number as its parent orb. The spectroscope fails to detect gold in nebulae, comet emanations, or in any of the suns, including ours.

Sir Roderick Murchison geologist and metallurgist said that gold was "the latest formed metal." Nearly all, if not all, metallurgists and miners agree that the occurrence of gold is mainly a surface phenomenon. There is also the current belief that the: "tailings" of gold mines show more gold, the longer they are left. These tailings are left by companies who have efficient plant, including mercury, soda, cyanide, etc., for dissolving out, or amalgamating with the gold; the tailings as a rule are worked over by Chinamen using only the cradle and pan. Lock, on page 787 of his monumental work entitled Gold, writes: "Many of the tailings cannot, by their position, have been enriched gold sand descending to them by gravity, or by water streams." Basil Valentine, in Chapter II of his Last Will and Testament, also mentions the matter. Gold has not apparently ascended from the interior of the earth, either as fluid, solid, or as volatilized into vapour. In either case, the gold would be more abundant towards the interior. The converse is true. Surface workings are the richest; and even the reefs themselves get poorer as they get deeper. There are few exceptions to this general rule.

If Nature is still producing gold on the earth, she probably does so in the form of minute specks. The nuggets are probably aggregations of these specks deposited out of fluid in which they were suspended or carried or in which they were in solution. It is unlikely that these atoms of gold are formed by one dry metal acting on another; and it is said "One body entereth not, or altereth not another." There must, it appears, be a medium, a fluid medium of union. The author of Aurea Catena Homeri writes: "A medium of union is wanting. They (the students) should look for such a medium. One metal does not and cannot enter into a radical union with another without their medium of union; this medium they have lost at the melting furnace, near the mines. Go there and look for it, or take its like." For those who work with common sulphur, mercury, salt, vitriol, and antimony, he writes the following; "Many authors have written that the vitriolic gur be the first matter of metals, others say that antimony is the root and mother of the metals, this has caused much error." Also: "That metals are reducible into sulphur, mercury and salt, I allow, but that they should immediately proceed therefrom, I cannot find. I find no running mercury in the mines near the metals; but will in cinnabar ore"; which latter fact is not strange, when one comes to think it over.

The alchemists teach that the ordinary metals are not imperfect but also impure; so here comes in a double work, Viz., removing impurities an arduous task and then grading up to the gold standard. The substance which they indicate as the material or subject, of the great philosophic experiment is, they say, imperfect, immature, unripe, green, but not impure. John Pontanus quoted with approval by others says: "He which separates anything from the subject or matter, thinking it to be necessary (so to do) wholly errs in his philosophy: That which is superfluous, unclean, filthy, feculent, and in a word, the whole substance of the subject is transmuted or changed into a perfect, fixed, and spiritual body, by the help of our fire, which the wise men never revealed."

In concluding the prefatory remarks, I should like to urge the necessity of not according to comments the value, the same importance, as should be attached to the text commented on. This applies to this treatise, and to all manuscripts and edited books, in which the author gives his interpretation of alchemic writers. The following are samples: Figulus, Kelly, Samuel Norton, Arthur Dee, Petrus Bonus, W. Salmon, Yardley, De Winter, Backstrom, and the volumes of Collectanea Hermetica ; these may suffice, though the list could be extended considerably. It does not apply to the comments of adepts upon adepts; but even these criticisms, strictures, or explanations, should be carefully weighed.

Every ancient faith or philosophy has been emasculated by friend and foe alike; through the medium of comments, glosses, and biassed interpretations; which have arrogantly assumed the authority which is inherent only in the original text. In these brief sections is presented a consensus of opinions extracted from ancient alchemic writings, in order to establish certain facts, and to correct certain glaring misrepresentations. That the tract might easily have swollen to an unmanageable size, will be known to those who are aware that an enormous mass of literature is available, from which to draw. As to the identity of the proxima and prima materiae, the writer's own conclusions are not pertinent to the scope of this treatise ; they are, therefore omitted. Neither is it useful to advise as to which books are the best to study; for all do not gain knowledge from the same point of view; as Eirenaeus remarks in his preface to Ripley Revived. Pictorial presentations of the theory and practice of the art are invaluable, such as those of Flamel, Maier, Basil Valentine and Splendor Solis (this last recently issued by Kegan, Paul & Co.).

R.W. Councell *Apollogia Alchymiae*

Section II. Modern Criticism

Transcribed by Mark House.

SECTION II.
Modern Criticism.

In order that the statements of modern critics may be assessed at their proper value, a list is here given of things which Ripley, endorsed by Eirenaeus, says are useless, and even injurious in the work. Other eminent alchemists, in their candid moments, warn students against using these and many other ingredients.

Antimony (not worth a mite), amalgams, acids, ardent and corrosive waters, arsenic, orpiment blood, copper rust, copper vitriol, eggs, egg-shells, ferments, hair, iron, steel, iron scales, crocifer, soul of lead, litharge, mercury (quicksilver), vermillion, mercury sublimed, mercury precipitated, marchasite, oils from calces, oil of lime, rubified imperfect bodies, spirits, sulphur, sandiver, and these salts : ammoniac, alkali, alembroth, attincker, tartar, common salt, gem, petre, soda, tinctures white and red, wine, vitiols (i.e., sulphates, and other crystallized salts). The author of the Mystery and Romance of Alchemy and Pharmacy writes: " Men of undoubted ability and genius wasted both their lives and their fortunes over the search for this illusive chimera, etc." The use of the word "chimera" implies, of course, that he does not believe that any of them did what they claimed to have done. He prejudges the whole question from the standpoint of his own attainments. So also, some say " there is no God " because they have not found Him. He also says: "The notorious Dr. Dee is said to have received immense sums of money from dupes for imparting the coveted secret, which he demonstrated by means of an ingenious trick." He does not quote any authority for so important a statement, nor explain even the nature of the ingenious trick.

Again: "Bacon states that 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; the latter metal he believed to be the true elixir of the philosopher's stone." This is not a true presentment of Bacon's sayings. Bacon did not believe and did not write that the metal mercury was an ingredient. He says: "The first work is the reducing the Body into Water, that is into Mercury." And: "Our tincture then, is only generated out of the mercury of the wise. . . because from this Mercury alone, is the Virtue and Power of this our Magistery: and it so resolves every (Metalline) Body, that it may be augmented or multiplied." "The second principle of our Stone is called Mercury." Notice the Body is not dissolved in Mercury, there is no amalgam; but resolved, as others say, into a clear water, called by them Mercury. This modern author also says: ". . . others, including Rhazes and Merlin, believed it to be an amalgam of gold and mercury, fantastically called the Red man and his White wife." It is difficult to understand how many reading of alchemic treatises save of the most superficial kind, can give rise to such an interpretation. Just as their sulphur was not brimstone, for it was incombustible (see Geber, Sendivogius, etc.), so their mercury was neither hydrargyrum nor any of its salts. (See Ripley's "Erroneous Experiments.") True, the Red Man is gold but the Mercury, which is the White Wife, was a substance compounded by art, therefore, not mercury. Eirenaeus on Ripley: "The next secret is to know our Mercury, which is not common, but artificial, drawn from three heads by the mediation of one thing," etc. He makes the same misinterpretation of the alchemic writers; since they agree that common sulphur is not meant, and not used. Extracts from authors on this point will be given later. "The Story of Alchemy" embodies several errors which are perpetuated by other authors, and it is the importance of these errors, and not of the work, which necessitates somewhat extended notice here. As regards the Story of Alchemy, the impression left on the mind by reading it is that the author thinks there may be something in it after all. He mentions that where gold is, silver is found (and he might have added iron), also that all lead contains some silver. But why? It was from hints less evident than this that Wallace and Darwin developed the theory of evolution. The author says: ". . . the one experiment which seems to us to be the crucial experiment of the system, was never accomplished." But surely he cannot expect, for his positive assertion of a negative, a credence he himself denies to others who state the contrary. Indeed, the author of that highly esteemed tract, entitled The Hermetic Art, himself writes: "It is not lawful, nor commendable to reprobate an art, by judges who are ignorant of its laws as well as the facts; and the ignorant negative of such, is by no means sufficient to set aside the affirmative knowledge of so many men of unquestionable credit, piety and virtue, supported by arguments and circumstances of incontestable force."

These men asserted not merely a theory, but that they had accomplished the work with their own hands, and had

done so more than once. I will instance Flamel, Eiranaeus Philalethes, and Basil Valentine. The latter, amongst many other things, discovered fulminating gold: this, the modern chemist believes, because he knows it exists, and knows how to prepare it. But he discredits Basil Valentine's assertion that he has made gold; he believes it cannot be made, because it has not come within his own knowledge or experience. And only on those grounds, for he cannot affirm that it is scientifically impossible or incredible. It is necessary to lodge an emphatic protest against the unfairness, the scarcely veiled contempt, that pervades the criticism of the claims of the alchemists. The criticism professes to be an impartial and scientific investigation of the theory of the existence of a law of evolution. It is neither impartial nor scientific.

The author of the Story of Alchemy cites the parable of Mercury and the Alchemist out of Sendivogious, and says: "Sometimes the patient rebelled." Our author does not say why this common mercury rebelled, yet Sendivogious mentions the reason. It is because hydrargyrum is the wrong "mercury" altogether, and could not accomplish the things the pseudo-alchemist required of it. This central fact could not be missed by the most careless reader. "Of what wilt thou make the Philosopher's Stone?" Alchemist: "Of Mercury , sir." Senex: "Oh what Mercury?" Alchemist: "There is but one Mercury." Senex: "It is true, there is but one Mercury, but altered variously, according to the variety of places; one is purer than another." Alchemist: O, sir, I know how to purify it very well with vinegar and salt, with nitre and vitriol." Senex: "I tell thee this is not the true purifying of it, neither is this, thus purified, the true Mercury: wise men have another Mercury, and another manner of purifying it."

Again, Alchemist: "Do tell me if thou art the true Mercury, or if there be another." Mercury: "I am Mercury, but there is another." And so on, all through the parable. The modern author says: "Those who pretended to know, abused and vilified those who differed from them." The word "pretended" abuses and vilifies those who solemnly swore that they had done the work; it also begs the whole question. He quotes Madathanas in support of his statement, omitting, however, to quote the following pregnant sentence by the same author. "To the Most High and Almighty God, the Creator of this Art, Whom it hath pleased to reveal to me, wretched, sinful man (in answer to my prayer), this most precious knowledge, be eternal praise, glory, honour, and thanksgiving." This alters the standpoint to that of an honest man who is indignant with those who defraud others by false methods, knowing them to be false and futile. In the same partial manner he quotes The Only True Way and omits this sentence: "I myself may not speak out as plainly as I would, for I am silenced by the vow, which binds all the masters of the Art." One does not need to be an expert in economics to visualize what would happen if a recipe were given "making this art as common as the baking of bread, or the brewing of beer."

On page 96 : Op. cit. the author writes: "The story quoted in chap. III., from Michael Sendivogious, illustrates the difficulty which the alchemists themselves had in understanding what they meant by the term "Mercury"; yet there is perhaps no word more often used by them than that. Some of them evidently took it to mean the substance then, and now called mercury; the results of this literal interpretation were disastrous; others thought of mercury as a substance which could be obtained, or, at any rate, might be obtained, by repeatedly distilling ordinary mercury, both alone and when mixed with other substances, etc." Here, again, he makes no distinction between alchemists who had, or might have, done the work, and who, therefore, knew perfectly well what "their mercury" was, and those who were groping after the hidden meaning of these adepts. He mentions that Basil Valentine wrote the "Dedicatory Epistle" to the Triumphal Chariot of Antimony. Surely this is written by his commentator Theodore Kerckringius; it is exactly his style, as used in his address "to the Reader" and in the comments throughout the work. Furthermore, these words occur in the Dedicatory Epistle: "Since in the words of Basilius, I have already gained a place in a higher class."

The author of the Story Of Alchemy also says: "The yellow lion was the alchemical symbol of yellow sulphides, the red lion was synonymous with cinnabar, and the green lion meant salts of iron and of copper." Ripley must have heard, or read, similar remarks nearly 500 years ago, for he says in his Erroneous Experiments: "Also I wrought in Sulphur and in Vitriol, which fools do call the Green Lion." Also in Ripley's "Sixth Gate":

"The said Menstrua is (I say to thee in counsel) The blood of our Green Lion, and not of Vitriol."

Ripley, in his Medulla Alchimiae, contrasts these two Green Lions. All these lions are one in nature though two in substance; the Green is a very immature or unripe thing, the Yellow is a more matured state of "our Unripe Gold," the Red Lion is the perfect state, sometimes applied to the philosopher's red stone, but more usually to ordinary gold. Neither of these lions contained common sulphur, nor common mercury, nor any of their derivatives. Neither Hg nor S entered into the composition of the Great Stone, as is shown later on. Again: "Black sulphides were called eagles, and sometimes crows." I cannot find it so in my reading. "When black sulphide of mercury is strongly heated, a red sublimate is obtained, which has the same composition as the black compound; if the temperature is not kept very high, but little of the red sulphide is produced; the alchemist is directed to urge the fire, "else the black crows will go back to the nest."

The application of the production of these sulphides of mercury to the process of the sages is hopelessly wrong.

First, they used no mercury and could, therefore, produce no sulphide of mercury; second, they used no sulphur; so, it being absent, could not combine with the mercury which was not present. Thirdly, the essential colours were not black then red: the black itself was soft, bubbling, plastic substance. The colours are black, azure, blue, iridescent, then white.

Scala Philosophorum says: "The sign of the first perfect whiteness is the manifestation of a certain little circle, as of hair that is passing over the head, which will appear on the sides of the vessels round about the matter in a kind of citrine or yellowish colour." This ends in perfect silvery whiteness. This is the White Stone; it is "fermented" with an "oily calx of silver" to produce the elixir which transmutes metals (chiefly copper and iron) into pure silver. The White Stone can, without opening the glass, be rubified by a higher degree of heat into the Red Stone. The attentive student also knows that the crow never evoluted into a scarlet bird direct, but first into a dove, or swan. So in the account of the Noachian deluge, the dove comes into the story after the raven had disappeared. And later we get the account of the red wine of Noah's vineyard. There are two ways of viewing The Story Of Alchemy ; either the author has not succeeded in deciphering the code which the alchemists used to notify their discovery to each other; or he has. In the latter case, it may have seemed good to him to discourage belief in metallic evolution; or in the alternative, to suggest to inquirers the wrong material, in order that the foundations of society might not be upheaved.

The nearer an investigator approaches the heart of the mystery, the more cautious he becomes in his public utterances, for the reasons I have stated.

In Alchemy, Ancient and Modern, by H. Stanley Redgrove, are the following brief and pregnant sentences: "What would be the result if gold could be cheaply produced?" ". . . the financial chaos which would follow, if it were to be cheaply obtained, surpasses the ordinary imagination." The above named book, issued originally in 1911, is written in the spirit of investigation, and should be studied. So much has been discovered lately in the realm of physics, that we are justified in presuming that not every writer on this tremendous subject, and who employs an obscure style, is necessarily merely posing as a mystigogue; or because his innate and inordinate vanity fears exposure. The unbiased student must, I think, conclude that these men discovered this evolutionary law: that they were ages in advance of their times, and are still in advance of ours. When we consider the paucity of their resources we must conclude, also, that their materials were common and cheap, and their method, from a view, simple. All their would-be imitators have been far too subtle and elaborate.

A History of Chemistry, by the late J. Campbell Brown, embracing the subject of alchemy, requires rather an extended review. A few extracts given before entering on the review may assist the reader to judge whether this author's opinion is biased, or scientifically critical.

Speaking of Raymond Lully, he writes (p.97): "The story goes that he was employed by Edward I. of England to make gold for minting, and that he had a laboratory for this purpose at Westminster; but analysis of the coins of that king does not bear out the tale, for they are found to be pure gold, not gold of the philosophers." P.138: "Of course, when we read that Paracelsus said that he possessed a portion of this mystic substance, and he actually transmuted base metals into gold, we feel sure that he was simply telling a lie. Or when we read that Raymund Lully was presented to Edward I. by the abbot of Westminster, and that he made gold for the king from base metals which gold was used for making coins: and when by assays we discover that surviving specimens of these coins are composed of genuine gold, we assume that either King Edward or Raymund Lully was deceived at some point of the process. In a later century, Henry VI. of England and Charles VII. of France coined a quantity of gold made by the Philosopher's Stone, but that gold was undoubtedly spurious."

P.201, on Van Helmont: "He asserted that he had actually witnessed the transmutation of a base metal into gold, a remarkable statement from a man of his lofty character and shrewd powers of observation, which has led some to think that the adepts may have approached nearer to the Magnum Opus than is usually supposed." Of Edward Kelly, he writes: "He seems to have been an accomplished liar."

Touching on these points briefly, he asserts that gold coins of Edward I. are good gold, and therefore not produced by alchemic art; and conversely, the gold coinage of Henry VI. of England, and Charles VII. of France, was debased, therefore, presumably, alchemy may have had a hand in producing it. ". . . we assume that either King Edward or Raymund Lully was deceived at some point of the process." The author seems to assume that this was a chemical experiment; but evidently it was an ordinary commercial issue, and had it not been profitable, the gold would have been purposely debased to make it so. Lully did not strike the coins, he only handed over gold to the king's coiners. A happy deception, truly, where pure gold results, and everyone is perfectly satisfied.

With regard to the episode of Henry VI., there is no evidence as to the kind of gold handed to the official minters; but there is abundant reason supplied by the disastrous events of that reign, for the necessity of a debased coinage for internal circulation. State paper money at 100 per cent. profit was not then known. The debasing of coin was known and practiced in every state at some period of its history, and this quite apart from alchemy : the critic is

therefore hard pressed for his argument and illustration to drag in Henry VI. of England and Charles VII. of France, and on the same page to discredit, by a sudden volte-face the account of Edward I.

His statement concerning Van Helmont is distorted; the latter did not merely "witness" a transmutation; here is the account according to Helmont." I had once given me the fourth part of a grain—I call a grain that which takes 600 to make an ounce. I made projection therewith, wrapped in paper, upon eight ounces of quicksilver, having made a little noise, stopped and congealed into a yellow mass. Having melted it in a strong fire, I found within eleven grains of eight ounces of most pure gold, so that a grain of this powder would have transmuted into very good gold, 19,156 grains of quicksilver."

Helvetius, also asserts that with a fragment of the philosopher's stone about the size of half a turnip seed, he transmuted half an ounce of lead (and some silver) into six drams and two scruples of most pure gold. This transmutation was done by himself and his wife, at home, in his own crucible, on lead cut off by himself, and the adept who gave him the elixir was not present. This episode is not mentioned apparently in The History of Chemistry.

Neither does he record the demonstrations of Dr. Price, of Guildford, in May, 1782. These eight or nine consecutive transmutations were done in the presence of several witnesses, with all the precautions the latter could devise. They are given in full detail in The Annual Register for the year 1782, published in London, 1783. It is difficult to imagine that the learned author of The History of Chemistry had not read the accounts of Helvetius and Dr. Price.

On page 2, the author cited, writes : "The professors of that art (alchemy). . .engaged themselves in a search for what was by them unattainable." Here the accent seems necessarily to fall upon the words "by them"; he does not commit himself here to the statement that the art is impossible per se.

On page 5, the following occurs : ". . .two philosophical follies of the schoolman, the search for the philosopher's stone, and for the elixir of life."

Page 10."The Chaldean Nebo corresponds with the metal mercury and the planet mercury." And on page 12: 'From the Chaldeans alchemy passed to the Egyptians," and, "Although quicksilver played an important part in alchemy, the ancient Egyptians were not acquainted with it, as it was not discovered till a much later date." In ancient Chaldean astronomy, Nebo may have been ascribed to the planet Mercury, but how it could correspond to a metal of which there is no mention until about 300 B.C., the author does not attempt to explain. In Chapter V., it will be found that such ascription was made about the fifth century.

Page 9, he remarks that "there were no mines and little fuel in Chaldea, and so this knowledge and skill must have been slowly acquired by some other nation domiciled in a metalliferous and fuel-growing country." The alchemists assert positively that no metal is an ingredient of the work (with the exception of gold or silver with which to "ferment" the elaborated "white stone"), therefore, presumably, the art of alchemy could be practiced in countries deficient in metals, so long as the necessary apparatus was obtainable.

As we know that the ancient Chaldeans and Egyptians were proficient in making vessels of glass and earthenware, we also may assume that they could and did make the laboratory apparatus they required, including crucibles. The modern critic holding—or pretending to hold—that the sophistication and adulteration of gold and silver constituted the art of alchemy, requires the presence of metalliferous loads.The alchemist required the absence—by all the tests known to him—of every kind of metal, including gold and silver and mercury. Therefore, the entire superstructure of criticism collapses, being theoretically built upon a nonexistent foundation.

As in the case of mercury and other metals so also is it in the case of sulphur. This, and other substances such as arsenic, bismuth, and salts are in alchemy analogous to the false gods set up in the Egyptian temples, where in very ancient times an apparently pure monotheism existed. (P.16 op. cit.).

On page 21, and elsewhere, "theiou apyrou" is translated as "unburnt sulphur," and therefore the distillate is called "sulphur-water." The correct translation of "a-pyrous" is "unchanged by fire"; this not only totally negatives ordinary sulphur, but also corresponds to that which the alchemists have named, in the tongues of Chaldea, Egypt, Arabia, Greece, and Rome, "sulphur incombustible." The apparatus depicted is also unsuitable for distilling sulphur, or for collecting any sulphur gases.

The true "sulphur" which was incombustible in the fire, "and valued not its martyrdom at all," has its analogy in the bush which Moses saw, which burned in the fire, but was not consumed, and in the Hebrew youths who were cast in the fiery furnace, over whom "the fire had no power. . .nor had the smell of fire passed on them." Following logically on the assumption of manipulation of sulphur, the author, on page 24, identifies the deleterious gas which issues as sulphuretted hydrogen, but he thereby proves that his sulphur was not "unchanged by fire."

On page 33 he quotes : "This is the definition of the stone which is not a stone, nor of the nature of a stone. It is a stone which is engendered every year. Its mine is found on the summit of the mountains. It is a mineral contained in sand and in rocks of all hills; it is found also in colouring matters, in the sea, in trees, in plants, in waters, etc. As soon as you have recognised it, take it and make a calx of it." (In other words, calcine it and reduce it to an oxide.)

"Extract its soul, body, and spirit, separate each of these things, and place it in the special vase which is set apart for it. Mix the colours, as painters do for black, white, yellow and red, and as doctors do in their mixtures, where enter the moist and the dry, the warm and the cold, the soft and the hard, in such a way as to obtain a well-balanced mixture, favorable to bodies. This done by the aid of determined weights. Then are united in one their diverse qualities."

This well-known extract is endorsed by other alchemists; but our modern critics do not attempt to explain how either common sulphur, or any one of the ingredients they mention, fulfills, or can fulfill the conditions here set out. On pages 86, 87 and elsewhere, the statement is made that copper is the basis of much of the work detailed in Chrysopoeia, Argyropoeia and the Turba. If this were literally true, they would not be alchemic treatises.

This extract is given from Parmenides in the Turba (Lond., 1896), pages 33, 34 : "Leave, therefore, manifold and superfluous things, and take quicksilver, coagulate in the body of magnesia, in kuhul or in the sulphur which does not burn ; make the same nature white, and place it upon our copper when it becomes white. And if ye cook still more it becomes red, when if ye proceed to coction, it becomes gold, etc."

In the History of Chemistry it is given thus, the contents of the brackets being our author's interpretation or interpolation: "Take quicksilver; coagulate it with the body of magnesia (meaning magnetite, sulphide of antimony, sulphide of lead, sulphide of tin, or pyrites), or with kuhul (i.e., sulphide of antimony) or unburnt sulphur, render its nature white and put it in upon our copper, and it will whiten the copper. If you render the mercury red, the copper will redden, and if one then heats, it will become gold, etc." (Note : the ore magnetite mentioned by our author happens to be singularly free of sulphur.)

Taking the points seriatim : "Leave, therefore, manifold and superfluous things," i.e., there is no need for extraneous things, for the "mercury," the "magnesia," and the dark "copper" are but separated parts of the One thing, now purified, and about to be reunited, and not three alien things. This is emphasized by many Masters, and even in the Turba it is said by Lucas (page 41) : "For ye need not a number of things, but one thing only, which in each and every grade of your work is changed into another nature."

"Take quicksilver,"i.e., the volatile "mercury" which has been distilled from the body. "Coagulate in the body of magnesia," i.e., in the white salt, the philosophic sal ammoniac which has also come up and separated itself from the dark body (kuhul or philosophic antimony, or black lead). In both works the dark body is whitened, but particularly in the sealed glass; and it is this latter work which is here intended.

"And if ye cook still more it becomes red. In the History of Chemistry version the translation ran thus : "If you render the mercury red, the copper will redden, etc."—to the modern author this must seem curious, for first the red copper is made white, and then its redness is restored to it, by two very elaborate procedures with some one or two, or more of the things he mentions. But with the philosophic base which they call Venus or copper, it is not incongruous, for their copper is not red after the "mercury" and the "magnesia" have been separated from it, but dark or obscure.

At the risk of irksome reiteration it is necessary to affirm that competent alchemists were aware of the presence of "combustible feculent sulphur" in sulphide ores such as sulphide of antimony, sulphide of lead, sulphide of tin, and pyrites; also in the sulphurets, sulphites, and the sulphate salts, and condemned them on that account, not merely as useless, but as prejudicial to the art. They apparently regarded sulphur or brimstone as a waste by-product, in the evolutionary process. See Sendivogius' Treatise on Sulphur, and his Parable.

Most of the extracts quoted in the History of Chemistry, are of little importance, and have no authoritative value, being by unknown authors, and the attempted interpretation of any quotation is unconvincing. Very few extracts are given from the writings of men held by consent to be adepts ; and these few are quoted with insufficient reference to the context, and no reference at all to any statements by their authors or others, which qualify the surface meaning of such extracts.

The same suggestion of bias is shown in varying proportions in the other critical books reviewed in this section. For instance, the Story of Alchemy in Chapter VI, suggests that the idea of alchemy and transmutation may have arisen in a manner something like this :--A steel knife blade is immersed in a solution of sulphate of copper, and on withdrawing it, it is found to be coated with a deposit of copper. [See also Sir Edward Thorpe's "History of Chemistry." Vol. I., p.34. Watts & Co., 1921.] "What more simple than to conclude that the iron has been transformed into copper?" Also, apparently, we may assume that when the knife blade was dipped in a saturated solution of salt, and was removed with a deposit of salt upon it, the very simple alchemist, who was an expert worker in metals, precious stones, glass, pottery, etc., would be overjoyed at the discovery of an instance of evolutionary law transmuting iron into an alkaline salt. According to Roscoe a knowledge of the properties of iron vitriol can be traced at least as far back as Geber ; but in what dim ages antedating Egypt, or the Aztecs, the knowledge of copper salts began, we have in the History of Chemistry men acute and clever, in silvering, gilding, depositing one metal on another, and in the mixing of metals in fusion.

These two eminent authors do not agree as to whether the alchemists were most noted for skilled cunning or credulous simplicity. They both commit the fundamental and very elementary mistake of taking alchemic names of materials literally, though protesting that they do not. For example, on page 186, op. cit.: "Gold, silver and mercury constitute the material of the stone, after they have been prepared by art." The following lines, and page 187, prove that these names are constructed literally.

On pages 187, 188 are the following: "To speak plainly, the materials for the work were gold trichloride, silver nitrate, and mercury bichloride. This mixture was enclosed in a glass matrass called the Philosopher's egg, which was hermetically sealed by fusion of the neck." Here, then, there is no sulphur ; moreover, it is not apparently possible that such a mixture could become by turns black, iridescent, white, and lastly a permanent red. As mentioned elsewhere, the alchemists especially and specifically condemn a mixture of gold and silver "lest a monstrous lineage be begotten."

". . .the alchemists seem to have employed an oil lamp with a wick composed of amianth or flexible asbestos." Nothing could be further from the truth. Basil Valentine has said : "Our fire is a common fire, and our furnace is a common furnace." "Let no prattling sophister lead you into error with many furnaces. As our furnace is common, so is our fire common." Urbigerus in Aphorism 72 says: ". . .we have our self alone without the help of any creature living prepared them all on a common kitchen fire, as is very well known to several co-adepts our friends, who could not but admire and approve our industry." Apart from these statements is the fact that a sufficiently fierce heat could not be obtained for the final stage, by means of an oil lamp. The modern critics are vitally at variance with each other, and none touches the hem of the mystery.

The alchemist prepared gold chloride in order to get gold oxide; or, according to Roscoe, to obtain gold in a final state of division. It is one of these latter—and not the trichloride—which they used in preparing the ferment. As regards the silver nitrate , the alchemists definitely and by name condemn the dissolving of silver in aq. fortis (or nitric acid), alleging that this is not a true philosophic solution, but rather a process which destroys the "radical humidity," and is comparable rather to melting by fire than to a natural process. The acid, if used at all, was used (as aq. regia was employed for gold) to enable them to get the silver oxide, or silver in a fine state of division.

As regards corrosive sublimate, no mercury, or salt of mercury went into the philosopher's egg. The modern author's remarks tempt one to diverge very widely from the scope of this book, but limits of space prevent; it must suffice to draw attention to the fact—the very suggestive fact—that none of these modern critics, be he humorous, sarcastic, or more condescendingly pitiful than angry, attempts to prove that metallic evolution is even probably impossible, having regard to chemical laws as now stated or accepted.

The History of Chemistry states a well-known fact that this art came to Western Europe from Egypt, through the Arabs and Moors. As is stated above: "Although quicksilver played an important part in alchemy, the ancient Egyptians were not acquainted with it, as it was not discovered till a much later date." This being so, it follows that the "Mercury" used in Egypt before hydrargyrum and its salts were known, is the same "Mercury" mentioned by all alchemists, both previous to and subsequent to the period of Egyptian alchemy.

I append this pertinent extract from Hydropyrographum Hermeticum: "Moreover, the philosophers do say that there is no coming to a good end until gold and silver be joined together in one body. Here, my son, thou must understand Luna metaphorically, and not according to the letter,. . .by Luna is understood mercury or the prime matter,. . .and not mercury vive, as the sophisters suppose. For the first matter of metals is not mercury vive. I tell thee, my son, unless the body of Sol be sowed in its proper soil, your labour is in vain, and it produceth no fruit." This agrees with the sayings of the Masters; consequently, neither gold nor mercury is in the sealed glass with the red stone; using these names of materials in their everyday sense. A quotation from Bernard Trevisan's Epistle to Thomas of Bononia "in which," writes Eirenaeus, "let me seriously profess I received the main light in this hidden secret" here follows. It deals with metalline salts, such as nitrate of silver, chloride of gold, and others: "For example, fools draw corrosive water out of inferior minerals, into which they cast the species of metals and corrode them. For they think that they are therefore dissolved with a natural solution, which solution truly requires a permanency of the dissolver and dissolved together, that a new species might result from both the masculine and feminine seed. Yet thus they think they dissolve (mistaking Nature) but dissolve not; for the aqua fortis being extracted, the body becometh meltable as before, and that water abides not with nor subsists in the body as its radical moisture. The bodies indeed are corroded, they are so much more estranged from a metallic kind. These solutions, therefore, are not the foundation of the Art of Transmutation but the impostures rather of sophistical alchymists who think that this sacred Art is hid in them." He adds that another sophistic solution is that of melting by the force of fire. The third and philosophical solution is by the mixture of their mercury with the sulphur (from which it, the mercury, had been previously separated) so that these two purified and re-conjoined parts might corrupt and putrefy together-as in the analogy of a grain of corn in the earth—and producing a living, growing thing.

R.W. Councell *Apollogia Alchymiae*

Section III. The Speech of the Philosophers

Transcribed by Mark House.

SECTION III.
The Speech of the Philosophers.

In order to understand the alchemic writer, it is necessary to follow his mental processes, to enter into the same mental view. It would be an easy task for him to name his two ingredients, and to describe, step by step, what he does with them. But such a revelation would inevitably result in national and international chaos.

The alchemist wishes to make himself known to the unknown brethren, who have also done the work. He craves the society of those with whom he can converse freely of these wonderful things; those with whom he can reside, and travel, without a continual restraint upon his words and actions. On this aspect, read the 13th Chapter of An Open Entrance to the Closed Palace of the King, by Eirenaeus Philalethes; and Lives of the Alchemystical Philosophers, by A.E. Waite; Thomas Norton's account of Thomas Daulton's experiences, in the Ordinal of Alchemy, and also the account of the persecution and death of the adept who was the master of Sendivogius.

The alchemists who, like Ripley and Valentine, already had a safe and chosen retreats in their monasteries, desired yet to leave on record their testimony that the art was true, and not "a cunningly devised fable." The ancient manuscripts were rare, and these later men were able, by the intervention of printing, to make known in their books, vital excerpts from these unobtainable manuscripts. It is obvious that the alchemist dared not openly name his materials in the practical part of his book: neither did he describe in detail his handling of these materials. These important points he apparently hinted at in a very circuitous way in his theory or philosophy; and where for all I know to the contrary, he may have remedied the omission for those who have patience and intuition.

The speech of the philosopher is not ignorant in the matter of which he is treating, for he is a Master. But he displays ignorance of the true explanation of the phenomena of nature. These he is using as figures of speech, as analogies, and as presumed parallelism; therefore, as proofs.

The alchemic writer has a very difficult task: he wishes to testify to a process, very difficult to be explained; that is—as to why it happens. To explain the laboratory work was easy, for the work was easy; but to explain why, according to the then accepted topsy-turvy explanation of natural phenomena, was not mere difficulty, it was sheer impossibility. But he did his best according to his ability; none can do more, and many of us do less.

The alchemist had been taught by the scientific dicta of his day to believe in the spontaneous generation of insects, flies, worms, snakes, and even higher forms of life, and in the evolution of barnacle geese from bi-valves. Also, that sea currents flowed up to the north pole by the magnetic attraction of the arctic pole, entered there, traversed the "Axle-tree of the world," and emerged at the south pole. They used these supposed facts to illustrate, and even as proof of, their art. But, however impatient this may make us, it should not lead us to conclude that the whole art is as untrue as the attempted proof. The attempted proof, though convincing, would not have proved the art true, neither does its failure prove the art false.

Many a modern man would make a hash of trying to prove the right angled triangle theorem, but his failure does not disprove it. For ages men tried to account for the apparent motion of the sun, planets and stars; their explanation was wrong. For years chemists explained the behavior of oxygen by the phlogiston theory; they also were wrong. But the earth still revolved on its axis, and travelled in its path around the sun; oxygen still continued its manifestations.

The discovery of evolution as applied to plants and animals, was of the last generation; in the next generation it may be found to apply to minerals and metals; if, indeed, it be not already as well known as it is suspected. It is, therefore, abundantly obvious that a wrong explanation of an occurrence does not affect the occurrence. Much less do these wrong explanations of phenomenon x. affect the truth of phenomenon y. being only used as analogies, or parallel illustrations. We have daily evidence of this, when children give most weird explanations of things which have come under their notice. The same type of error is observed when an aboriginal native or an inexperienced kitten, sees its reflection in a mirror for the first time.

But the wrong explanation does not make us pooh-pooh the occurrence. Quite the contrary, indeed, the very earnestness of the child convinces us that something has happened. Similarly, I think, we should hold it not only as

unfair, but also unscientific to dismiss as an "illusive chimera" this art, merely on the grounds of the falsity of the supposed analogic illustrations advanced as proofs.

The History of Chemistry is crammed full of blunders in nomenclature, action, re-action and composition; but the substances have not been "scrapped" or condemned on that account; they have been investigated, analyzed, and re-named.

As the ancient chemists were ignorant of natural law outside their laboratory, so to-day a botanist of world-wide fame may be ignorant of mathematics; a theologian, of medicine; and so on. We do not, therefore, deride them as inefficient in their own special life's work. Here also are men who lived and worked, and discovered elements and compounds, who testified—centuries before Darwin—that a law of evolution exists in the mineral realm, and that they had proved it practically.

In nature it often happens that the obvious is false and the concealed is true. So it is in the speech of the philosophers; and many have discovered this. In their presentment of the method of Practice. Here the verbal surface which conceals their "snowy splendour" is "blacker than black."

It would, indeed, in some respects, be easier to follow their methods, if blank spaces, or mere letters of the alphabet, or numerals, were substituted for most of the names given. The student would then—instead of wasting his thought, time, and means on the wrongly named materials—be compelled to guide himself by the properties of the things. As matters are he probably works on things which, though indicated, or even named, by alchemic writers, could not possibly accomplish the work, because they are not in the true evolutionary path to silver and gold.

The following points should be considered.--1.The place where the substance is found. 2. Whether liquid or solid. 3. How treated. 4. Any change when heated. 5. Its action in contact with other bodies. 6. Does it evaporate? 8. Is it easily distilled or with difficulty, and great heat? 9. Its scent or taste. 10. Its ordinary outward appearance. 11. Is it acid or alkaline? 12. On mixture does it evolve heat, or produce cold? 13. If a fluid, does it swim on, mix with, or sink in other fluids? These and other signs will aid in determining whether or not the worker has succeeded in "spotting" the materials used by the alchemist. All this is very elementary; but apparently students usually rush at the thing which the writer has called antimony—for instance—and try to force from it the signs and reactions described. If much more thought were used, before the actual practice began, these blunders would be less frequent.

It does not appear to be necessary to discuss the intangible "elements," earth, air, fire and water; they are exhaustively treated of in ancient and modern books on alchemy. As regards the three "principles." mercury, sulphur, and salt, I gather that they are definite entities, cognizable by our senses, and capable of being investigated by the process of modern chemistry. They are discussed elsewhere; but it is impossible to avoid frequent mention of them in any section of a treatise on alchemy.

The metals are named after the sun and planets, our earth excepted; and the astronomical signs of the heavenly bodies are also used for the metals. Besides being assigned to gold, the word Sol means: positive, active agent, heat, dryness, fire, masculine: Luna, or Lune, indicates the opposite attributes, viz.: negative, passivity, cold, moisture, feminine. Silver, the metal, and mercury, the metal, have the attributes of Sol, so has Antimony, all metals being "masculine." The philosophic "mercury" and the philosophic "salt" are both feminine; the former, when elaborated, is ascribed to the moon, and frequently called Luna, or Lune, and Argent Vive.

The philosophic "sulphur' is masculine. Venus, or copper, is variously considered; copper being acted on by acids or alkalies is often spoken of as the hermaphrodite. The alchemists have taken advantage of this to call their secret substance—which is hermaphroditic also—copper and Venus. The word copper is used throughout the Turba Philosophorum to indicate their elaborated base. Others term it lead, antimony, litharge and many other names. Eudoxus says in the Hermetical Triumph : "The philosophers speak the truth negatively." which saying should be indelibly written in the student's mind.

Artephius writes: :But these things are so set down by the Obscure Philosophers, to deceive the unwary as we have before spoken; for it is not this Ars Cabalistica, or a secret and hidden Art? Is it not an Art full of secrets? And believest thou, O fool, that we plainly teach this Secret of Secrets, taking our words according to their literal signification? Truly, I tell the (that as for my Self I am in no ways self-seeking or envious as others are; but), he that takes the Words of the other Philosophers, according to their common Signification; he even already (having lost Ariadne's clue of Thread) wanders in the midst of the Labyrinth, multiplies Errors, and casts away his Money for nought."

According to these words, most students, and all would-be critics, wander hopelessly in the Labyrinth, seeing they take the words of the philosophers literally. The sage called a certain product of his work red lead, and it is red lead accordingly, to the critic; another writer calls the same substance "our vermillion or cinnabar" and straightaway, to the critic, that which before was oxide of lead has become sulphide of mercury!

Eirenaeus Philalethes writes in Ripley Revived: "Take this from one that knows best the sense of what he has written; where we speak most plainly, there be most circumspect (for we do not go about to betray that Secrets of

Nature) especially in those places which seem to give Receipts so plain as you would desire, suspect either a Metaphor, or else be sure that something is suppressed which thou wilt hardly find of thyself, without Inspiration, yet to a Son of Art, we have written that which never heretofore was by any revealed."

If this art could be accomplished out of any one of twenty different things, or their combination or even out of the then known seven metals, it would have been common property long ago. But the materials of the Rebis are so common, and the work so easy, that ingenious minds cannot stoop to the simplicity of it. Eirenaeus expresses himself thus: "I do verily admiringly adore the Wisdom of God herein, that an Art so true, so natural, so easy, so much desired and sought after, should yet be so rarely found, that the generality of men, learned and unlearned, do laugh at it as a fable; it is therefore most certainly the Gift of God, who is, and ever will be, the Dispenser of it, according to his good pleasure." And so say the other philosophers.

In the process the name "Saturn" is not used to indicate lead; but things compact, earthy, and particularly it alludes to cold, moist darkness. For unless you get this obscuration of your matter, and blackness, you accomplish nothing." Out of this darkness comes light, and the empire of Jupiter; not tin. It was so in the creation: "waste and void and darkness"; "and the spirit of God moved upon the face of the waters. And God said 'Let there be light' and light was."

Exoteric analogies to this esoteric art exist in all other arts; in the teachings of philosophy; in the sacred writings of various religions, and in their rituals; as also in the rituals of freemasonry, and the Rosicrucian cult. Where, indeed, may they not be found? So multitudinous are the sources from which analogies may be brought, and used fairly, that similes are used such as the baking of bread, the making of wine, brewing of beer; marriage, birth, life, death, resurrection; the parable of the "sower of the seed, that went forth to sow.' The art is typified, at different stages of the work, by names of all sorts of birds, beasts, fishes, creeping things, and reptiles, on account of their appearances, habitations, or actions. These similitudes are so apt, that authors copy each other, instead of substituting some other type or allegory.

They also write, as Basil Valentine has written, thus; "For I have written nothing but what I shall bear witness unto after my death, and at the Resurrection of my body." In his Short Way and Repetition, Basil Valentine gives the following seriatim illustration of the work, viz.: a crowned lion, a crowned eagle, a crowned serpent without wings, an uncrowned flying dragon, a crow or raven, a peacock, a swan, a pelican, feeding its brood with its own blood. The crowned lion, eagle and serpent are transmuted; they are of the process. Basil Valentine described his process, as if done out of ordinary gold; but this metal he did not use as his base; for, as he says, it would require about ten pounds weight of the vitriol of gold to do so. But as gold is the ultimate product or offspring, therefore, it is permissible to call the parent, or sire, gold also. This substance the philosophers called immature or unripe gold, or the "Green" Lion. In the second stage of the work—the analysis of the green lion—a white salt ascends, like snow, and adheres to the sides of the vessel, "much like sublimate," as Ripley says. This is their Eagle, Sublimate, Arsenic, Sal Alembroth,Sal Ammoniac, Nitre, Sea salt, ergo Aphrodite or Venus, Sulphur of Nature, Icarus, etc. Its importance cannot be exaggerated.

The "serpent that creeps in and out of stony places" is wingless and remains below. It is non-volatile, and plastic, and also assists in the transmutation. The entire volatile spirit has passed on into the receiver, if one is being used. These three are the body, soul, and spirit of the Lion. The wonderful manner in which the "soul" leaves the corrupting "body," and unites with the "spirit," is indicated by many writers; and also the manner in which spirit and soul return to the altered body, unite with it, and resurrect it in purity. On uniting these and placing them in an hermetically sealed glass, they pass through the stages of the crow, peacock, swan.

The multiplication in quality and quantity is symbolized by the pelican; and by another metaphor in Valentine's eleventh key. The crow, peacock and swan symbolize respectively the black, the iridescent, and the white, the latter being the White Stone. The Red Stone is symbolized by the Phoenix.

The curious names used—since the writers cannot use the real names—indicate, as before remarked, properties cognisable by the senses; if this be kept constantly in mind, it may be that the correct name(or names) will fit into the proper place. By the association of ideas in the student, it is quite possible to alight on the association of ideas which led the writers to select these obscure but permissibly relevant terms. An instance has already been given, viz.: that hermaphroditic copper—called also the prostitute of metals—suggested the name Venus-Venus is allotted to the zodiacal sign of Taurus; therefore, Sendivogius writes: "This is the Wood and Garden of our Nymph Venus," having previously spoken of a Wood in which were Bulls (Taurus).

Similarly, they speak of "the warlike god that dwells in the house of Aries" (Ripley Revived). This is Mars, or Iron; but this riddle is too easy, and the obvious solution should be suspect. Treasure is usually buried, not scattered in full view. There is, however, a substance they call Ferrum Philosophorum, which is a white salt, innocent of, or not derived from, iron. A further reference to Aries occurs in the section on the Mercury of the Philosophers.

In the present day we are seriously handicapped by our scientific training in our attempts to probe these

tergiversations. We are taught to attach one meaning to one word, so far as the limits of language allow. We strive to get the "currency of thought" as pure and unadulterated as possible. Thus we naturally fall easy victims to an apparent simplicity and candor (the critics call it ignorance), which is in reality a deliberately designed subtlety. Here is an example from Eirenaeus, the cleverest Sphinx of them all : "Know, therefore, that Mercury hath in itself a Sulphur, which, being inactive, our Art is to multiply in it a living active Sulphur, which comes out of the loins of our Hermaphroditical Body, whose Father is a Metal, and his Mother a Mineral; Take then the most beloved Daughter of Saturn whose arms are a Circle Argent, and on it a Sable Cross on a Black Field, which is the signal note of the great world, espouse her to the most warlike God, who dwells in the house of Aries, and thou shalt find the Salt of Nature; with this Salt actuate thy water as thou best knowest, and thou shalt have the Lunary bath in which the Sun will be amended." Three pages further on, he says: "Our Diana hath a wood. . . In this wood are at last found two Doves, for at about the end of three weeks the Soul of the Mercury ascends, with the Soul of the dissolved Gold; these are infolded in the everlasting Arms of Venus," etc.

Taking these seriatim, we here have suggested the following metallic substances, viz.: Cinnabar Antimony and Iron (commonly called the Martial Stellate Regulus), Salt, Diana or Silver, Gold, Copper. We should remind ourselves that the man who composed this riddle was no "child in these matters." According to Eugenious (in Euphrates, Pars. 26, 27 and Appendix) men, himself included, have worked for years with these materials, and without result. The other authors who condemn antimony are too numerous to mention.

We find mention of two doves of Venus, and also of the ensigns of Diana. The ensign of Diana is a crescent moon; if two of these are mounted on two signs of Venus we get a mercury sign duplicated: the substance is indeed the Mercury Duplex of the Philosophers, and is not a combination of common silver and copper. What then is the substance, the proxima materia of the alchemists? According to Norton, its colour is sub-albide, not quite white; when dissolved it is apparently red. The alchemists, if they speak of it at all, mix it up with the prima materia. Eugenius in Euphrates calls it "Water and Earth, or, to speak more obscurely, mercury and sulphur"; notice the word "more. "Other descriptions are that it is "cheap," "common," "thrown away." The writers say that it is not likely that a student can find in one book all that is necessary to the art. Each writer elucidates one or more points, but the beginners cannot find any point more elucidated than another; and consequently might not find the point or points of the secret art. In the Lives of the Alchemystical Philosophers are given instances of men who toiled for years unsuccessfully until at last they sat down, and collated the writings of many men, noting their agreements and apparent differences, and ultimately grasped the truth.

Jean d'Espagnet writes : "A studious tyro of a quick wit, constant mind, inflamed with the study of philosophy, very skilful in natural philosophy of a pure heart, complete in manners, mightily devoted to God, though ignorant of practical chemistry, may, with confidence, enter into the highway of Nature and peruse the books of the best philosophers; let him seek out an ingenious and sedulous companion for himself, and not despair of obtaining his desire." This applied perhaps to the student at the commencement of the 17th century; it may not apply so aptly at the beginning of the 20th.

The trouble is not entirely with the parables and the analogies, many of which are of as much force and appropriateness now as then: it is also with the names of chemicals, and the difficulty of estimating exactly what substances they new. Again, it is certainly that they handled things which were then unnamed, things which to-day are well known. It is of assistance to get the most ancient books on chemistry such as Boerhaave, Maquer, and work up through Ure and other men to the present day. Also books on mining and metallurgy from Basil Valentine, and so consecutively to the 20th century. It is curious that, even to-day, men of scientific attainments do not repeat correctly that which the alchemists have said plainly enough.

One author writes: "A white colour indicating that the Stone is now capable of converting 'base' metals into silver; this passes through orange into (iii) a red colour, which shows that the Stone is now perfect and will transmute 'base' metals into gold." Not quite so; it is necessary to ferment the white stone with silver, and the red stone with gold; otherwise the process has to be continued for some time.

Again, the white and red stones, after having been "fermented" and matured, will not transmute base metals into silver and gold, for they must, in the very first instance, be projected upon melted silver or gold respectively. In Fasciculus Chemicus, it is said: "Thou, must with all care and providence, take heed lest through ignorance of the right form of projection the Divine work (when it is now brought to its complement, and degree above perfection) should be destroyed. Therefore, he must know, that upon whatsoever body thou shalt first project the medicine, it will change it into dust answerable to the nature of the body on which thou didst project it, which indeed is mystical, and to be wondered at: If, therefore, thou desirest to bring thy elixir to the sun, let thy first projection be made upon the sun, that in the sun it may be specificated. And so with the moon to the moon, thou must thence proceed as hath been manifested clearly enough from the authority of most approved philosophers."

Also in item 15 of Things to be Observed : "Many men through ignorance have destroyed their work, when at the

first they made projection of the medicine, upon the imperfect metals. For on whatsoever body thou first of all projectest thy medicine, that same is converted into a frangible mass, and shall be an elixir according to the nature of the body upon which it is projected. So, as that if the projection be made upon Jupiter, or Venus, it shall be a medicine which not only converteth the imperfect bodies into Jupiter, or Venus, but also reduceth perfect bodies (to wit, the sun and moon) into imperfect bodies; according to the nature of the body upon which the medicine shall first be projected : which caused the most learned Raymond (struck with admiration) to cry out in these words, "What! Is Nature Retrograde? Some few candid writers have definitely given instructions to project thus on melted silver or gold; others have passed it by in silence.

As regards the colours observed in the work, they are black, then white, and thirdly, red. The alchemists who give accounts of their own working, say they saw these colours, and in this order. This cannot, therefore, be an a priori bit of reasoning, but a statement of an obsrerved and accomplished fact. Basil Valentine says he did the work more than once. Flamel writes : "I have done the Mastery three times"; and also "I had indeed enough when I had once done it, but I found exceeding great pleasure, in seeing and contemplating the admirable works of Nature, within the vessels. To signify unto thee, then, how I have done it three times. . ." And so other writers.

The author of the Story of Alchemy, on account of his sulphide of mercury theory, had no use for the white; he could not fit it in, and required only black and red. But every student knows—if he knows nothing else—that the writers never contradict each other on this point; the confection must be black in forty days, and continue some time; then other colours—green, azure and blue are mentioned—then citrine turning to white. Decoction with increased heat produces red.

Not only are the three colours, black, white and red absolutely essential; but this order of sequence is a sine qua non. "If it be orange colour,or half red within some small time after you have begun your work, without doubt your fire is too hot; for these are tokens that you have burnt the radical humour and vivacity of the stone. Laton must be blanched and made white. This blackness doth manifest a conjunction of the male and female,or rather of four elements. Orange colour then doth show that the body hath not yet sufficient digestion, and that the humidity (whereof the colours of black, blue and azure do come) is but half overcome by the dryness. When dryness doth predominate, then all will be white powder,etc."

No useful purpose would be served by multiplying extracts from the sages' writings upon this point. Reverting for a moment to the theory of spontaneous generation, it ought in all fairness to be conceded that the philosopher, in searching for parallel illustrations, was handicapped, and not assisted, by this theory. His work, as is abundantly evident, required two parents for his noble offspring. He said his art was founded on universal law; and here he was confronted by an unaccountable lapse on the part of Nature. In the vegetable world, thorns, nettles, thistles, sprang up where none were before, and therefore, apparently, no seed; and in the animal kingdom, snakes, worms, scorpions, flies, ants, etc., were produced without parental influence. He had to apologize for these things.

In reality, the law governing his art was more universal than he imagined—if the solecism may be allowed. Our freedom from this false theory only dates from the discoveries of Pasteur. We now know this dictum of the alchemist to be true : "Nothing is generated but in its like, of the same species." Having said this, because he had proved it, he called the first substance "green lion" and "unripe gold," for so it was.

When the sage speaks of a single simple mercury, it is necessary to remind oneself that, for all we know to the contrary, the substances may have been compounds, it would make no difference for if the working were the same method as used by the alchemist we should get the same results, if operating on the same subjects. But it might make a difference mentally, when trying to discover what these"simple" things might be.

A "simple" thing to an ancient chemist's mind was one he could not de-compound or split up into two ore more dissimilar parts. The same definition applies to-day. Such a substance he styled as belonging to the fossil kingdom, in other words, a "stone." Thus, salts and also alcohol were considered in Boerhaave's time to belong to the class of simple fossils. These few examples of the dark sayings of the philosophers, and the brief comments on them, must suffice, though it is evident that the correct interpretation of their words and phrases is the only key which avails to unlock the mystery.

R.W. Councell *Apollogia Alchymiae*

Section IV. The Mercury of the Philosophers

Transcribed by Mark House.

SECTION IV.
The Mercury of the Philosophers.

The identification of the Philosophic Mercury is of prime importance. It is, therefore, necessary to get a definite idea of the difference existing between the common mercury (hydrargyrum) and that of the Philosophers. It is vital to notice the dissimilarity in the manner in which each acts on, or is acted upon by, other bodies. The principle points of agreement or likeness are volatility, and some resemblance in appearance.

Common Mercury is silvery and opaque, that of the philosophers is clear at first, :as clear as the tears of the eye" (Bernard Trevisan, etc.), but when its salt is dissolved in it, it is milky and opaque. "The Clear and Diaphanous Menstruum, Philosophical Vinegar is by reason of the Spirit of Philosophical Wine Diaphanous, not of a Milky Colour, but in the distillation of a Menstruum it is made Milky, because the Acidity of the said Vinegar is debilitated by the Aridity of the Body dissolved (in it)." Secrets of the Adepts". Weidenfeld. Common mercury only becomes clear and transparent by being dissolved in an acid. The two things are exactly opposite.

Paracelsus says : "Whatever is volatile is of the nature of mercury." "The name of mercury doth only properly agree with that which is volatile. . ." Hermetic Arcanum". The hypothesis of the sages is that everybody in the mineral, vegetable and animal realms contains mercury, sulphur and salt. The philosopher's mercury is an unctuous vapour, the vehicle of the essential seed. "Now whilst the sperm is yet in the center, there may as easily be brought forth a tree as a metal from the sperm, as soon an herb as a stone. . ." New Light of Alchemy.

This sperm or mercury is therefore in common mercury, but the latter is a compound body differentiated, and specificated, or determined, into a metal. The mercury of the sages is apparently undifferentiated or undetermined, and is a simple, not a compound substance, from their point of view. The alleged universal diffusion of their mercury makes one at first think of water, as fluid or vapour. Eugenius Philalethes says : "For this thing is not water otherwise than to sight." Euphrates. Again : "They (the sages) mean not water of the well, nor dew. . ." Coelum Terrae. Neither can we imagine water to be in the solid metals. Eugenius in his remarkable Euphrates, writes : "Whosoever seeks the philosopher's mercury in metals, of what kind soever they be, is already out of the way. . .in metal, water there is none." This dictum he further emphasis when speaking of antimony and vulgar mercury. But as the philosophic mercury is built up into the substance of all metals it is evident that it is still there, even if altered and combined, or compounded.

The stricture of Eugenius quoted above as regards metals, does not apply to the use of gold or silver as a "ferment" or determining principle. Other alchemists agree with Eugenius so far as to say that the extraction of philosophic mercury from metals is very difficult. They concur in stating that there is a despised and common substance, from which, with little trouble and expense,,may be obtained not only the mercury, but also the sulphur and salt, identical with that in silver and gold. This substance is, of course, not named in their practical working, as a recipe; they do not say: "Take so and so." They say: "Take antimony, or cinnabar, etc. "Some writers, in speaking of the philosophic mercury, define it as "Our," "Their," "The," "the mercury of metals" -but a large number of writers make no distinction. It is necessary, in the latter, to judge by reactions and other properties of the subject under discussion. Bernard Trevisan says: "Mercury is the substance of all metals; it is as a water by reason of the homogeneity which it possesses with vegetables and animals and it receives the virtues of those things which adhere to it in decoction." Hydrargyrum (and its salts) has no affinity to vegetables and animals, quite the contrary. Kelly writes :"Those persons make a great mistake who suppose that that viscous substance which is extracted from sublimed mercury can in any case be the first substance of metals. Those who destroy the natural composition of mercury, in order to resolve it into a thick or limpid water, which they call the first matter of metals, fight against Nature in the dark, like blinded gladiators. As soon as mercury loses its specific form, it becomes something else, which cannot thenceforth mingle with metals in their smallest parts, and is made void for the work of the philosophers. Whoever is taken up with such childish experiments should listen to the sage of Trevisan in his Transmutation of Metals : "Who can find truth that destroys the humid nature of mercury? Some foolish persons change its specific metallic arrangement,

corrupt its natural humidity by dissolution, and disproportionate quicksilver from its original mineral quality, which wanted nothing but purification and simple digestion. By means of salts, vitriol, and alum they destroy the seed which Nature has been at pains to develope. For seed in human and sensitive things is formed by Nature and not by Art., but by Art it is united and mixed.Seed needs no addition, and brooks no diminution. If it is to produce a new thing of the same genus, it must remain the very same thing that was formed by Nature. All teaching that changes mercury is false and vain, for this is the original sperm of metals, and its moisture must not be dried up, for otherwise it will not dissolve. No water can naturally dissolve metals except that which abides with them in substance and form, which also the dissolved metals can again congeal. Only that water can rightly dissolve metals which is inseparable from them in fixation, and such a water is mercury." See The Answer Of Bernard of Trevisan to Thomas of Bononia.

This extract endorses the saying that common mercury is a sperm of metals, and it contains the seed: so also do the other metals. Other writers say it is more than a sperm, it is a body, and that no new body of the same genus is formed by Nature, of, or out of a destroyed body. The last sentences quoted show that Bernard is describing the action of philosophic mercury; for common mercury does not abide with metals in fixation, or fusion. "Mercury is cold and humid, and of it, or with it, God has created all metals. It is aerial, etc." Avicenna. These are the attributes of philosophic mercury, which is their feminine subject, or wife.

"It is a mistake to suppose that you can work miracles with a clear limpid water extracted from mercury. Even if we could get such a water, it would be of no use, either as to form, or proportion, nor could it restore or build up a perfect metallic species." Bernard Trevisan.

"The water of the sages adheres to nothing except homogeneous substances. It does not wet your hands if you touch it, but scorches your skin, and frets and corrodes every substance with which it comes in contact, except gold and silver - it would not affect these until they have been dissipated and dissolved by spirits in strong waters - and with these it combines most intimately." Kelly. With the exception of "does not wet your hands," all these attributes are different from those of mercury vulgar and its salts. It cannot be said to wet your hand if it burns it; but it is not necessary to urge this sophistry.

The principle writers say "Our mercury which wets not the hands," but they do not add Kellys' gratuitous addition of "if you touch it." Artephius says: "Wash away the blackness from the Laten not with your hands, but with the stone,"i.e., with our mercury, or mercurial water. Also:"This separation of the pure from the impure is not done with the hands." "This Composition is not a work of the hands." It is in fact, done or carried out in a sealed glass, and therefore does not, because it cannot and should not, wet the hands. (Vide Artephius, Book III.,Chap.XVIII.,sect.IX.,etc .,and Chap.XIX.,sect.V.,VI.,VII.)

"We cannot with our own proper hands work on mercury, but with ten species which we call our hands in this work, i.e., nine parts of water, and the tenth of earth." Massa Solis et Lunae. ". . .our one Image out of which springs white and red (not bare Sol and Luna as will spring out of our mercury which was prepared with our own hands, but) the white and red elixirs, which show that this Mercury which Nature hath made in the glass, without our help, is far beyond that mercury which we prepared with a laborious toil." "For all they (the sophisters) dream of, is such operations which are to be performed by hand, etc." Ripley Revived.

Other extracts of the same purport could be given, but these should suffice to show that the description of a fluid mercury which "does not wet the hands," is not necessarily and inevitably pointing to ordinary quicksilver. "In the first place, you must note that common mercury doth not avail here; but our mercury is made of the best of metals, by the spagyric art, as pure, subtle, clear as any well water, of a crystalline transparency, without any impurity, etc." "You must have the female or wife, which is the mercury of the philosophers, or the materia prima lapidis. . .there is a salt made of prima materia (this salt is called the philosopher's mercury, which is coagulated in the belly of the earth). When this matter is brought to light, it is not dear, and is found everywhere, children play with it: it is ponderous, and hath a scent of dead men's bones, for two gilders you may buy this a matter for the work." Basil Valentine.

There is no indication here of common mercury, or its salts; further, being, a metal, hydrargyrum is male, and positive. "By the name of Luna, philosophers understand not the vulgar moon, which also may be positive, in its operation, and in combining acts a positive part. Let none, therefore, presume to try the unnatural combination of two positives, neither let him conceive any hope of issue from such association" Hermetic Arcanum. This Luna is the philosophers' mercury, or lune, or argent vive. "Our gold and silver, sun and moon, active and passive principles, are not hose which you can hold in your hand, but a certain silver and golden hermaphroditic water, etc." Kelly.

When we speak of common mercury, we mean one thing only, but when the philosophers speak of mercury, they may mean one of many manifestations of their mercury. So we might speak of sugar, and use the same word when we really meaning the cane in which it exists, i.e., its "ore" or "mine"; or in its other manifestations of dark brown, light brown, white moist, crystalline, or even of treacle or syrup.

As is mentioned in another section, our two luminaries, the sun and moon, were anciently considered as "he" and "she." masculine and feminine; husband and wife; father and mother; dry heat and cold moisture. These names being allotted to metals became synonyms of gold and silver; and here comes in confusion, for silver is not feminine, or wife, or mother. Mercury looks like molten silver; is called quicksilver, argent vive, luna vive. But "Mercury is a metal"; the philosophers' mercury is not a metal; yet as they call it "mercury," therefore they appropriate all the other names by which common mercury is known, even to corrosive and other sublimated forms, and to cinnabar. Working on these lines of associated ideas, they get to luna or lune, which rarely means silver.

The term "white wife" does not mean silver, though the "red man" means gold. "The White Wife, otherwise called the moon, is a female; it is a coagulated mercury, but not fixed, etc." Eirenaeus. Thus writing on "mercury" it is necessary to consider all those passages in which luna, lune, luna vive, argent vive, and wife occur. Some few of them refer to silver, the rest refer to feminine and passive qualities, and to their mercury, in one or the other of its chameleon disguises.

It will be noticed from what has been quoted, that the philosophers' clear fluid mercury is a distilled liquid. It is, therefore, a separation from something. Any clear solution of common mercury must be mercury, plus the solvent. The latter is, therefore an addition, or synthesis, and not an analysis. "It is a water that is very spirituous and volatile, therefore within a month after it is distilled, it ought to be put upon its calx, it will, without any external heat, boil if the vessel be closely shut; and it will not cease to ferment or work, till it be all dried up into the calx." Medulla Alchymiae.

"The sages agree that the stone is nothing but animated argent vive. But if your argent vive has no life, it is not what they mean. For this water - to be more frank than discreet - is a viscous water, extracted from the bowels of Jupiter, i.e., from white lead; it is moist and wets the finger. If proper quantity of the sun be added to it, it is coagulated and becomes brilliant - the sun is dissolved into exceedingly limpid mineral water. For the water dissolves the sun at the very same moment that itself is congealed, and thus the solution of the one is the coagulation of the other, at the very same instant. This compound is living mercury; from which alone spring all colours. To regulate the fire is mere child's play. After the conjunction it looks just like common limpid mercury and does not moisten the finger, but is viscous and living." Kelly.

"The sages have indeed purposely concealed their meaning under a veil of obscure words, but it is sufficiently clear from their writings that the substance of which they speak is not of a special, but of a general kind, and is therefore contained in animals, vegetables and minerals. It would, however, be unwise to take a round about road where there is a short cut, and they say that whereas the substance can be found in the animal and vegetable kingdoms only with great difficulty, and at the cost of enormous labour, in the bowels of the earth it lies ready to our hands. It is the matter which sages have agreed to call mercury or quicksilver.

Our quicksilver, indeed, is truly a living substance, so called not because it is extracted from cinnabar, but because it is derived from the metals themselves. If common mercury be fixed by fixation from its crude, volatile and watery superfluities, it may, with the aid of our art, attain to the purity and virtue of the substance of which we speak. And as this mercury is the metallic basis and first substance, it may be found in all metals whatsoever. Nothing contributes so much to a ready apprehension of our secret as a knowledge of our first substance, and after that of the distinctive species of minera which is the subject of investigation of the philosophers>" Ibid. "The matter of our stone, mercury, is a commonly diffused subject, and though it is found with greater ease in some minerals, it may be discovered everywhere." Ibid.

Jean D'Espagnet writes in Hermetic Arcanum : "Now these bodies must be taken, which are of an unspotted and incorrupt virginity; such as have life and spirit in them ; not extinct as those which are handled by the vulgar; for who can expect life from dead things; and those are called impure which have suffered combination; those dead and extinct which - by the enforcement of the chief Tyrant of the world - have poured out their soul with their blood by martyrdom," etc. This has been interpreted as meaning that the materials should be quite pure and unadulterated. This explanation is insufficient; that alchemists commonly took impure and adulterated materials, and purified and separated them. "Unspotted and incorrupt virginity" means not combined with another substance,e.g., not mercury combined with silver, or antimony; it does not exclude a substance masked and covered over with impurities. A virgin may be covered in filthy clothing. See Golden Age Restored.

Also fire is masculine, therefore a substance which is in the metallic state, and has undergone fusion by fire, has endured its fiercest embrace, and cannot therefore be called either virgin, or living. "The metals - especially the gold of the vulgar - are dead, but ours are living, full of spirit, and these wholly must be taken: for know, that the life of metals is fire, whilst they are yet in their mines; and their death is the fire, viz., of melting. Now the first matter of metals is a certain humidity mixed with warm air, and it resembles fat water, sticking to everything pure or impure." Sendivogius. These are not properties of common mercury, or its salts.

"The first and principle matter of metals is the humidity of air, mixed with heat, and this the philosophers called

mercury. And although the body of metals be procreated of mercury (which is to be understood of the mercury of philosophers), yet they are not to be harkened unto, that think the vulgar mercury is the seed of metals, and so take the body instead of the seed, not considering that the vulgar mercury spoken of, hath its own seed in itself. They dissolve metallic bodies, whether it be mercury, or gold, or lead, or silver, and corrode them with sharp waters, and other heterogeneous things, not requisite to the true art, and afterwards join them together again, not knowing that a man is not generated of a man's body cut to pieces." Ibid.

We cannot find any unmistakable indications in writers of repute for using mercury or its salts; except for the purpose of breaking down the gold which has to be added as a ferment to the red stone. This is after the work has been virtually accomplished. The mercury thus employed has to be fumed away, and in other ways got rid of entirely, before making the ferment.

The philosophers' mercury is simple at first, and is afterwards compound. "It is a stone, and no stone, Spirit, Soul, and Body. . .it is volatile or flying, and clear as a tear, afterwards it is made citrine, then saltish. . .it is but one thing to which nothing extraneous may be added." Arnold Villanova.

"The third principle is a clear compounded water, and it is the next substance in complexion to quicksilver, it is found running and flowing upon the earth." Lully. As mercury is used to dissolve gold, so the sages use their mercury to dissolve their unripe gold, i.e., the pure but imperfect (or immature) mineral base. "Our mercury, indeed, is cold and unmatured in comparison with gold; but it is pure, hot, and well digested in respect of common mercury, which resembles it only in whiteness and fluxibility. Our mercury is, in fact, a pure water, clean, clear, bright and resplendent, worthy of all admiration. . .it is living, fluxible, clear, nitid, as white as snow, hot, humid, airy, vaporous and digestive, and gold melts in it like ice in warm water." Eirenaeus.

This solution of gold being done by their mercury, they sometimes call an amalgamation; and because the gold dissolved, or philosophically melted, they call the water of mercury their fire, a furnace, a calcining fire, etc." This agent is sought by many but found by few. It is a precious liquid which does not tender its services to the multitude, but is the handmaiden of the sages. Some think it is common mercury exposed to violent heat in a glass vessel, and rarefied. But all these persons are ignorant philophasters. Raymond, indeed, describes a similar process, but he means something quite different. viz.: That our mercury is to be purified in a brilliant vessel, not to elicit water from it, but to free it by fire from its crudity, and to make it more readily soluble. Neither in one way nor the other can our water be elicited from common mercury, nor the mysteries of our magistery be unlocked. There is no menstruum which can dissolve this mercury that it shall retain its form; yet that is what our art requires." Kelly.

Eirenaeus writes : "It is a fact that the mercury which is generated in the bowels of the earth is the common substance of all metals - since this mercury will enter into combination with every kind of metal - etc." If these remarks were true as regards common mercury or its salts, there would be no necessity to style it "the" mercury, and "this" mercury : this extract shows that "their" mercury is not vulgar mercury. Again, Eirenaeus in the Metamorphosis of Metals, says : "The mercury gained from any metallic or mineral body. possesses the property of assimilating common mercury to its own nature." So the two mercuries are quite distinct from one another, but akin : and according to this, if you get the "mercury of gold," it could change common mercury into the "mercury" of gold.

The philosophers in the analysis if their unnamed "mineral" substance, produce a "viscous humidity" which is akin to all metals; they, therefore, boldly assert the theory that this is the substance which Nature first forms in the earth, and from which she evolves all metals; gold being the last and best. This is their chaos, containing the male and female principles, the seed and the menstruum, the mercury, sulphur, and salt; their hermaphrodite. The sulphur of gold or silver is added to it to specificate and expedite evolution in the required direction.

Although this chaos will evolve gold, yet according to Basil Valentine you cannot get this chaos out of gold; you must first have their solvent, or mercury. He says : "Without the spirit of mercury, the Universal of the World to be gotten merely from the body of Sol, is impossible." And : "In gold there is no waterish humidity at all, unless it were reduced again into vitriol, which would be but an useless and unprofitable work, and would require huge expenses. . . .but what countries, goods, lands, have been dilapidated this way, I waive to discourse of. . .nature having left a nearer way to keep, and to imitate that, that they also might take heed to fall into such extreme and inextricable poverties."

Their theory being that gold is evolved out of lower forms, it would seem to be fairly obvious that the intermediate and not the ultimate form should be wrought on. He further says : "The solar mercury, sol, being never brought so far unto destruction, neither did the ancient philosophers ever make use of that way, as being a thing clean contrary unto Nature, containing indeed a humidity, but it is a mere elemental waterish humidity, after its dissolution, and good for nothing, etc."

Eirenaeus says that the work can be done out of common gold; but what may be possible to a master may be impossible to a tyro. In The Celestial Ruby, he says "In order to elicit our gold from common gold, the latter must be

dissolved in our mineral water, which does not wet the hands; this water is mercury extracted from the red servant, and it is capable of accomplishing our work without any further trouble to the artist. The chief object of your perseverant efforts should be the discovery of this mercury, or the albification of our red laton."

I understand that though Nature is said to make this viscous humidity from which metals are evolved, yet that man cannot find it in that condition. Apparently, he has to make it, or rather educe it from metals or minerals, or from the chosen unnamed subject, alluded to by the sages. Eirenaeus definitely asserts : "Our homogeneous agent, our mercurial ponticum, which is pure, crystalline without transparency, liquid without humectation, and in short the true divine water, which is not found above ground, but is prepared by the hand of the sage."

On considering the point, it seems evident that a solvent is required; as it is evident that powdered or finely divided metals, or the oxides of the metals could yield no moisture or fluid on distillation. The same applies to minerals, but not to the salts, or so-called vitriols. "Let the practitioners of alchemy understand that the kinds of metals be not transmuted except they be brought into their first matter." Arnold.

Such a solution would contain two things, the solvent and the dissolved substance, hence the name Rebis. This solvent is apparently called mercury unactuated or simplex, crude mercury, etc. Ripley says in the Concordance : "When I speak of mercury, understand mercury more common than common"; meaning, I presume, more common than ordinary quicksilver.

This dissolution is mentioned by most writers; but its consideration does not come under this section, which treats only of the mercury itself, and its source of origin, etc. "Our water is the life of all things, and if you can by much toil obtain it, you will have both silver and gold. It is the water of saltpetre, and outwardly resembles mercury, while inwardly at its heart there burns purest infernal fire. Do not be deceived by common quicksilver, but gather that mercury, which the returning sun, in the month of March, diffuses everywhere, till the month of October, when it is ripe." Fount of Chemical Truth.

This month of March, or Aries, is mentioned by Eugenius, Combachius, Sendivogius, Basil Valentine, D'Espagnet, and others. "No philosopher has ever openly revealed this secret fire, and this powerful agent, which works all the wonders of the art. . ." Eudoxus. "Artephius, Trevisan, Flammel have passed in silence the preparation of our mercury." Ibid. Yet this "preparation" is precisely that which the student needs to know: this preparation of the solvent, and the preparation of the "mineral" base which has to be dissolved, or as they put it "calcined by our fire into a redness," are of the first work. This work nearly all writers are absolutely silent about.

They generally start with the second work (which they call the first), namely, the separation of the "rebis" into distilled fluid in the receiver and calx in the retort. "Again, in the second preparation, that which by authors is styled the FIRST (because they omit the first)." Hermetic Arcanum. As a "mercury" is used at the beginning, middle, and end of the work, it will perhaps be pertinent to give a few extracts from authors, asserting that common mercury is not employed; at any rate until after the work is accomplished. "Common Mercury and Gold we none occupy Till we perfectly have made our Stone, Then with them two our Medicine we multiply." "In common Mercury thou dost me seek; In Alkali and in Alembroth, In common Sulphur and Arsenic eke Which makes many a man to dote, Common Mercury is not good." "Gold with Mercury stands us in stead Our Medicine for to multiply After our Physic's Stone be red." "I councell thee this lesson learn, Our Mercury is but of one thing In our vessel thin and clear. Common Mercury in him is none Neither Gold nor Silver in him none is : Of Metals we make not our Stone By proportion more or less. All manner of Metals we deny Until the time our Stone be wrought." Theatrum Chemicum Brit.

Pages might be filled with quotations from the alchemic treatises, all stating in plain language that ordinary mercury is useless, and worse that useless. The same remark applies to its salts. J.S. Weidenfeld, in Secrets of the Adepts, gives a list of seven "mercuries," mentioned by philosophers; this seems to be an over-elaboration; for, as he includes animal and vegetables "mercuries," few of those he recites belong to this work. Jean d'Espagnet mentions three, but all are but elaborations of the first.

Hear what Eirenaeus Philalethes says in his Exposition upon Sir G. Ripley's Fourth Gate : "From what hath been said may appear the strong passive delusion that hath taken many men of our age, and formerly, who with the chemist in Sendivogius, cannot dream of any Mercury, than that Mercury which is to be bought at druggists, which they take and sublime variously to make it clean, and then with Hogheland mix it with Gold, applying all the words and sayings of philosophers to this their mixture."

R.W. Councell *Apollogia Alchymiae*

Section V. Sulphur and Salt.

Transcribed by Mark House.

SECTION V.
Sulphur and Salt.

It is not my intention to deal with the subject of sulphur in an esoteric manner. There is little or nothing fresh to be said from that point of view. It is handled in Aesch Mezareph in relation to alchemy, in Rosicrucian literature on material, and on higher planes; especially in the writings of Boehme. In alchemy, "sulphur" is that chemical substance which, in a masculine fashion, specificates or determines an undetermined matter in a certain matter in a certain direction. It is the active agent.

The common sulphur is not used in the alchemic universal work, i.e., it does not go into the hermetically sealed glass, it takes no direct part in making the "medicine" which transmutes. Sulphur was used with common mercury to break up common gold and to prepare it for making a gold ferment; but the mercury and sulphur must be evaporated away. Basil Valentine writes: "Take of pure gold which is three times cast through antimony, and of well purged mercury vive, being pressed through leather, six parts make of it an amalgama, grind twice as much of common sulphur, let it evaporate on a broad pan in a gentle heat under a muffle, stirring it still well with an iron hook; let the fire be moderate that the matter do not melt together; this gold calx must be brought to the colour of a marigold flower, then it is right."

Here the usefulness of sulphur ends : for the gold (and any sulphur and mercury adhering to it) is dissolved in aqua regia; and further prepared, so that it is impossible that any sulphur can be present. Roscoe, in his Treatise on Chemistry, Vol.II., Metals, Page 404, writes : "The substance termed calx of gold by the early chemists was nothing more than the finely divided metal." Apart from this, any compound of gold and sulphur is a dark coloured powder, and not the purple mantle described by the alchemist.

Enough has been said in other sections to convince an unbiased reader that common sulphur in any form or combustion does not "enter" into the work. The terms "sulphur and "salt" cannot be separately discussed—at least, not usefully—for they are intimately intertwined in theory and in practice; thus, the sublimed salt in the second process—and which is "much like the common sublimate"—is properly called the "Sulphur of Nature." In contradistinction to the volatility of philosophic mercury, sulphur is that which is fixed, and which gives fixity, or permanence of manifestation on the plane to which it belongs. It coagulates and fixes "mercury," and although sulphur is said to be made volatile by conjunction with the mercury, yet both this fixity and volatility are only relative or comparative, not absolute. It is a harmonizing of, or a compromise between the two qualities : each gives of its own, and partakes of the other's distinctive attributes. It is the ideal wedded state.

The sulphur is not "sulphur" only, it also contains its own inherent "mercury"; so also"mercury" contains its own inherent, but inactive, "sulphur." When sulphur is added to mercury it constitutes a true inoculation; this occurs twice in the work, by different sulphurs. Therefore the alchemist said—in Hermetic Arcanum, Canon 26 : "Nevertheless spiritual love polluteth not any virgin; Beia might therefore without fault (before her betrothal to Gabritius) have felt spiritual love, to the end that she might thereby be made more cheerful, more pure, and fitter for the union." This is rather unnecessary sophism.

The rebis consists of mercury and sulphur; the rebis is one body ; this rebis is divided by the alchemist into its constituent parts, each is "purified," and then the sulphur is restored to the mercury; thus the sulphur is its own, and not another. The second sulphur added to it, is a separate "determined" sulphur, viz., that of one of the perfect bodies. The first sulphur then is not a true inoculation, or it would be auto impregnation.

The second sulphur imparts its own proper colour, form, and attributes to the resulting new body, and determines or specificates it to silver, or to gold; if fermentation be rightly performed. This sulphur is true seed, for it remains with, and is built up into the body.

Sendivogius says: "There be some that suppose Saturn to have one kind of seed, and gold another, and so all the rest of the metals. But these are foolish fancies : there is but one only kind of seed, the same is found in saturn which is in gold, the same in silver which is in iron." These words apply to the common seed of metals before differentiation

into saturn, gold, etc.; Sendivogius has here pushed back the enquiry to the beginnings of things in general. Hence the necessity for an already differentiated sulphur in the work.

Ripley says : "You must know of a certainty and believe me, that the Stone may be finished in the white and the red, both of which spring out of one root, without common gold, or silver." This is a further assertion of an evolutionary law; and evidently the gold and silver are added, merely for the purpose of effecting a considerable saving of time.

Mercury and Sulphur are equally universal theoretically, for they are considered to be present in all tangible bodies. Yet, according to the writings of the alchemists, mercury seems to be the more abundant, or more in evidence. Frequently it appears to be feebly attached, evaporates with the aid of slight warmth, is volatile, and is therefore continually flying about, more or less free, unless—or until—"coagulated" by an appropriate sulphur. Hence the wings on the heels, helmet, and caduceus of Hermes : the union of Hermes and Aphrodita begets or produces Hermaphrodita, or Rebis.

If sulphur be the form, how is it that this inherent sulphur of x, in the Rebis, does not result in x sulphur again, in spite of the added sulphur of gold, or at the most we might expect a body containing the mixed sulphurs of x and gold. The answer is not far to seek; first, this sulphur of x will of itself—the conditions being favorable—ultimate in gold. These sulphurs are therefore akin. Now it is the presence of this crude, undetermined golden sulphur in the cheap and common substance x which makes the art possible, to any student, who is so favored as to use the right material, and the correct method.

Two or three extracts from Basil Valentine here given show that the golden-natured sulphur is also found elsewhere. "You will find that the nature of the golden sulphur resideth only in those metals which are comprehended among the red. . .the astrum of sol is found not only in gold, but may be prepared artificially out of copper and steel, two immature metals, both which as male and female have red tingeing qualities, as well as gold itself." "Such souls and goldish sulphurs are found most effectual in Mars and Venus."

"The tincture or antimonial sulphur is of wonderful efficacy, and is equivalent unto potable gold" "Antimony stands in a near relation and affinity unto gold, which is the reason why antimonial sulphur purgeth the soul of gold, graduating the same to a very high degree. On the other side, the gold can meliorate in a short time the soul of antimony, and can bring it to a firm fixation, exalting antimony and gold to an equal dignity and virtue," etc.

It is to be noted that he does not say here how you are to be rid of the tendency of these sulphurs to produce iron, copper, and antimony respectively. The metals mentioned contain impure sulphur also; the different varieties reputed to be present in each metal can be ascertained from the writings of Geber, Bacon, and others. Arnold, it is said, asserts that vulgar sulphur is the cause of all the imperfections present in metals. Boehme says : "The sulphur principle is an other thing than common suplhur."

The sulphur present in the White Stone is en route for the golden quality, and if not fermented with silver, can be rubified into the Red Stone by merely increasing the artificial external heat. But heat only will not rubify the sulphur of the white metals, lead and tin, into golden sulphurs. It is necessary to reduce them first, into what the alchemist calls the first or original condition, before anything can be done (except of course when "projection" is being performed).

As regards lead, Kelly says :"This is the tree of unwholesome fruits, on which must be inoculated the twigs of sol."

As regards tin, Aesch Mezareph says : "In particular transmutations, its sulphurous nature alone doth not profit, but with other sulphurs, especially those of the red metals, it does reduce thick waters (duly terrificated) into gold." This is not the universal work, but a "Particular" one; no gold of plusquam perfection is formed; but bare gold. Many other particular works are mentioned by writers; thus: "If you extract the Salt out of Vitriol, and rectify it well, then you have a work which is short, and tingeth luna into Sol." (Valentine). In treating their vitriol, the mercury comes first, and the remainder or chaos contains the sulphur and salt; but in operating on vitriol of gold, the sulphur comes first, and the salt second, the undried remainder being the mercury of gold. But nearer to perfection the body is, the more difficult is the extraction of the sulphur.

Bernard Trevisan held the opinion that "in gold there is nothing but mercury coagulated by its own sulphur," and "the philosophers have affirmed sol to be nothing but argent vive matured" also "gold is nothing but mercury anatized, i.e., equally digested in the bowels of a mineral earth." Golden Tract says: "Internal sulphur is nothing but mature mercury." So that here everything is traced back to that one primary fluidity, on the which, the spirit of God moved at the beginning. But this is pure theory.

Sulphur is generally distinguished by the title of "red," thus—Turba : "Nothing is more precious than the red sand of the sea; it is the distilled moisture of the moon joined to the light of the sun and congealed." Flamel : "The fat of the mercurial wind joined to the scum of the red sea." Aesch Mezareph mentions that Solomon fetched gold from Ophir by way of the Red Sea.

In the generality of cases, the remakes are but as so many fresh enigmas to the student, who cannot without illumination distinguish whether the light is near or afar off. To the instructed, however, all things are clear; and the

expounding or propounding of riddles is done with equal facility. Therefore, also, he can see that the erroneous paths he has trodden are being are being pressed by the feet of others. There seems to be no remedy but inspiration, and that can come but from one only source.

The analogy between the modus operandi of reducing common gold and their "unripe gold"—or proxima materia—each to its respective prima materia, is very striking. Gold is broken up by common mercury and sulphur; is then dissolved in aqua regia—of sal ammoniac (or other chloride salt) and saltpetre. "Unripe" gold is solved by a crude "mercury," and in the subsequent analysis, their philosophic sal ammoniac and saltpetre are produced. With these latter—and not with the common variety—the finely divided common gold)or perhaps its oxide), is reduced into its prima materia; and is then called the gold "ferment."

The White Stone in its perfection is—though a compound containing its own sulphur—are called mercury, or wife, or lune. The same remark applies to the Red Stone, before its fermentation by gold. Either Stone is called Beiya, or Bride; and the silver ferment for the one, and the gold ferment for the other, are each styled Gabritius, or Bridegroom, etc. Therefore when mercury is spoken of as the "seed of metals"—instead of the sperm—the saying can only be true on account of its sulphur; for this latter is the fire and seed. In Metamorphosis of Metals Eirenaeus says: "I am now speaking of metallic seed, and not of Mercury." The element water encloses those of air and fire, and these three in the form of a fluid "fall into the earth, and there they rest and are conjoined," and all together, when matured, constitute the mercury, or bride luna.

R.W. Councell *Apollogia Alchymiae*

Section VI. Concluding Remarks.

Transcribed by Mark House.

SECTION VI.
Concluding Remarks.

It is obviously of prime importance that the names of wrong material, and wrong methods of working should not become anchored in the mind. Those who have allowed this to take place "will never be inclined again by their own genius to the plain way of nature and light of truth." Hermetic Arcanum (i.e.,without the aid of a guide or master). The philosophers' mercury "may be sooner met with by the force of the seeker's intuition, than be found by reason or toil." Ibid. ". . .some affirm that the concretes of the vegetable and animal kingdom; others, that minerals as antimony, sulphur, and marchasites, and the rest of the minerals; others, that metals themselves, gold and silver; but others of a more subtle wit, that vitriol and common salt be the subject of the glorious Stone:which opinions the sincere searcher of nature ought to leave free to their authors. . . For immediately this thing which composeth the stone is but one; which is divided into a fixed and a volatile, into an agent and patient, and so it is two; and although it be so divided, yet it doth by no means lose its unity. So also when it is divided into salt, sulphur, and mercury, and so is threefold, neither doth this division destroy its unity." Sanguis Naturae.

A list of things that are useless for the work should be made from all the books available. Animal and vegetable substances are ruled out first; then read the Golden Tract, the first treatise in the first volume of the Hermetic Museum, 1893 : and there will probably be little left to blunder over. Their mineral substance may not resemble anything metallic; it may be as dissimilar as is a gorgeous poppy to its tiny seed. Preconceived ideas are obstructive to progress; the mind should remain in a receptive, passive condition until a composite photograph emerges from the superimposed impressions.

"As soon as anyone discerns the intention of the philosophers, from the seeming sense of the letter, the dark night of ignorance will fly away, and a glorious morning of light and knowledge will break forth, etc." Hermetic Art. "An undetermined matter being the beginning of all metals and minerals it follows, that, as soon as anyone shall be so happy as to know and conceive it, he shall easily comprehend also their natures, qualities and properties." Urbigerus. ". . .despair and errors, which they (beginners) can never escape till they so far understand our writings, as to discern the subject matter of our secrets, which being known, the rest is not so hard." Ripley Revived.

Eirenaeus, in his commentary on Ripley, and in his four treatises in the Hermetic Museum, explains a large number of the obscure sayings of the writers. As a "set off" against these discoveries, he propounds other enigmas, apparently easier to be understood, but in reality much more misleading. The same applies to his instructions for doing the work; thus, in one place he advises closing the neck of the glass very securely with a thick layer of sealing wax; in another he says let the flame stream to the top of the vessel; and in another "if he be over-provoked, he will certainly break the vessel, and fly, and leave thee the ruins of thy glass, etc." The probable explanation is, that in cohobating a mixed fluid, the heat is gentle as a steam bath, and the glass temporarily stopped; when the fluid is distilled off, the dry calx can be calcined at a dull red heat; in the third case, the purified mixed confection is ripened up to the White Stone, and the heat must always be extremely gentle or "remiss," the glass neck having been closed by fusion.

The use of the words "horse dung" has also been difficult to explain by those who have not had access to a sufficient number of alchemic books. "This supernatural Fire, my Son, the Philosophers have hidden in their Books in parabolic expressions, naming the same by innumerable names, and especially they term it Balneum Mariae, a moist Horse-dung, Menstruum, Urine, Blood, Aqua Vitae, and the like." "And what is signified by Horse-dung, I mentioned before, viz., that by Horse-dung is meant the water of the Prima Materia, for it warm and moist like Horse-dung, but it is no common Horse-dung, as many ignorant persons do suppose and understand." Hydropyrographum Hermeticum. The author gives extracts in proof of this from Alanus, Alchidonius, Arnold Villaneuva, Alphidius, Aristotle, Hermes, Morienus.

This is the agent that dissolves and "putrefies" ordinary gold and silver, reducing them to "oily calces" suitable for use as ferments. It is the "Water and Spirit of the Prima Materia" and must be prepared first, for without it, no step can be taken in this art. Calcination: the student must judge by the kind of substance in use, as to the kind of

calcination which is intended. The ordinary dry fire calcination is undoubtedly used, but if it be used on a tender, plastic material the whole vitality is burnt up. As they call this magic water their fire, it is evident that they will have no scruple—if they so choose—in calling its action upon a certain substance a philosophic calcination. Nearly all their work is done by retort and receiver; crucible work is rare, until they come to actual projection.

Their virgin and blessed water is also named Bird of Hermes, Vessel and Seal of Hermes, a melting and calcining Furnace, "for this Water dissolveth all Metals, and calcineth them." Their first water besides calcining, also "melts" the necessary substance; so that to "melt" our mineral base, or saturn, or antimony, or gold—i.e., "our unripe gold"—means to dissolve it by means of this Water which is their Fire. This water, which dissolves the mineral base in bulk, will also dissolve its separated parts in detail, and in the re-uniting of them acts as the flux, or medium of conjoining the parts; it is their solder; the priest which unites the red man and the white wife, yet "both were born in the priest's bed."

In Ripley's first gate, Eirenaeus has a parable of the King marrying, as his Queen, the daughter of a water bearer; "of which water bearer I told you that his body, his pitcher and the water in it, are all one". . ."the King and also his son, and he (the water bearer) is greater than both." These then are all different parts of one thing—the Prima Materia Gold is the sulphur of it—the King; the Queen is the salt of it; the water bearer, etc., is the fluidity which is necessary for intimately uniting these.

It is not, therefore, necessary—indeed, it is wrong—to unite two or more things to form our prima materia; but to find the one thing and separate the superfluities from it, re-uniting the remainder in correct proportions. "He who knows not how to make many things out of one, knows not how to conjoin many things into one." This wonderful agent is also their pestle, by which they accomplished pounding, grinding, trituration. Eugenius is ironic about the man who in this work "makes his philosophic contrition with a hammer." It is with this mercury they make their "amalgams"; as is mentioned elsewhere.

Sericon: "The gold of the wise, boiled and well digested with a fiery water makes Ixer. Red is the sure colour for the golden matter, and the nature thereof is not sweetness; therefore, we make of them Sericum, i.e., Ixer." Aureus. Crude or partially wrought things are considered to be sour, bitter, poisonous or harmful, dangerous to inhale: and wrought things, the contrary. That which comes out of Ixir is Elixer, i.e., drawn out of water.

Azoth:--Bernard Trevisan writes: "Azoth is not raw quicksilver (or argent vive) simply extracted out of the mine, but is that which is extracted by argent vive itself out of the dissolved bodies." "Wherefore if laton be an unclean body it is depurated by such an azoth. . .and by this laton purified by azoth, we make our medicine. Indeed this azoth is made of the elixir, because elixir is nothing else but a body resolved into a mercurial water, after which resolution, azoth is extracted out of it, i.e., in animated spirit. And it is called elixir from e which is "out of" and lixis which is "water," because all things are made out of this water, and the elixir is the second part in the philosophic work, as rebis is the first in the same work." Epistle to Thomas of Bononia.

It is essential to know and to memorize the order in which the products occur, or it will be impossible to know to what part of the work the writer refers. As they have mixed up the different stages, this is the only way of sorting them out; for the writer may have begun his treatise with the preparation of the ferment, using ordinary mercury, then gone to the other stages in any order. But the evident use of common mercury will have biassed the student's mind throughout the treatise.

The first stage (or ante first part), viz., the preparation of their crude mercury, and the selection and preparation of the base, is omitted. Afterwards the order is Solution, and formation of the Rebis or Sericum or Ixir; the Elixir in the sealed glass separates into the azoth above and the laton below; the azoth descends in dews, or rains, and ultimately whitens the laton, without the laying on of hands. The water precedes the oil; the spirit precedes the soul; elixir precedes azoth; rebis, is the chaos, the viscous humidity, and contains all. In the laton and azoth stage, the green lion has become a black lion and the volatilized azoth, eagles. These are intermediate stages, the dew or rain is a menstruum, a fire, a sharp vinegar, antimonial—saturnine—mercurial argent vive. Saturnine, for it comes out of darkness; antimonial, because it becomes like fine black minute atoms (like the powdered black variety of antimony tri-sulphide), it splashes all about in the glass; mercurial, for a volatile portion ascends from it.

Height, depth, width, altitude, profundity, latitude: the highest altitude is red, the second is white; profundity is black; latitude is extension in quality and quantity and powder to permeate other things. Whenever a writer speaks of the heavenly influences, such as those of the sun and moon; or speaks of sky, clouds, the earth, the sea, it is necessary to remember that he refers to the things which are in his laboratory. There he has his mountains and valleys; his heavens, earth and sea; the salt in the center of the earth; his snow on the hill tops.

It is only from a substance which is not "determined" in the direction of any one of the seven then known metals, that the alchemist made his rebis. All specificated or determined things are rejected. Thus Urbigerus (Aphorism 28) had no kind of metal in the calx in his retort, neither had he (Aphorism 37) ant "mercury, or any other kind of metallic substance" in the distilled fluid in the receiver. This axiom, or sine qua non for it amounts to that—is the

center of the circle, from which a worker cannot err; and radiating out from that center are the determined things amongst which students can, and, do, wander for years, without apprehending the center, that broiling, frying company, who call themselves chemists, but are indeed no philosophers." She (nature) had in her bosom two things "not metalline" without doubt one was white and the other red. It is—he says—necessary to find the Lunaria plant growing on the top of India's mountain; this is quite a common symbol, and another writer says: "It is necessary to visit both the Indies"; all these, and other things occur in Section I. of Lumen de Lumine.

Unless one is enthusiastic in a wise and enduring way, the philosophy of alchemy is dreary reading, and is impatiently abandoned for practical work on immature ideas of the substance, and hazy notions of the working. In the philosophic desert is the trial, and also the reward. At the end of Euphrates—by Eugenius Philalethes—the commentator S.S.D.D. writes: "I will end as I began, by saying, I have read many alchemical treatises, but never one of less use to the practical alchemist, than this." Yet the practical man is, in that work, given open and plain information as to what he must avoid; the hints on the material are quite as plain as discretion would allow; and there are no false suggestions.

The reader is also well repaid by studying Coelum Terrae (by Eugenius); he there learns that he is not following the path traversed by the philosophers unless he gets white clouds condensing to "thick heavy water as white as any snow" followed by red. He will find where to look for the invisible white salt; the Mars that unites with this Venus (Venus the spouse of vulca, i.e., labour or toil). In his poem is the following: "Those sighs return to drops again"; what, in practice, is the signification of these sighs? They are mentioned by other writers, though presented in less poetic garb.

It is so with many other indications, mentioned as occurring in the laboratory work, which are apprehended by the ordinary five senses, and assessed at their proper value by the intellect. The theory of evolution implies the unity of nature; it therefore seems logical that gold could be made out of the white metals, lead and tin; and silver out of the red metals, iron and copper; by bringing these metals back to the point at which the paths began to diverge. Or, as the alchemist puts it, by adding citrinity to the white metals, and argent vive to the excessively red: a sort of leveling to the standard required. Geber mentions ten medicines for the five common metals—including mercury; five of these for introducing a solar quality, and five for introducing a lunar quality.

But the universal medicine is the best, and will make any metal gold or silver, according to the intention of the philosopher, and the quality of the medicine. The superfluities of the common metal go off in fumes. Men who have been ultimately successful write that they toiled unsuccessfully at the making of these ten particular medicines, when they were "Geber's cooks"; but after fruitless years, they turned their attention to the universal, and then accomplished the work.

It is necessary to distinguish between things that are possible to an accomplished master only, and those things that are within that capabilities of an earnest student. Eirenaeus, though making mistakes for several months, had the conviction that he was already a master; so that it is evident that to alight on the right material, makes clear to the mind the sayings of the philosophers; as has been mentioned. In every block of marble is a potential Venus de Milo, but it requires inspiration to see it, and a master to educe it into actuality. In the subject we seek is enclosed a Galatea, who must not only be made visible, but must also be infused with life. Having now given in the very words of alchemists of repute, direct contradiction to some of the more important misinterpretations of modern critics, the raison d'etre of this treatise is accomplished. Much more might be said, but considerations far more cogent than those of space forbid. I will conclude with a few extracts from Boehme: "Do not toil and trouble yourself in that manner and way which you mention, with any gold or minerals, it is all false. . .It is not of earth, stones or metals, and yet it is the ground of all metals; a doubled mercury, yet not quicksilver, or any other mineral or metal." As regards the working or process upon the correct materials, he says that a close parallelism exists between it and the life of Christ. "Now it behooves the wise seeker to consider the whole process with the humanity of Christ from his opening in the womb of his mother, Mary, even to his resurrection and ascension, The Magus must keep and observe this process also with his Alchymy." FINIS.