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EDITED BY H. STANLEY REDGROVE, B.Sc. (LOND.), F.C.S.

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REPORT OF SEVENTEENTH GENERAL MEETING.

THE seventeenth General Meeting of THE ALCHEMICAL SOCIETY was held at 8.15 p.m., on Friday, January 8th, at 1, Piccadilly Place, Piccadilly, W. The chair was occupied by the Acting-President, Mr. H. Stanley Redgrove, B.Sc., F.C.S.

A paper was read by Mr. Gaston De Mengel on "The Philosophical Channels of Alchemical Tradition," which was followed by a discussion. (The paper and an abstract of the discussion are printed in the present number of the JOURNAL).

A vote of thanks was passed to Mr. De Mengel for his paper.

THE PHILOSOPHICAL CHANNELS OF ALCHEMICAL TRADITION.

By GASTON DE MENGEL.

TO LIFT more than a corner of the veil of mystery which enswathes alchemical doctrine, to understand much of its nature, to discern its purport at all clearly, to be enabled fairly to estimate its value, it does not suffice to exercise the imagination upon its possible meaning, with no more than some vague idea of the swirl of mediæval thought in which Alchemy is bathed—we must know something of the channels through which flowed the waters of thought creating that eddy; we must catch a glimpse of their various sources. For only thus can we separate, as by a kind of fractional distillation, the discrete essences which commingle to wash the roots of the mysterious tree.

To trace those channels by a process of pure induction is a task beyond my meagre historical attainments. I will, therefore, take another course, and, somewhat in the spirit of the alchemists themselves, sketch deductively a hypothesis which I think will, in its main lines, be verified by comparison with historical data.

It can be proved, by a chain of metaphysical arguments which would be out of place here—even did space allow of them—that the spiritual soul of man is free. Man's spiritual activities can exercise themselves, when sufficiently actualized, on any object they choose, more or less independently of extrinsic motives, thus escaping the determinism of

the material world, as expressed in the law of cause and effect. In other words, man enjoys internal freedom of choice, in the measure of the actualization of his spiritual potentialities. Yet man, as Socrates pointed out, cannot but choose the good, once the good is presented to him; for evil is no positive entity or attribute, but merely a limitation, distortion or displacement of good. But, being gifted with spiritual freedom in the likeness of his Creator, man must have scope for its exercise, and can accordingly choose between particular kinds and degrees of good—he can select the greater good by becoming a willing and obedient instrument of God's Purpose; or he can select the lesser good by centering his activities on the exaltation of self, in more or less disregard of his relations to the Whole of which he can never be aught but a part. The choice can be made in the full light of truth—it was through no lack of wisdom that Lucifer fell. Often, indeed, the greater the wisdom, the greater the danger of the fall. The mystic who seeks God-union may come perilously near to the brink of the abyss, should he neglect that outward expansion which is sometimes called the Macrocosmic Consciousness. He who seeks too ardently the salvation of his own soul may lose it. This is a peril from which Christianity itself has not always been free, especially in its later, more corrupt and puritanical forms; whilst some Oriental religions and their Western derivatives, seeking to avoid it, have fallen into an unwarrantable pantheism.

Now, according to the choice which the free spirit of man has made, two disciplines and two traditions have arisen: the "White" and the "Black." These adherents have—if we believe in disembodied intelligence—been helped respectively by the Powers of Good and the Powers of Evil. But, as man, not being pure spirit, seldom lives to become wholly good or wholly bad, the White and Black traditions are probably nowhere to be found in perfect purity. Everywhere the two are commingled; though in some races, the outcome of a kind of spiritual selection, the White tradition predominates; and in others, become centres of spiritual rebellion and a haven of corruption, the Black tradition prevails. There is a legend of one race in particular, giants born of the sons of God and the daughters of men, according to the sixth chapter of *Genesis*, which race became evil beyond others, so that "it repented the Lord that He had made man on the earth." This race of men, descendants of Enoch, son of Cain, inherited the occult lore which, in the apocryphal *Book of Enoch*, the sinful angels are said to have taught the daughters of men. These things are referred to by Clement of Alexandria and Tertullian, by whom (especially the latter) all occult lore is on that account utterly condemned. Indeed, the path of evil which clung to it through the ages

had caused it to be suspect in the eyes of the Roman law. Julius Paulus [*Lib. iv.*, tit. 23: "*ad legem Corneliam de sicariis et Veneficiis*"] relates that the practice and even knowledge of magic were forbidden in Rome, as well as the possession of works on magic, which, when found, were to be burnt. Tacitus [*Annals*, ii, 32] mentions an edict, enacted under Tiberius, condemning all "mathematicians," which term included astrologers and magicians. Now magic, astrology and Alchemy were closely related, as witness Tertullian and the Leyden Papyri, and the first alchemists certainly did seem to promote the success of their art by magical formulæ and the evocation of spirits. Accordingly Diocletian consigned to the flames all alchemical works found in Egypt. If we add that the condemnation of Tertullian held its sway well into the Middle Ages, we have one potent reason for the secrecy in which the alchemists wrapped themselves and their works. Another was the intrinsic sacredness of the art in the eyes of its adepts; for in Egypt, its probable birth-place, the knowledge of the sacred art, relates Zosimus, was reserved to the sons of kings. But in all except the earliest alchemical writings all traces of magic have vanished, and they breathe a spirit which is the very antithesis of that of the black art. Could such a change have come about had Alchemy originated with the sons of Cain? Let us, in answer, continue the chain of consequences dependent on our starting hypothesis.

The essential feature of everything related to the Black tradition is the quest of power, the secret for and practice of every means which may serve to exalt the adept above his fellows, make him the equal of angels and a pretender to the throne of God Himself. Seldom, as we have seen, does this gloomy ambition reach its nethermost depths; even in what may be considered the remnants of the primeval Black tradition—the voodoo practices of Africa and Australasia, the rites of the Shamans of Tartary or the Bon-pa Bonzes of Thibet, the spells of the medicine-men of the Red Indians—the magician remains content, at the most, with the worship of evil spirits. Yet this essential feature, this quest of a power more or less secret, may be easily traced in the great religions, bearing witness to the commingling of the White and Black traditions—in Elam and Chaldea it was mitigated by the poetry of their cosmogony; in Egypt it was well subordinated to a higher esoteric teaching, which, among other things, seems to have had many points in common with the Kabalah; in China it grew into Taoism; in India it gave rise, by its fusion with the Vaidika religion, to the system of the Tantrika. In all such cases, the tendency would evidently be to abjure the commerce with evil spirits, and retain such arts as were not evil in themselves, turning to good ends the power that they gave. Thus

the commingling of the Black tradition with the White served in many ways a most useful purpose, by enlarging the outlook and adding to the means of action which, by too strict an adherence to the White discipline, might have remained too narrow and limited. If it be asked how such a danger could accrue from a truly enlightened tradition, answer may be made that, in his first apprehension of truth, man uses, almost exclusively, his intuition; but, inasmuch as he is not a pure spirit, but is limited by the corporeal part of his substance, his intuition cannot at once grasp the whole truth, and can see but a small part of it at a time. To overcome this difficulty, there must either be brought about a contact between minds seeing divers aspects of truth, or there must be initiated that process of linking together, as it were, successive glimpses of intuition, which constitutes the discursive reason. For reason is not in essence distinct from intuition—it is only a process rendered necessary by the limitation, in the semi-corporeal substance that is man, of the intuitive act. A pure spirit would see the truth as a whole—it can, by one spiritual glance, see at once all round the sphere of truth; but man, to use the same analogy, can only see a small part of the sphere at a time, and must travel over it by systematic stages—the act of vision is the same, it is only the limitation of its range which makes the discursive process necessary.

It was the Greek mind, with its love of independence, that first began to make systematic and deliberate use of the discursive process. Yet it did not start with a *tabula rasa*, but began by a blending of the new poetic independence with the theogonies and cosmogonies of the ancient Mysteries, themselves a blend of the White and Black traditions, with the White strongly predominant. This introduction of independent, individual thought, still at first expressed in poetry, the natural language of intuition, was bound sooner or later to come about, given proper conditions, such as those to be found in the Ionian isles. It first appears in Hesiod's *Theogony*, in the ninth century, B.C. From that time onwards, Greek thought passed gradually from the purely intuitive to the reflective, and its vehicle changed from poetry to prose.

Intuitively, the human spirit, being a reflection of the Divine Reason, must apprehend, under normal conditions, the order, proportion and harmony of the Universe. When reflection brings it face to face, as it were, with apparent contradictions, it seeks to reconcile them. This effort to reconcile, by reflection, the apparently contradictory intuitions of partial truths with the vague general intuition of universal harmony, seems to me the key to the proper understanding of Greek philosophical thought. I will not trouble you with a review of the various phases through which his

thought passed, but will be content with a brief exposition of a few of the doctrines which went to make that medley of many waters in which, in the third century, A.D., the tree of Alchemy took root in Alexandria.

One of the first problems that, in the nature of things, must first present itself to the mind, is precisely that which, by its close connection with alchemical cosmogony, immediately concerns us, *viz.*: How to reconcile the evident diversity and multiplicity of the Universe with the aspiration towards Unity revealed to us in the general intuition of universal harmony?

Though there can be but one answer when the discursive process is applied in all its rigour, a great diversity of answers suggests itself to the philosophical mind before reflection attains its maturity. With Parmenides and Zeno, we can attempt a denial of becoming and multiplicity, by treating them as mere appearances. With Heraclitus, becoming can be looked upon, on the contrary, as the essence of things, and must therefore contain within itself all opposites, which combine in the universal harmony ruling all things. Fire, which was to assume such importance with the alchemists, is with Heraclitus the universal principle of being, waxing and waning in ordered rhythm, constituting in its purity the soul, in its dimness and coarsening, the body. With the Stoics also, the soul is assimilated to fire; it is the fiery, thinking breath which penetrates matter, informs it and contains it—it is the spermatik logos of the Universe, and the human soul itself is but a part of this universal soul; all things are produced from it by relaxation of its tension; all things return to it by an augmentation of this tension—truly here we have the "*solve et coagula*" of the alchemist. The Stoics, we see, answered the problem by a materialistic pantheism. Before them, Plato had answered it by an idealistic pantheism, inasmuch as he seems to consider matter as a sort of limitation of Ideas in the sensible world, the quasi-reality of which he explains by postulating a participation of things in Ideas, which themselves owe their being to, and have their essence in, the ultimate Idea of the Good, which is the living God, the Absolute Being which has life, motion and thought. By thus denying the reality of a matter, which can be reached neither by sensation nor by thought, since it is neither sensible, nor an Idea, Plato seems to be seeking to avoid the contradiction of what is practically non-being issuing from Being, of what has none of the attributes of spirit proceeding from the spiritual One. This contradiction the Neo-platonist Plotinus boldly ignores, and, uniting the cosmogonic processes of the Stoics to the spirituality of Plato, invents the Alexandrian Trinity, with its three hypostases proceeding one from the other; the first, the Absolute

One beyond all thought, radiates of its Being, without loss, giving rise to Intelligence, the second hypostasis, which itself gives rise to the Soul of the World, the form of all things, and which contains them all. But since, says Plotinus, there is form, there must be something which receives the form, otherwise matter. And in this postulation of matter and form, Plotinus, as the Stoics before him, was influenced by Aristotle. Recognising the reality of both being and becoming, distinguishing the essential difference between the material and the non-material, Aristotle regards all sensible things as the combination of matter and form, two correlated entities of which the first is the substrate of all things, in itself purely passive, and the second the determining, actuating principle. I will not here refer at greater length to the Aristotelian doctrine of matter and form, further than to say that the penetrating intellect of "The Philosopher," as the Middle Ages called him, thereby gave to the world a clue which not only guided all philosophy after him until quite modern times, but even to this day can lead us to conceptions entirely in harmony with the most modern scientific thought. Refer to my paper in Vol. I, Part 4 of THE JOURNAL OF THE ALCHEMICAL SOCIETY, replace the terms "Aether" and "stress," on page 57 and after, by the terms "*prima materia*" and "*forma*," respectively, and you have Aristotle's thought guiding us in the formulation of a cosmogony comprehending the discoveries of modern science. But so far as the alchemists were concerned, the influence of Aristotle, great though it was throughout the Middle Ages, seems to have been more indirect than direct; the rays of his wisdom reached them after refraction through the prisms of Stoicism and Neo-platonism successively. In fact, the genius of the alchemists seems to have been more intuitive than dialectic—in the realm of speculative philosophy, they feel more at home with Plato and the Neo-platonists; and their ideas, for instance, as to the prime matter from which all things are fashioned, are derived, through Plotinus, more from the *Timaeus* of Plato than from the *Metaphysics* of Aristotle. For in the *Timaeus* Plato attempted a more concrete definition of matter than elsewhere in his works; he speaks of it as an indeterminate something which is the source of becoming, difficult of explanation and dimly seen, a soft substance, the natural recipient of all impressions, the matrix or substrate of all physical change, and identified with space. He postulates the four elements of Empedocles—fire, air, water, earth, as composing the body of the Universe. Those elements are not ultimate, but, with the exception of earth, are convertible into each other, differing only in so far as their molecules correspond to four regular geometrical solids, the tetrahedron, octahedron, icosahedron, and cube respec-

tively. To animate the body of the Universe, Plato postulates a world-soul, fashioned by the Demiurgos according to mathematical and musical relations. For Plato was, as an intuitionist, influenced by Pythagoras, a link with the ancient Orphic Mysteries which made it all the more easy, for the seekers who regarded Alexandria as their Mecca, to mingle the independent spirit of speculative philosophy with the authoritatively inspired traditions of old.

The Pythagorean was one of the principal channels which conveyed to Alexandria the ancient traditions, in which the "white" was strongly predominant. It mingled freely with Platonism in the third century A.D., and its influence extended to the fifteenth century and even up to the present day; for Paracelsus was primarily a Neo-pythagorean, and some of the French secret schools of esotericism in existence in our own time are largely inspired by Pythagorean doctrines. Two other important channels of the (mainly White) tradition were Judaism and Christianity. Some notable elements of the White tradition flowed also through Egyptian and Gnostic channels. The Greek alchemists make mention of Isis, Osiris, Typhon, Thoth, the temples of Memphis, Alexandria and Serapis, and the library of Ptolemy; they assimilate the tomb of Osiris to Mercury. The philosophical egg is a symbol common to Egypt and Chaldea, the religious systems of which latter country greatly influenced the Gnostics. But in Egyptian and Gnostic beliefs—particularly the latter—the Black tradition played a large part, and through it principally was the attention of the alchemists drawn to the phenomena of chemistry and especially the manipulation of metals. Of the Egyptians as heirs of the Black tradition we have already spoken. As to the Gnosis, it was a mixture of Orientalism (principally Babylonian), Hellenism, Judaism and Christianity, which flourished between the second and fourth centuries, A.D. The Gnosis, among other things, sought to probe the mysteries of Nature, and represented by plurivocal signs those of her properties which they discovered. It was strongly tinged with Chaldean lore, and several of its sects made great use of magic.

Such a fusion of elements as we have indicated was bound sooner or later to come to pass; civilisation, like all the rest of the Universe and its phenomena, obeying the law of progress from the homogeneous to the heterogeneous. As a result, the birth of Alchemy might well have been predicted, for what wonder that, struck with the wonderful transformation which the chemistry handed down with the Black tradition had brought to their notice, the partakers of the many waters of speculative philosophy should seek in these phenomena the confirmation or correction of their cosmogonical views?

The alchemists, as we have already surmised, were not particularly strong on the dialectic side; thus their philosophical doctrines are apt to be misleading, and the philosopher will be better employed in the critical study of the great minds of Greece from which those doctrines were derived, than in the reading of alchemical works. Likewise the scientist is justified in viewing with suspicion the alchemical operations, for the alchemists cannot claim to any mastery of the experimental method. Where the real value of Alchemy lies, therefore, is in what revelation it may yield us of the esoteric doctrines, imbued with all the fervour of mysticism, for which it ultimately came to serve as one of the repositories.

ABSTRACT OF DISCUSSION.

MR. ABDUL-ALI said that he thought the paper had covered a very wide field, and he hardly felt in a position to criticize it. He was not sure that he had even grasped thoroughly the lecturer's thesis, but it seemed good and agreeable to him so far as he had understood it. The first point of interest which occurred to him was in connection with *The Book of Enoch*, and the legend therein related of how certain angels revealed to women the secret of working in metals; and he knew that in one of its legendary aspects the origin of Alchemy was held to be involved in this alleged event. He had not quite gathered, however, the lecturer's opinion on this matter—that is, how he interpreted the story and how it connected with the general thesis before them—and he would be pleased if a little further explanation could be given on this point.

With regard to the general transmission of Alchemy, he supposed that they could not go further back in the search for historical origins than the period of Alexandria. There was not, so far as he was aware, any trace of a theory of transmutation in Egypt prior to the epoch of Greek influence. Of course, there was considerable knowledge of metals and skill in working them, and he did not question that, in the minds of some of these workers, speculations would have arisen concerning the meaning of the familiar facts and the possibilities which might open from a consistent theory. But such a theory (except, of course, the ancient astrological one, which from their present standpoint was negligible) did not seem to have existed. The possibility always remained of a system of doctrine not preserved and never published in the ordinary sense, and of a purely esoteric channel of transmission, but it was undesirable from the standpoint of historical research to make any gratuitous assumption of that kind.

It was doubtless in the period when Alexandria flourished, he continued, that the so-called Hermetic works were

written—that is, the works ascribed by tradition to Hermes Trismegistos. At least that was the general opinion of modern scholars—Dr. Louis Ménard, for example. [See his work entitled *Hermès Trismégiste: Traduction complète, précédé d'une étude sur l'origine des livres Hermetiques*, 1867]. It was at Alexandria in the early Christian centuries that the peculiar fusion of Greek, Jewish and Egyptian thought occurred, which produced that remarkable body of speculation of which Neo-platonism was perhaps the most important limb. Into Alexandria, and flowing from it as a source, there would, the speaker conjectured, have been various streams of thought, but it was not quite clear how any of these came to be drawn towards the problems of chemistry. There was Philo the Jew, for instance, speculating upon the doctrines of Judaism and presenting them in a form acceptable to the philosophic mind of Greece; and later there was Zosimus of Panopolis seeking, perhaps, to bring the dreams of the Neo-platonists into touch with some scheme of nature, or *vice-versâ*.

This was the general philosophic atmosphere, and its chief element was mysticism. Possibly about this time, and certainly during the succeeding centuries, there would have been men skilled in the working of metals—among the Arabs, he suggested, and at Constantinople—and among these there would no doubt have been some of a more reflective or speculative type, who would have given some attention to the philosophical aspect of their work. Such minds, coming into contact with Greek thought, would probably have tried to assimilate it to their metallurgic knowledge, and thus would have arisen something rather more definite in the nature of a chemical philosophy. Later still, when the Arabs carried their knowledge into Spain, a channel of transmission was opened into western and northern Europe.

It was probably in these later years, continued Mr. Abdu'-Ali, though he was not prepared to say exactly when, that the theories took on a somewhat more precise form by becoming assimilated to Christian doctrine. The distinctive Christian element he took to be the doctrine of the Philosopher's Stone as the "medicine of metals," the redeeming agent in the metallic world corresponding to Christ, the Redeemer of Man. Gold, considered as the perfect metal, might typify the regenerate man: it could withstand the fire, and was beautiful and incorruptible. But of itself it had no transmuting or redeeming efficacy: this belonged only to the Philosopher's Stone, which contained all the qualities of the perfection of gold *plus* the power of imparting such perfection to that which of itself was base.

Somewhat along these lines, the speaker thought, might be traced the development of alchemical theory.

Returning to the paper itself, he said there were one or two questions he would like to ask the lecturer. He supposed it was true to say that Aristotle influenced the alchemists more than Plato; but he wondered whether in some cases, even where Aristotle's works (in their Latin form, that was) were quoted, the general trend of thought was not rather in the direction of Platonism and its later developments. He remembered particularly the case of Thomas Vaughan, who, although under the influence of Aristotle in some of his books (*Aula Lucis*, for example), refers to him in another place as a mule, and contrasts him a little odiously with Plato. It was not quite easy to understand the attitude.

He would like also, he said, to ask the lecturer what precisely he meant by an ancient tradition of which white and black magic were two manifestations. Did he refer to any sort of traditional doctrine in the ordinary sense, or was he hinting at certain fundamentals in the constitution of the mind which tended always to predetermine or at least to direct its highest speculation?

With regard to the last paragraph of the paper, Mr. Abdul-Ali said he was in agreement with what was suggested as to the purposes with which the study of Alchemy might be profitably undertaken; and he would add one other, which was to endeavour to answer the question as to how and why these views came to be held. What, he asked, were the internal and external causes which produced these amazing theories—internal in respect to the nature of thought, and external in respect to the philosophic outlook of their period and of the period which preceded it?

Miss FRENCH enquired whether in the lecturer's opinion the Gnostics practised black magic.

THE CHAIRMAN said that he had listened to Mr. De Mengel's paper with great interest. It raised, he thought, many topics of debate, an adequate consideration of which was far beyond the time at the meeting's disposal.

Mr. De Mengel had spoken of a "black" tradition, and that, the speaker said, he supposed might be taken as the spirit of lust for power. It had, unfortunately, been rampant in the hearts of some of the later pseudo-alchemists of the "Edward Kelly" type, but he did not think that it was the motive force that actuated the earlier alchemists, whose ambition, rather, was to gain knowledge. And, judging from their writings, many of the later alchemists were quite free from it and acted from the highest motives. The words of "Eirenæus Philalethes," doubtless well-known to the members of the Society, might here be quoted—"Would to God all men might become adepts in our Art—for then Gold, the great idol of mankind, would lose its value, and we should prize it only for its scientific teaching."

He agreed with the lecturer that the genius of Alchemy was intuitive, and that its exponents, dialectic was often weak. Intuition had, he thought, been well defined by C. C. Massey, thus:—"Thought, in whatever province it is exercised, seeks to recover for consciousness the synthesis of its related elements; 'intuition' gives this synthesis immediately, and is a direct perception of truth in an organic and concrete unity". [See *Thoughts of a Modern Mystic: A Selection from the Writings of the late C. C. Massey*. Edited by W. F. Barrett, F.R.S. (1909), p. 136]. What intuition gained over reason in point of rapidity, it lost in point of sureness. Moreover, it brought with it no criterion of the validity of its products. One could not distinguish between a false and a true intuition save by the aid of reason, and whatever warrant an intuition might carry for its recipient, it had to be restated in terms of reason in order to be made available for other minds. The alchemists might have—he thought, actually had—discovered intuitively certain facts concerning the Universe of the utmost importance; but these had to be rediscovered anew by the slower process of modern Science, based on inductive reasoning, to become, as it were, available, by separation from the dross in which they were embedded. At the same time, it must be remembered, he added, that inductive reasoning involved in itself an element of intuition—intuition, as it were, conjured up by the magic of reason—where the mind took a leap in the dark, and, from the ground of particular facts, seized upon a general law or truth of relation.

The error of the alchemists, he thought, and it was the error of their time from which they could hardly have been expected to have escaped, was the placing of too great reliance upon deduction. The major premise of their syllogisms—the principle of the unity of the Universe and consequent correspondence between its various parts—intuition, he thought, had given them correctly. But in forming their minor premises, a too slight acquaintance with the Universe frequently led them astray.

Naturally, owing to this predilection for deduction, he continued, Alchemy throughout its history reflected the philosophical soils on which it grew. The doctrine we regarded as most characteristic of it—that of the Philosopher's Stone as the medicine of the metals—was, as Mr. Abdul-Ali had indicated, certainly of Christian origin. Entirely explicable from this standpoint was the fact that the writings of the Greek alchemists hardly read like alchemical writings at all, in the sense in which we had accustomed ourselves to understand that term. The hand of mysticism, however, was clearly present; but it was Neo-platonism here, instead of Christian mysticism. Physiology also dictated its doctrines,

and gave rise to what might be termed the phallic element of alchemical tradition, an element which persisted from the beginning to the end of its days.

In conclusion, the speaker said that he was almost in entire agreement with the lecturer's final remarks. Only he would add that, to his mind, the problem of Alchemy was first and foremost a problem in epistemology, or perhaps, he should say, psychology. The question,—Why were the characteristic doctrines of Alchemy believed in by the best intellects of several centuries?—was a problem that demanded solution, apart altogether from that of the validity of those doctrines. He believed that the solution lay in the concept of Alchemy as one of the mind's products in its endeavour to bring its experience into unity and harmony with itself. But the problem was an immense one, not to be solved in a few words, or, indeed, by the labours of any one man.

Mr. GASTON DE MENGEL said, that in reply to Mr. Abdul-Ali's question as to *The Book of Enoch*, his reference thereto was purely in the sense of bringing forward an old legend which might be related to the "Black Tradition." As to Alchemy not being earlier than the Alexandrian times, his own opinion was that this was the case; as a matter of fact, the origin of Alchemy was dated by many authorities at about the third or fourth centuries, so that there was no justification for carrying it further back than this period. Moreover, he also thought he could agree with the former speaker that in Alexandria the principal element was mystical, in the sense of seeking union with God.

An interesting point had been raised by Mr. Abdul-Ali as to whether the mere fact of working in metals might not have given rise to speculations of origin and transmutation. Mr. De Mengel thought that this was quite a probable hypothesis, only he would add, that if such had been the case, these speculations would probably have arisen at a much earlier date than the third century, because workers in metals in that century had already travelled far in their craft. He thought, too, that it was extremely probable, as suggested by both Mr. Abdul-Ali and the Chairman, that Christianity had given rise to the theory of a regenerating element, and, in fact, he had mentioned Christianity in his paper as one of the principal channels of alchemical tradition.

With reference to the question concerning Plato and Aristotle, it must, he said, not be forgotten how difficult it was to distinguish between their respective influences in later writings; and this difficulty arose because all philosophy up to modern times, including Neo-platonism itself, had been greatly influenced by Aristotle, so that when we came to study the influence of Neo-platonism, we were bound to find with it many traces of Aristotelian doctrines.

As to white and black magic being two different aspects of the same tradition, he had endeavoured to suggest that they were more than aspects, being really related to two different traditions. Here he was in agreement with the Chairman's remarks. But whether the distinction was inherent in tradition, or was fundamentally a distinction in human thought, was a very wide question. Whilst in one sense we might consider the distinction to be subjectively fundamental, in another, historical study made us aware of much that supported the hypothesis of an objective distinction in tradition. In reply to Miss French, he added that some gnostic sects certainly practised magic and used all sorts of magical formulæ, and it was black magic from one point of view, inasmuch as evil spirits were involved. When we used such terms we must distinguish between intentions as well as processes, and if the intentions were good, the magic might be called "white." On the other hand, all magic, in one sense, might be deemed "black," because aiming at the invocation of spirits.

With regard to the Chairman's definition of intuition as that which gave an immediate synthesis of truth, he thought that the term "intuition" was here taken in a different sense from that in which he had used it in the paper, where it did not stand for a supernatural faculty. The Chairman's use of the term more closely approximated to Schelling's "intellectual intuition," that mystical gift which enabled the spirit of man to partake to some extent of the powers beyond the potentialities of the human substance *per se*. True mystical intuition could only be distinguished from false imagination by its results. To employ an analogy: Leverrier calculated the probable position of Neptune and communicated the result to an astronomer friend, who found the planet by his directions near the predicted spot. Imagine the mathematical process of Leverrier to be a superior power possessed by no other mortal, then the practical confirmation of his conclusions by his friend might be likened to a test of the reality of that power which an ordinary mortal might apply.

The speaker added that he agreed with the Chairman that the alchemists reasoned deductively, but he did not think that this was the cause of their failure, because, starting from a fundamental axiom, no fallacies were possible providing deduction was sufficiently strict. Such a fundamental axiom had, he suggested, been stated, though not accurately, by Descartes—"Cogito, ergo sum." The existence of consciousness was an undeniable fact. It might be argued that the whole world was a hallucination, but the reality of mental experiences still remained, and from that fact very much indeed could be deduced. He did not say that, where details, and not broad principles, were con-

cerned, deduction was a very precise or sure process, but it was, he maintained, a possible process, which had, even in the realm of principles, been very greatly neglected.

As to Alchemy being more Latin than Greek, he thought that depended on what we elected to call Alchemy; and he did not see any special reason why we should reserve the term for the mystical chemistry of the sixteenth century any more than for that of the third.

The phallic doctrine, he suggested, arose in Egypt. In an alchemical MS. of the third century, attributed to St. Mark, metals were represented by men, and the Greek alchemists, who speak of the male and the female in this manner, mentioned many names of Egyptian Gods and temples.

REVIEWS.

Studies in Valency. By F. H. Loring. 8ins. \times 5 $\frac{1}{2}$ ins., p. viii + 47. Weight 7 $\frac{1}{2}$ ozs. London: Simkin, Marshall, Hamilton, Kent and Co., Ltd., Stationers' Hall Court, E.C. Price 2s. 6d. net.

THERE is no force, perhaps, quite so puzzling as chemical affinity—that force which, according to the atomic hypothesis, binds the atoms together, and by whose aid, out of some seventy-odd elements is woven the entire fabric of matter in all its multitudinous forms. Moreover in its property of valency—whereby the combining power of the elements is so strictly and so curiously limited—it appears to have no other analogue in nature. Other forces—though, perhaps, we must in the end postulate a “quantum” which cannot be divided, as in the case of electricity—at least appear to undergo continuous changes only. But valency is essentially a discontinuous property—a thing of jumps and jerks, if one may be allowed so to express it—following some yet-to-be-discovered law of integers and not one of continuous quantity. Perhaps this is but seeming, and a consequence of the postulation of the atomic constitution of matter; but even those who frankly recognise Dalton's hypothesis as a mental tool and a tool only, are reluctant to throw it aside until it has become quite superceded by some more adequate instrument.

Mr. Loring writes in a very terse manner, without any waste of words, and has evidently studied the literature of the subject to some purpose. He points out a number of interesting relations between the valencies of the elements, and indulges in some suggestive speculations. Always, however, does there seem to be an exception to any rule concerning valency,—suggesting, as Mr. Loring has himself pointed out more recently (in *The Chemical News*, Jan. 8th., 1915), the existence of some further law, some regularity in the irregularities. Perhaps the most interesting of his

speculations is that concerning the constitution of certain members of the group of inactive gases, wherein they are likened to the ions of a dissociated salt. The book should certainly be read by all interested in the question of the constitution of matter and the more philosophic side of chemical theory.

EDITOR.

The Voice of Isis. By the Teacher of The Order of Christian Mystics. Transcribed by Hariette Augusta Curtiss and F. Homer Curtiss, B.S., M.D. Second and Revised Edition. 7½ins. × 5ins., pp. 450. Weight 21¼ozs. Los Angeles and San Francisco: The Curtiss Book Co. (London Agents: W. Fowler, 7, Imperial Arcade, Ludgate Circus, E.C.) Price \$1.50.

The Soundless Sound. By the Teacher of The Order of the 15. Transcribed by the same authors. 7ins. × 5ins., pp. 34. Weight 2¼ozs. Same Publishers. Price \$0.75.

The Philosophy of War. By the same authors. 6ins. × 4½ins., pp. 49. Weight 6¼ozs. Same Publishers. Price (stiff paper cover) \$0.25.

The Order of the 15, or alternatively, of Christian Mystics, is described as a non-sectarian spiritual movement for the advancement of Christian Mysticism. It is said not to be an organization, and in *The Voice of Isis* is also described as "the Order of Transmutation or Alchemy," the reference being to the spiritual side of the art. Judging from the books under review, the teachings of the Order have a close affinity to those of modern "Theosophy," and in their insistence on the doctrine of "as above, so below" connect with ancient Hermeticism. *The Voice of Isis* contains a full exposition of the philosophy of the Order, whilst in *The Philosophy of War* the Hermetic axiom is applied to the elucidation of the causes of war. *The Soundless Sound* is a less controversial book. It is a little volume of salutary ethical advice, insisting on the need there is of our awakening to the Divine Presence in all its manifestations and veils. It is, by the way, very beautifully printed and is a credit alike to authors and printers.

EDITOR.

Soc : Ros : in Anglia : Metropolitan College. Transactions, 1914. Edited by the Secretary, W. John Songhurst. 8¼ins. × 5½ins., pp. 74. Weight 5¾ozs. Privately Printed.

THIS contains reports of the meetings of the Metropolitan College of the English Rosicrucian Society, held during 1914, including the following papers read at these meetings.—Dr. William Hammond: "Notes on some Stone Remains in Cornwall"; F. Bligh Bond: "Studies in the Christian

Cabala"; Dr. R. W. Felkin: "Folk-Lore in Central Africa"; Dr. W. Wynn Westcott: "The Religious and Masonic Symbolism of Stones"; and there is an additional paper by Dr. Westcott, entitled "An Essay upon the Constitution of Man: Spirit, Soul, Body." Mr. Bond's paper is particularly interesting. He establishes the importance of the numbers 19 and 37 (the lunar and solar numbers) in the geometry of the Vesica Piscis, and proceeds to point out how many—far more than given by chance, as calculated by probability—appropriate Greek words yield one or other (as the case may be) of these numbers or their multiples by Gematria. The whole subject is a very curious one, of much interest to the student of mediæval lore. The volume has as frontispiece, an admirably executed reproduction of Van Dyck's portrait of Sir Kenelm Digby, now in The National Portrait Gallery, London.

EDITOR.

ALSO RECEIVED

The Differential Essence of Religion. By Theodore Schroeder. Reprinted from *The New York Truth Seeker*. 9ins. × 6ins., pp. 28. Weight $2\frac{1}{2}$ ozs. New York: The Author, 56, East Fifty-ninth Street.

NOTICE.

I HAVE been requested by the High Commissioner for Australia to refer in the JOURNAL to a pamphlet published under his authority, and obtainable from 72, Victoria Street, S.W., entitled *Australia's Trade with Germany.—Britain's Chance.—Australia's Raw Materials.* ($9\frac{1}{2}$ ins. × 6 ins., pp. 56; weight 3 ozs.). It contains details of the Commonwealth's imports from and exports into Germany, and other information likely to be of much interest to manufacturers at the present time.

EDITOR.